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THE HACIENDA SYSTEM AND THE DEVELOPMENT
OF CHILEAN AGRICULTURE : 1850 - 1930.

by

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of Philosophy at the University of Glasgow.
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LIST OF ABBREVIATIONS

Anuario Estadístico : Anuario Estadístico de la República
de Chile.

Sinopsis Estadística: Sinopsis Estadística i Jeográfica
de Chile.

S.N.A (SNA) : Sociedad Nacional de Agricultura.

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ABSTRACT

This thesis is a study on the transition towards capitalist production in Chile's agriculture. It refers to the hacienda and to the inquilinaje in particular, which was a social relation of production based upon the exaction of non-remunerated labour from peasant families who took residence in the estates (i.e. a Chilean form of what is generally described as 'service tenantry'). Some features of the inquilinaje began to emerge by the turn of the 18th-century following a development of agricultural production for exchange, especially in wheat, in the most central provinces of Chile. It was only towards the mid-19th century, however, that the fast development of Chile's export trade and domestic commerce brought about a considerable intensification of the labour burdens placed upon the peasants, and a fully mature form of inquilinaje emerged. At the same time, commerce and agricultural production for exchange led to a partial dissolution of the traditional subsistence economy of the rural population living in small holdings independent of the large estates. Through fragmentation of the small proprietorship, and through re-settlement or in cases expulsion of those who had previously lived on unused hacienda lands, part of the rural population was forced to seek seasonal employment in the estates as harvest workers. As villages and rural commerce spread landowners began to remunerate outside seasonal labourers in money, and this was the earliest wide-scale form of wage relations to appear in rural Chile. Thus, as the inquilinaje reached maturity by the mid-19th century, some forms of wage relations also began to emerge. The simultaneous prescence of the inquilinaje and of wage relations became a distinctive feature of the hacienda.

Further, the technology and agricultural methods employed by the 19th-century haciendas were extremely

simple and the estates were greatly dependent on the massive use of labour-power, particularly during the harvest season. Landowners soon had to start remunerating at least part of the labour-power required over and above their inquilinos' established obligations, and wage relations began to develop within the estates' resident labour force. Technical change was nonetheless the main factor which contributed to trigger-off the dissintegration of the inquilinaje, and as from the late 19th-century a series of developments took place. The technological transformations were generally quite simple at first, but they were nonetheless sufficient to unleash a process that led to more sophisticated innovations, some of which became noticeable already by the 1920s, the speed of the technological change accelerating considerably during the 1950s and 1960s. By the 1960s, the number of inquilino-peasants had greatly declined, and those who still remained on the estates were chiefly dependent on wages for their sustenance. Today, the inquilinaje is part of the country's past. In slightly more than a century after having emerged the inquilinaje disappeared, but not without leaving its mark on Chile's social and economic history. The nature and historical role played by the inquilinaje are still the subject of debate. The main objective of this thesis, therefore, is to offer a theoretical analysis of the mode of production to which the inquilinaje contributed to give rise, and the main historical objective is to discuss the events which accompanied the process of the hacienda's change.

Chapter 1 introduces the subject of research and explores the origins of the inquilinaje. Chapter 2 sets out to study the hacienda's relations of production in connection to its labour process. A general comparison between the inquilinaje and the wage relation is made, and the hacienda's change is looked at from a long term historical perspective, this change appearing as a development towards capitalist production.

Chapter 3 examines the connection between the inquilinaje and the relations of circulation (the selling of the hacienda's produce and the circulation of money). The historical role played by the inquilinaje is discussed in the light of the pre-requisites necessary for the emergence of capitalist production and the accumulation of capital. On the one hand, the inquilinaje enables the landowner to produce with small outlays of capital, thus contributing to the expansion of the productive forces during the hacienda's early stage of development. On the other hand, however, the inquilinaje does not compel the landowner to invest productively on his estate, thus becoming an obstacle for the development of agriculture at a further stage. The circuits of production and circulation of the hacienda, together with the factors which contribute to their transformation, are also examined in chapter 3.

Chapter 4 deals with the mode of production and appropriation of surplus-value typical to the inquilinaje and its effect on labour productivity in the hacienda. This chapter first examines the labour process which takes place in the small field of the inquilino-peasant, on which the supply of surplus-labour to the landowner depends. It then examines the labour process which takes place in the large fields of the landowner where the surplus-labour supplied by the inquilino-peasant is used, and discusses the effect of the inquilinaje over the hacienda's rate and mass of profits. Chapter 4 also discusses the overall nature of the inquilinaje, and expounds a critical view of the concept of 'labour-rent'.

Chapter 5 focuses on the more specific historical circumstances of the transition to capitalism in the hacienda from the 1850s to the 1930s. The transition to capitalism is seen from a wider perspective than the hacienda alone, commerce, the role of merchant's capital, and the rise of industrial capital being therefore discussed. Likewise, the technological and social transformations which, starting from the late 19th-century, began to affect the inquilinaje, are examined.

CHAPTER 1

THE HACIENDA

Section 1 : Introduction

This is a study on transition to capitalist production in Chilean agriculture. It refers to the hacienda and to the inquilinaje in particular. There is no precise translation in English for the word inquilinaje, at least not in the sense it is used in rural Chile. As a way of introduction one could say that the inquilinaje is a relation of production, of which the most outstanding feature is that the landowner, who is known as hacendado, allots a small piece of land to the peasant who works it with his own tools and labour and is known as inquilino.¹ In turn, the inquilino is required to work a certain number of days for the hacendado receiving little or no remuneration; he works in the lands of the hacendado in whatever task he is called upon to do, with instruments of labour that chiefly belong to the landowner. The labour process of the hacienda is thus divided in two. One is the labour process of the hacendado, who uses the inquilino's labour-power. The other is the labour process of the inquilino who with his own tools and labour produces the means for his livelihood (members of the inquilino's household help him farm his piece of land and are also frequently required to work for the hacendado).

One can rarely find the inquilinaje in a pure state, however, since the hacendado partially remunerates the inquilino either with food rations, tokens, or as from the first decades of this century increasingly with money. Further, the hacendado almost invariably employs non-resident wage paid labourers, especially during the

harvest time, the hacienda's labour process thus entailing a combination of different kinds of workers and relations of production, which as we shall see is one of its most distinctive features.

This study aims at making a theoretical contribution to further our understanding of the inquilinaje relation and the hacienda, and thereupon of the historical process of transition to capitalist production as accomplished in Chile. The main focus of the first four chapters is on the development of a theory of the inquilinaje, the method used being that of historical materialism as described by Marx.² The most important historical developments of the hacienda between the mid-19th century and the 1930s are discussed throughout the thesis, in the first four chapters to develop a theory, and in the fifth and final chapter to analyse, in conjunction with the theory, the more concrete aspects of the process of transition to capitalism. New empirical evidence will be brought to bear which sheds more light on our knowledge of the hacienda's development during 1850-1930.

This thesis, therefore, has had to contend with issues of Chile's social and economic history, some of which go beyond the hacienda involving the society and economy as a whole. Furthermore, since the hacienda in its transition to capitalist production cannot be seen in isolation, the topics discussed are, at points, wider than the hacienda alone, although therefore not altogether unrelated.

Undoubtedly a theory of the inquilinaje necessitates dealing with its entire period of evolution, which as shall be seen involves a time-span which extends at least from the first half of the 19th-century to the 1970s. As may seem obvious, however, this is too large a time-period in which to adequately undertake research with primary sources, and thus, the focus is on the 1850-1930 period, discussions involving previous or later years being based largely on secondary evidence, as is the case with topics such as merchant's capital which are not directly confined to the hacienda or agriculture itself.

Hopefully, the theory developed in the following chapters may contribute to the general debate on transition to capitalism by dealing with the particular case of the inquilinaje, which falls within what is generally known as a 'landlord-peasant/tenant' relationship.³ It may also have some relevance for countries where similar relations of production have, or still exist, although since this is also a historical study it is important that I place a word of caution on its relevance to other cases and qualify now what is meant here by the hacienda.

Although in Latin American countries the word hacienda has for long been used throughout, it is apparent that there have been different types which sometimes vary even within the same country.⁴ In Peru for example, the hacienda of the highlands is different to that of the coastal area, Mariátegui maintaining that the former uses labour remunerated in kind and is basically feudal in character, whereas the latter employs wage paid labourers and is capitalist in nature.⁵ Also marked differences in hacienda organization are said to occur depending on the type of product of the estate. Martinez Alier differentiates between the sheep-breeding hacienda and the agricultural hacienda, both of which exist in the central Peruvian highlands.⁶

It is furthermore apparent that the hacienda has a number of socio-economic features that are specific to each region or country of origin. Whereas in parts of Mexico the peasant was tied to the land through the system of debt-peonage, the Chilean inquilino and the Peruvian colono for example, have always been free to leave their estates.⁷ As regards the market, some haciendas are said to be self-sufficient units inserted only into a small local market (as for example the Puerto Rican haciendas studied by Wolf and Mintz), whereas others are geared at producing chiefly for exchange and for a large commodity market, which is not necessarily local.⁸ The latter is the case of the Chilean hacienda,

particularly since the mid-19th century following a rapid development of merchant's capital and trade within the country, and of exports of wheat and flour. Regional differences in population density, labour supply, geographical conditions, and the particular set of historical circumstances that preceded the development of the hacienda in the various countries, are also said to have influenced the emergence of varying relations of production and forms of hacienda organization.⁹

There is some similarity, however, between the Chilean inquilinaje, the Ecuatorian huasipungo relation, the colonato of northern Bolivia and the Peruvian highlands, and the Mexican peon acomodado. In all these cases the peasant is allotted a piece of land which he farms with his own labour and tools to produce the means for his sustenance. In turn, he is required to work a certain number of days for the hacendado receiving little or no remuneration. One thus finds in the hacienda of these countries a labour process which is twofold. On the one hand, there is the small subsistence plots of the peasants, and on the other, the large scale labour process of the hacendado. This is in contrast with modern capitalist production, where the labourer is paid a wage, rather than allotted land, and where the labour process is one, and one in which the worker produces the value of his own wage at the same time as he produces surplus-value for his employer.¹⁰ So far as there are common features to the above relations I think that a study on the Chilean inquilinaje can provide some insight into other Latin American haciendas. Yet, since each has distinctive features, the relevance of a theory of the inquilinaje if applied to other haciendas can be assessed only after careful empirical analysis. This study does not aim at explaining haciendas, other than the Chilean one. Moreover, not every type of Chilean hacienda said to have existed is examined here, but only that which originated from the inquilinaje towards the mid-19th century, as shall be described in the following section.

Section 2 :

The origins of the Chilean hacienda and theinquilinaje¹¹

The 19th-century hacienda has its roots in earlier forms of economic and rural social organizations. Following the arrival of the Spanish in Chile their main economic interest was in gold and silver mining using Indian slave-labour. Agriculture was practiced for subsistence purposes chiefly by the Indian communities, although there was also some farming by Spaniards based upon Indian forced labour, which together with a levy in kind on the crops of the indigenous communities, served to feed the small white population, the army garrisons and the enslaved Indians working in mines.¹²

The encomienda was one of the first forms of exaction of Indian labour created by the Spanish Crown in Chile.¹³ It consisted of Indian communities who were given in 'care' to a Spaniard (known as encomendero), who imposed on them forced labour. He was allowed to put them to work in any activity he saw fit. He could also move them to another region with the permission of the authority, provided that the community itself would not be divided by this; (this regulation was widely violated, the Indians were in fact up-rooted and many communities were destroyed). In addition to their work as forced labourers the Indians of the encomienda generally grew their own subsistence crops, on which the encomendero was allowed to impose a levy in kind. As opposed to the African slave (of whom there were few in Chile) the Indian was said to have a soul, in other words, he was considered to be a human being. He himself could not be purchased or sold but the 'care' of his community could be, and indeed was.

Initially the encomienda's main function was to secure labour for mining, where the working conditions were appalling despite some attempts by the Crown to impose regulations.¹⁴ Thousands died of malnutrition and illness. It is estimated that the population of conquered Indians declined from 450,000 in 1570 to some 230,000 in

1600.¹⁵ Apparently this led to a shortage of labour and "beginning in 1550 slaves were imported from Africa but high prices kept the traffic thin. Less expensive than Africans were Indians captured in the Araucanian wars and enslaved. This was a thriving practice even before the 1608 Royal Decree that made Indian slavery legal and it continued for nearly a hundred years, down to the end of the 17th-century".¹⁶ As compared to Mexico or Peru, however, Chile had few known gold mines with high ore content and easy gold mining was beginning to be depleted by the turn of the 16th-century.

The 16th-century was thus followed by a fast process of appropriation of land by means of the mercedes de tierra (land grants). At first the mercedes were granted by the Crown to officials and the military in reward for their services, but soon merchants, encomenderos and the clergy began to buy mercedes.¹⁷ The size of a merced was generally huge (some contained up to 50,000 hectares of land) and in central Chile there was a marked predominance of the large estate since very early colonial times.¹⁸ Further, according to Góngora and Borde the land of central Chile was appropriated over a rather short time; for example in the Puangue Valley the land had been entirely appropriated by the turn of the 17th-century.¹⁹

At first not all the owners of mercedes had encomiendas, nor did all the encomenderos possess a merced (there were a series of regulations on the supply of labour of the latter to the former). Throughout the 17th-century, however, a fusion between ownership of mercedes and of encomiendas took place. Property of land and labour thus concentrated in the same hands and it is held that this was a major step towards the formation of the hacienda.²⁰

It is apparent that to a large extent the appropriation of land long preceded the development of agricultural activities. Most of the lands of the mercedes were covered by wild bush and grass and only a tiny fraction was farmed.²¹ The main commercial product during the 17th-century was extensive livestock breeding. There was also some wheat

being cultivated for use or exchange, chiefly in La Serena, Aconcagua and Concepción (in places adjacent to the larger towns or transport routes), the source of labour being largely the encomienda. The first half of the 17th-century seems to have been a rather idle period for commerce, however, although during the second half there was a modest development of the town markets and of regional trade between Chile's three main centres of La Serena, Santiago and Concepción. In fact, recent scholarship has shown that trade in towns and some inter-regional commerce existed from early colonial days.²² "The large estates were engaged almost from the beginning in the export trade. Animal products were bundled into skins, hauled by muleback to Valparaíso and consigned to a handful of merchants who negotiated their sale. The most lucrative 17th-century markets were Lima and (after 1650) the army garrisons of Bio-Bio and Valdivia. The estancieros [owners of cattle ranches] closer by to Santiago sold their still very modest quantities of wine and garden crops, flour, candles and lard in the city, converting sections of their houses into stalls that opened to the main street streets".²³

Further, during the second half of the 17th-century a more meaningful development of wheat cultivation began to take place, which continued to be based upon the use of encomienda labour. Trade within and between Chile's three major regional centres of La Serena, Santiago and Concepción, however, was still fairly modest by then (the city of Santiago for example, the country's largest urban centre, had less than 520 households with a population of barely 5,000 people).²⁴ The market for wheat thus depended largely on shipments to army garrisons in the south and on exports to Peru which the Crown allowed as from 1667 following an earthquake that ruined the indigenous Peruvian irrigation system.²⁵

Amidst marked short term oscillations, trade between Chile's three regional centres and exports to Peru of wheat, flour and pelts grew during the first half of the 18th-century, accelerating considerably as from the 1780s

in a phase which could be described as one of a limited colonial mercantile expansion (limited to products, countries and volume of trade allowed by the Spanish Crown)²⁶. Notwithstanding this, the encomienda was abolished in 1791 although it is held that by then it had already lost all economic importance. It is held that "owing to the weak administrative structure of Chilean Indians it was expensive and difficult for the Spanish authorities and landlords to demand forced labour on the estates".²⁷ It is also held that the "Indians of central Chile gradually but persistently withered away. Demographic attrition began with the impact of European diseases and demands in the first decades of settlement and continued into the 18th-century. Moreover the indigenous groups were further depleted through inter-breeding or assimilation and were no longer considered to be Indians by either their contemporaries or the census taker".²⁸

One has the impression that there is still much to be learned about why the encomienda went into decay. It could well be, that despite the growth of colonial trade, agriculture was still neither commercial nor profitable enough so as to justify the expense and controls required for imposing forced labour upon the Indians. In countries rich in gold mines or with commercial plantations the encomendados and black slaves did not 'wither away' so easily from the notice of census takers, or from the eye of potential masters. At any rate, whether or not it was the result of the encomienda's decline, we know that an important development occurred during the second half of the 17th-century that contributed to the formation of a peasantry. It was known as the préstamos de tierra (borrowing of land).

Prior to the formal abolition of the encomienda and particularly during the second half of the 17th-century there had been countless litigations over boundaries amongst the owners of mercedes. The boundaries of mercedes were usually established very vaguely and the fact that most of the land was unoccupied and covered by bush was an open source for disputes.²⁹ Hence the préstamos de

tierra emerged; an arrangement whereby a person was allowed to settle in lands of a merced in return for just a few labour services such as helping in the round-up of cattle, but most importantly with the commitment of acknowledging the property rights of the landowner in the case of a dispute. This type of agreement speaks for itself of the personal relationship that existed between the settler and the landowner. It is held that these settlers came from the poorest sections of colonial society such as mestizos and descendants of low rank Spanish soldiers.³⁰ Kay takes the view that this was the first type of Chilean hacienda.³¹ It was known as estancia and its main commercial activity was livestock breeding, combined with a modest production of wheat and vegetables on those estates located near to the cities or export routes.

The cattle herds were left to graze in extensive natural pastures and this required little labour. As Bauer describes, "in a common pattern of movement, for example, livestock pastured in the coastal range through winter and spring and were then moved across the valley and up into the veranadas (summer pastures) of the Andes. There they stayed through the summer, and were brought down in the fall when animals were selected for breeding or slaughter. (...) The pastoral year on the great estancias turned around the rodeo and autumnal slaughter when the angular criollo cattle were converted into lard, leather and jerked beef (charqui) and sheep were killed for their pelts (cordobanes)".³²

In contrast to livestock-breeding, however, wheat production and agriculture in general were far more demanding of labour. The fast growth of population during the second half of the 18th-century, together with the development of regional trade and of commerce with Peru and Río de la Plata, led to a growing differentiation in economic activities between Chile's three main centres of La Serena, Santiago and Concepción.³³ In fact, by the late 18th-century mining of gold, silver (numerous small

deposits were discovered), copper and other ores, had become the main economic activity in La Serena whereas in districts of the central provinces of Aconcagua and Santiago wheat production had gained importance over livestock, which still remained as the basic product of estates further to the south (in Maule for example commercial wheat cultivation started only in the 1830s).³⁴ It was in estates located in the most central provinces or nearest to consumption centres or export routes that wheat production developed first, and it was there that landowners began to either demand from their settlers the payment of a rent in produce (although it could be calculated or paid in money), or the stepping-up of their labour obligations.³⁵

There seems to be some discrepancy in the emphasis that scholars give to either of the above 18th-century processes (increase of the rents, or of the labour obligations). Kay maintains that landowners gradually stepped up the rents of their peasants who were by then known as arrendatarios (leasees). Kay holds that during the 18th-century the trend was to increase the rents rather than the labour obligations of the arrendatario. Kay takes the view that this gave rise to a second historical type of Chilean hacienda, in which the peasant's economy was predominant whilst the landowner's intervention in productive activities was largely confined to owning a herd of cattle (looked after by the arrendatario as part of his few labour obligations), and to seeing that rents were collected and paid.³⁶ Moreover, it seems that there was a change in the social and racial origins of the arrendatario as compared to the people who had previously settled in the préstamos de tierra during the 17th-century, who for the most part were impoverished Spaniards or mestizos as described further above. The 18th-century arrendatario is said to descend from the Indians of the encomienda, some of whom had inter-bred with the mestizos.³⁷

Bauer, however, refers chiefly to an increase of the peasants' labour obligations, rather than of their rents.

He maintains that the Spaniards and mestizos who in the 17th-century settled in the préstamos de tierra were gradually incorporated into rural society as vaqueros and mayordomos (herdsmen and stewards), being allowed to graze their own livestock in the hacienda paying little or no rent. Bauer argues that since the 1770s, the fast growth of population and the abolition of the encomienda created a vast floating population which the hacienda did not absorb. This floating population lived in scattered coastal hamlets or in spontaneous settlements occupying hacienda lands, many of which were allowed to remain on the lands of the estates on condition that they would keep an eye out for thieves. As cereal cultivation expanded towards the end of the 18th-century, these settlers were required, under threat of eviction, "to supply an able bodied man to the estate all year round to help with the ploughing, planting or irrigation".³⁸ This view of the arrendatario portrays him as a labour supplier from the outset, rather than as a rent paying tenant. Kay, who as we have seen regards the arrendatario as a tenant paying rent either in produce or money, rather than as a labour supplier, maintains that towards the turn of the 18th-century there was a commutation of rents, from rent paid in kind or money into labour-rent. He argues that as the commercial importance of wheat cultivation grew towards the turn of the 18th-century, the hacendados started to take production into their own hands, the arrendatario being now asked to supply labour to the estate(i.e., pay his rent in labour), rather than to pay rent in produce or money.³⁹

From the available literature one gets the impression that much research is still needed on this period since little is known about the arrendatario people and references to them are scant.⁴⁰ Although a number of doubts can be cast as to the real nature of the arrendatario, it is possible that in some cases he was originally required to pay rent in produce(in estates closer to towns, perhaps in money), this being later on commuted to labour services.

Likewise, it is possible that in other cases he was required from the outset to supply only labour to the estate. There might have been considerable regional variations of the arrendatario determined by the extension of wheat cultivation (for exchange) and social norms sanctioned by custom. If the arrendatario was once the owner of a substantial herd of cattle and enjoyed possession of a sizeable portion of land paying little rent to the estate, it was probably not easy for the hacendado to expropriate him overnight, let alone change his condition from one of a rent paying tenant to that of a supplier of non-remunerated labour. It may also well be that once the shift from livestock breeding towards wheat production was on its way the late-comers and squatters were settled on the estates on condition that they supplied only labour, rather than pay rent. Thus, what Kay and Bauer maintain of the arrendatario are, in principle, not necessarily opposing views.

At any rate, it is generally agreed that towards the turn of the 18th-century the trend in the most central provinces was to increase the arrendatario's labour obligations with the estate, rather than his rent. By then the arrendatario was known as inquilino-arrendatario. As wheat cultivation continued to expand in the first half of the 19th-century, the inquilino-arrendatario was required to provide the estate with more labour and eventually only labour rather than rent, and he came to be known as inquilino. From here originated the type of hacienda which is examined in this thesis. Hence, in what follows the word hacienda shall refer to this particular type.

Section 3 :

Chile's colonial society

Let us now briefly glance at the type of society that grew out of the colonial epoch for this influences some

characteristics that we shall see in the hacendado and his inquilino and allows us to better comprehend the hacienda in a wider social perspective. During the colonial period Chile was relatively isolated from the Spanish central administration. To anyone that has visited the country it would be apparent that transportation then was a very major problem. Separated from the (Atlantic) Río de la Plata by the Andes, from the Viceroy in Lima by the Atacama Desert, contact with the rest of the world was practical only by sea and there were few natural ports. Moreover, very few of Chile's rivers were at all suitable for navigation (none north of the Bío-Bío in Concepción) and all of them run from east to west. In addition to this Chile's already narrow territory is crossed from north to south by another chain of mountains known as cordillera de la costa. Certainly there have been factors other than geographical ones which have contributed to Chile's isolation. There was no such thing as the rich gold mines of Peru to attract the eye of the conquistadores and merchants; the Indians were far more backward than the pre-Colombian civilizations of the Andean highlands or Mesoamerica; the climate was unsuitable for commercial plantations of indigo, sugar or cotton for example. Indeed, Chile was of secondary importance within the political organization of Spanish America and its governor was accountable to the Viceroy in Lima.⁴¹

Due to that very isolation, however, Chile was able to escape from some of the controls that the Crown had on other places such as Peru or Mexico for example. Land and the Indians of the ecomienas were distributed with almost entire freedom, violating the Crown's provisions that related to the conservation of indigenous communities.⁴² As a consequence of this and partly because the Mapuches were more primitive than the Indian civilizations of the Andean highlands, Mexico or Mesoamerica, in Chile, more so than in other places, the Indian communities were quickly subdued and destroyed both culturally and

economically (only the Araucanos in the far south were able to resist). "Land grants were given to Spaniards in the very centre of native communities and inhabitants were scattered or resettled and eventually organized in work gangs. (...) In Chile the conquest swept away the native culture and values and the Indian was forced into a foreign system he could not comprehend. It was a system against which he had no defence, no tradition of resistance to draw upon, no understanding of his own rights".⁴³ This provided one of the historical basis for the subordination of the inquilino to the hacendado, for it was the descendants of these Indians many of whom inter-bred with the mestizos, as we have seen, who were later integrated into the hacienda as arrendatarios and (or) thereafter as inquilinos.⁴⁴

As regards the upper class, the Officials of the Crown that went to Chile were rapidly absorbed into a local 'aristocracy'. Further, a number of administrative posts were filled by Chilean born subjects and at first a relatively cohesive Creole-Spanish aristocracy emerged (an aristocracy in possession of titles of nobility but wealthy only if seen in the context of Chile's society). Its members owned most of the land although they lived in the cities, either in Santiago, Concepción or La Serena.⁴⁵ Nonetheless, there developed regional groups within the colonial aristocracy which by the late 18th-century had evolved into three distinct geographical and socio-economic nuclei centred in the northern city of La Serena, Santiago in central Chile, and Concepción in the south, the most powerful being the Santiago aristocracy composed of some 200 families of the late colonial vecindario noble.⁴⁶ Later, as the War of Independence gave birth to the Republic there were conflicts between the three regional groups, but the Santiago landed aristocracy was soon able to control the government within a process that was marked by a strong social continuity, in the sense that there were no immediate radical changes in the nature of Chile's society.⁴⁷

The War of Independence was not the result of social unrest amongst the lower classes nor did it produce a social upheaval. "The leaders of the revolt were almost without exception hacendados(...) There were few caudillos brought to the fore. The hacendados kept firm control of the country while the conflict was going on (...) The encomienda and the hacienda had built up an aristocracy which, once the government of Spain was overthrown, stepped into the place vacated by the representatives of the Crown and set up a new government in harmony with the existing social order".⁴⁸ In slightly more than a decade the Santiago landed aristocracy succeeded in installing a fairly stable and efficient system of government as compared to any other Latin American country, and one which was highly centralized in Santiago. It was known as the autocratic republic and its constitution of 1833 ruled the Chilean political system for nearly a century(i.e., until 1925). "The leaders of this autocratic republic insisted on sober and effective administration and a firm hand with the plebs. Most got their degree in law from the University of Chile and had learned (to) command in the school of the hacienda".⁴⁹

As from the mid-19th century, however, leading hacendados of central Chile, i.e., the Santiago landed aristocracy composed of the two hundred or so families with land in the most central provinces, merged quickly with merchants and later on with miners, many of whom in turn bought land.⁵⁰ Indeed, Chile was a country not run exclusively by the hacendados of central Chile but one in which they, together with merchants (as shall be seen in chapter 5), were able to remain in control. Their political power rested to no negligible extent on, and in turn provided the basis for, the inquilinaje relation.

Section 4 :

The inquilinaje and life on the hacienda

The inquilinaje presupposes a series of personal relations which need to be looked at in the wider context

of the hacienda. The inquilino was required to supply a certain amount of labour-power to the estate without being paid and this was possible thanks to a system of domination, of which the most outstanding feature was the inquilino's strong personal tie, perhaps not so much with the hacendado himself as with the land where he and his forefathers were born. This is a vision which I share with McBride who has written probably one of the most perceptive treatises on the Chilean hacienda and its influence on the country's politics.⁵¹ He maintains that the hacendado and the inquilino were the two people who formed the cornerstone of the Chilean political and social structure until the 1920s; a country that for the most part had been historically divided between the 'gente decente' (decent folk) and the 'rotos' (men in rags). The ties between the inquilino and the hacendado gave the latter complete control over rural Chile, a seat in Congress and predominance in government, whilst providing the former with a slightly higher status than the roto, the rural peon.⁵²

McBride describes the inquilino in the following terms : "The inquilino in present day Chile [1920s] is neither slave nor serf, and no bondage to the land or the landowner has legal status. He is not even a peon, since the essential feature of peonage -debt bondage- is not recognized or practiced in the republic. Legally he is free to leave the farm at will: there is not even a legal contract binding him to remain. But he is, nevertheless, in most cases quite firmly attached to the estate on which he lives. He thinks of himself as part of the estate. His father was probably born in the place, and his grandfather and several generations of ancestors spent their lives on the hacienda. Thus by heritage and custom he is strongly rooted to the particular property on which he lives".⁵³ In pre-1930s Chile, the inquilino himself very rarely emigrated although some of his sons did when there were no prospects for them of obtaining land as inquilinos, deciding to leave the estate for the city, rather than to become casual peon labourers for

example. Besides the personal ties that held the inquilino to the hacienda, there was little chance of his faring better in the city or, as from the late 19th-century, of obtaining land elsewhere in the remote regions of the south.⁵⁴

The inquilino's life was full of hardships. At best he would own a few head of cattle (probably a team of oxen), a horse and some sheep, in which case he would be said to be well-off; he scarcely owned any but a few simple tools and neither the land nor his dwelling were his property. His dwelling consisted of one or two rooms built of cane, plastered over with clay, or of adobe brick, an earth floor, one or two doors and possibly a small window in either rooms. There he, and his extended family of several sons and daughters, one or two relatives or lodgers known as allegados, and perhaps a passing-by friend, squeezed in. He had very few personal possessions. McBride says that in matters of food and clothing he lived little above the mere subsistence level and this view is shared by most scholars.⁵⁵ Moreover, he was required to supply the estate with labour-power, usually with one or two men for some 240 days a year. He could either work there himself or send a substitute who was often one of the members of his household. For this he received a food ration while working for the estate and, as from the early 20th-century, perhaps a little money or a token for exchange in the hacienda's store, together with the right to use a few hectares of the estate's land and keep for himself whatever he managed to produce (cash payment became more important after the 1930s). He was also allowed pasture rights for a few head of cattle and a small number of sheep. At the time of the harvest every member of his household was obliged to work for the estate at whatever rate was being paid to outside peons, or less. Working hours were from sunrise to sunset, i.e., about ten hours in winter and twelve in the summer. There was half an hour's break at mid-morning and another at noon. The mid-morning food ration usually consisted of about 300 grams of flour (harina tostada) or a bread known as galleta, and at noon

of some 300 grams of beans cooked with chicharrones (the residue of cow fat after being melted and the liquid poured-off for lard making).⁵⁶

Although the inquilino's life was full of hardship, matters could get even worse if he were expelled or had to leave the hacienda. Worse-off than he, was the rural peon, who as opposed to the Mexican peon was an entirely free man, usually a migrant from coastal villages or loose settlements (known as costino), or a member of an independent small-holding family (minifundia) for whom there was no more room or work to do, and he needed to seek whatever casual employment he could get. The peon had no security of employment and often nowhere to stay having to spend his nights in barns or in the open air. He worked for a daily or weekly wage and his status was the lowest in rural society (some peons were men permanently on the move, especially until the 1860s).⁵⁷

In contrast to this the inquilino at least had a dwelling and a place to stay where he could grow some vegetables, build a hen house, meet friends; he ran little risk of being evicted in the event of disability or accident as the hacendado seldom failed to respond to such situations, after all the family of the inquilino had been known to the hacienda for generations.⁵⁸ There was also a slim chance of promotion to the category of foreman (capataz, mayordomo) or to the slightly higher status of herdsman (vaquero). Members of some inquilino families obtained employment as servants in the hacendado's house (the empleadas), and a few of these were taken to serve in the Santiago house. McBride again, draws a sharp comparison between the inquilino and the casual peon. The latter is unattached and undependable; someone at odds with a society that has found no place for him. He is often a vagabond and one can find him in the country or city where he emigrates in search of work. "It is hardly to be expected that he would conform to social conditions created by the hacienda regime. Rather he looks on society as his enemy and preys upon it at every opportunity. One

guards against meeting him in unfrequented places by day or night, in city or country.(...) In sharp contrast with this landless, professionless, patronless, lawless, unattached 'roto' is the inquilino of the hacienda. He is respectful, loyal, faithful, diligent, honest, submissive. Sometimes quarrelsome with his equals and quick to let quarrels grow into fights, he seldom forgets himself, even when drunk, so far as to fail in deference to the upper class. He knows his place and keeps it and discharges well the obligations of that position." 59

Most haciendas had a store where the inquilino could obtain such things as clothing, needles, thread, mate(a typical beverage imported from Paraguay or Argentina), tobacco and alcoholic drinks. It was known as the pulpería and there he also often sold, or traded-in part of his crop. In pre-1930s Chile it was a common practice to pay the inquilinos with tokens known as fichas, which could be exchanged for goods but only at the hacienda's store. At any rate, going to town usually involved a long and time-consuming journey on horseback. Beyond increasing the inquilino's dependence on the hacienda, the store also played a necessary economic and social role and it was the centre of much of the social life that went on in the hacienda. 60

On some haciendas there was a chapel although the visits of the priest were not very frequent. 61 In few cases there was a resident priest. When attending mass the inquilino was almost invariably preached to about the values of loyalty and hard work; the sermon, given by a priest who "gamed and supped with the hacendado", was one of the factors which contributed to strengthen the subordination of the inquilino to the hacendado. 62 As McBride says, "the feast days are more likely to be celebrated than Sundays," followed by horse racing competitions and drinking parties at one of the inquilinos' houses. 63

The number of inquilinos of the hacienda varied greatly, not only according to the hacienda's size and cultivated area but also in different historical periods (more of

the latter will be seen in chapter 2). McBride reckons that in the 1920s most haciendas of central Chile had between 15 and 35 inquilinos, some had between 50 to 75, and a few as many as 150.⁶⁴ Much of the hacienda's labour requirements were supplied by the inquilino but extra-hands were needed for the harvest and often for the planting. This was supplied by the migrant peon or by the neighbouring minifundia-family who obtained casual employment in the hacienda and were known as afuerinos (outsiders). The work of the hacienda needed careful preparation and controls, particularly in the peak season (i.e., the harvest). Peon wages needed to be calculated and paid, thus someone had to be good with figures and at handling cash. Hand tools such as sickles, of which a vast amount were used in a non-mechanized estate, had to be distributed to the workers at sunrise and collected back at sunset. Food rations had to be prepared and taken to the different fields where work was going on. An eye had to be kept over the peons so that there would be 'no lazing about', or tools missing at the end of the day.⁶⁵ In the hacienda there was a fairly complete hierarchical organization together with a certain division of functions. For example there was the vaquero, who was responsible for the round-up of cattle and had to supervise the milking of cows; there was the carretero who was responsible for driving the ox carts and training teams of oxen; there was the potrerizo in charge of overseeing the up-keep of fences and of maintaining a record of the number of animals in each field. They received from the estate housing, more pasture rights than the inquilino and a partial wage, (sometimes they also received a small land allotment). When the inquilino or the labourers that he supplied worked in such tasks as assigned to these overseers the former were under the orders of the latter.

In charge of the hacienda's crops was the capataz and it was with him that the inquilino dealt most. According to Balmaceda the inquilino and all the above-mentioned overseers were under his orders in absence of the mayordomo,

who was the capataz's direct superior.⁶⁶ The mayordomo was in charge of the capataz, the vaquero, the potrerizo, the carretero, and of the rest of the hacienda's staff(e.g., the man in charge of the keys known as llavero, the one who worked in the store and so on). He kept an inventory of livestock, tools, calculated and paid wages and controlled the entrance or exit of produce. All these men were usually recruited from amongst the most reliable inquilino-families.⁶⁷

Above the mayordomo was the administrator whose social origin, as opposed to the rest of the overseeing or administrative staff, was usually different from the inquilino's. McBride maintains that he was recruited from the ranks of the upper class(the function of administrator being often performed by a member of the hacendado family).⁶⁸

Finally, there was the hacendado himself. One can say that most hacendados grew up in Santiago or in a provincial city such as Talca or Concepción for example. At any rate it was there and in Santiago in particular, where the only universities and most of the secondary schools were in pre-1930s Chile.⁶⁹ The political, cultural and social life of the country's upper class was centred in Santiago and anyone who could afford it would have very probably moved there. Most of the medical profession, lawyers, men of arts and politicians lived in the capital.

As a child the hacendado had been looked after, and probably breast-fed, by his nanny(the nana), who in turn was very probably the daughter of an inquilino employed as a domestic servant at the age of 10 or 12, and later on taken to the Santiago house. She told him bed-time stories at night, which she in turn had heard at home and thus many of the popular images of rural Chile were passed on to him. Later on in life she walked him to school and often a strong tie remained between the two of them. With other servants, however, his relation was different, quite distanced and despotic. He grew up used to being served and used to being obeyed. As McBride writes, "he moved as a king in his small world".⁷⁰ The wealthiest of the

hacendado families had French governesses and sent their sons to France once they had finished their schooling. They would probably obtain a degree in Law or in some of the Arts or Divinities, but very rarely in agriculture or in a technical profession.⁷¹

The hacendado used to visit his estate at least once a year, preferably during the summer together with 'the family'; his own family and that of his brothers and sisters, aunts, grandparents, and their friends. It was an extended family gathering and McBride thinks that in many ways the hacienda contributed to keep the hacendado family united.⁷² There were a number of haciendas which were the property of the whole 'family' and whom I am referring to here as the hacendado was only one member of such a family who performed the functions of an administrator.⁷³ The family holiday coincided with the busiest time of the year in the estate: the harvest. The hacendado's presence during this time helped to maintain his authority over the workers of the estate and keep discipline in the work, which he himself sometimes supervised or planned with his mayordomo. During this time too, every able man, woman or child was needed and his presence was important to secure as much labour as possible from the inquilino family. The estate was also full of outsiders, the peons (afuerinos or forasteros as they were known), who were recruited for the harvest only and of whom nobody knew much about. They had to be 'kept in their place' and for this purpose he and his inquilinos made a good team⁷⁴; if things got out of hand with some disorderly peon his personal influence over the local police was extremely beneficial and this too required his presence in the hacienda at this time of the year.⁷⁵ In turn, the presence of his family made his evenings pleasant; otherwise, he would have been completely deprived of social life since in no way would he ever have joined his mayordomo or inquilino for a drink for example. He and his administrator, if there was one, belonged to an entirely different social world to that of the mayordomo and the

inquilino. Such is the hacienda that I examine in this thesis.

Obviously any description in a work where narrative is not the main purpose is a prototype. There were less well-off hacendados than the ones I have described, who owned smaller and less well located lands. Their estates were sometimes known as fundos and their owners were not amongst the 200 families of the old vecindario noble. They could not afford a French governess and many were not wealthy enough to afford even a Santiago life-style, in which case they resided in a provincial city such as Talca or Curico for example.⁷⁶ Their estates, however, were organized on the same principles as we have seen and their relationship with their inquilinos was as I have portrayed above. Thus, the theoretical study that follows applies also to their estates.

Section 5 :

The inquilinaje relation

I define the inquilinaje as a relation of production between the hacendado, who owns means of production, and the inquilino who only owns his labour-power and a few instruments of labour.⁷⁷ In general terms the inquilinaje relation operates as follows: the inquilino is allotted a small piece of land and a dwelling (or the materials to build one), and is granted some pasture rights and allowed to collect wood. In return for this he is expected to supply labour-power to the estate, either by working there himself or sending a member of his household. He generally receives a couple of hectares of land for dry farming, known as regalía pa' trigo, and a very small irrigated garden plot near his dwelling known as cerco. The size of his land allotment and the amount of labour-power that he supplies to the estate vary according to the type of inquilino, the different historical periods, local custom and (it goes without saying) the quality of the land itself. There

are inquilinos of different status or grades in the mid-19th century. The highest status corresponds to the inquilino de a caballo who provides the estate with a worker on horseback when required. The most common status is the inquilino de a pie who provides the estate with workers on foot mainly (there can also be different grades of inquilino de a pie). The inquilino de a caballo receives a larger piece of land than the inquilino de a pie, but the labour obligations of the former are greater than the latter's. The 1870s handbook of the hacendado for example, suggested that:

"Custom has sanctioned so far that the name of inquilino should be applied to the workers living in the estate who do not receive wages, and that provide their services without payment. (...) In large estates where it is convenient to have inquilinos de a caballo, they should be granted grazing rights for horses or cattle amounting to no more than ten to twelve in number and for up to twenty five sheep. In addition they should be allotted land to sow four fanegas of wheat [some 2.7 hectares of average quality land], and about half a cuadra of land for garden crops [some 0.8 hectares].

To repay the hacienda all these benefits, the inquilino de a caballo should provide the estate with the following workers. One worker on horseback for the rodeo, the roundup of sheep and other services of the like; one worker on horseback for duties outside the estate who will be paid 25 centavos per every ten leguas ridden; one worker for the up-keeping of fences who will receive only food rations; one worker for the sowing who will be paid only when the sowing has exceeded the 300 fanegas [the sowing of some 200 hectares of average quality land]; one worker on horseback for the threshing who will receive only food rations; this man will also work in the stalking; one worker for all the ordinary tasks who will receive the same payment as the men supplied by the inquilino de a pie unless it was agreed that he should work for free.

The inquilino de a pie should be granted grazing rights for cattle or horses amounting to no more than two to four in number, and for up to twelve sheep. He should be allotted land to sow one or two fanegas of wheat [0.7 to 1.3 hectares of average quality land] and a small piece of land of up to 1/4th of a cuadra to grow garden crops [some 0.4 hectares of land]. To repay the hacienda for all these benefits the inquilino de a pie should provide the estate with one horseman for the rodeo, the roundup, threshing, stalking, and to perform duties involving short distance travelling, either on his own horse if he has one, or on one provided by the estate; no remuneration shall be paid for these tasks. The inquilino should also supply a daily workman for all the tasks of the hacienda

who will receive the ordinary wage rate, although the hacienda reserves the right to reduce such a wage at discretion to a third of its value and under no circumstances to increase it. In addition, these inquilinos should be required to put to work for the estate all the members of their household for the same wage that is paid to outside peons".⁷⁸

As can be seen from the above description only part and only in some circumstances is the labour-power supplied by the inquilino remunerated by the hacendado with either food rations or money; the rest the inquilino himself must finance with the produce of his own land or livestock. That part of the labour-power which he himself finances will be referred to as inquilinaje labour-power.

As we have seen, the inquilino can either work for the estate himself or send a replacement to discharge his obligation. Whenever he works for the hacienda he does so under the direction and the orders of a foreman or overseer, and with tools and farming equipment that belong to the estate (except in some particular cases when he needs to supply a horse, or a team of oxen).⁷⁹ To a certain extent he, as a proletarian, is supplying abstract labour or labour-power to someone else thus alienating his labour capacity. The labour-power that the inquilino supplies is used in a productive process which is the property of the hacendado and which takes place in the fields of the latter (all the land is owned by the hacendado and I refer to the 'hacendado's fields' in the sense of demesne, as opposed to the land in possession of the inquilino). The inquilino, however, also uses his own labour (and that of the members of his household) to cultivate his piece of land. As opposed to a proletarian, in this particular circumstance his labour remains as his property, within a process of production of which he is seemingly the owner, i.e., in terms of usufruct.

As regards the forces that compel the inquilino to supply labour-power to the estate, I have mentioned the personal ties that exist between himself and the hacienda and the relation of subordination and dependency which he

has with the hacendado. For such a relation to develop, however, the inquilino needs to appear as a person deprived of ownership of land and the hacendado, as the proprietor. The inquilino in fact only owns a few instruments of labour(a plough,a working animal,seed), rather than means of production as such, because he does not own land which is an essential constituent of the means of production in agriculture. To this extent land ownership separates the inquilino from the means of production and thus he must bow to the conditions imposed upon him by the proprietor, the hacendado, who demands the supply of a certain amount of non-remunerated days' labour for access to a piece of land. The existence of a rural population deprived of land ownership is,therefore, a pre-requisite for the establishment of the inquilinaje relation.

NOTES : CHAPTER 1

- (1) Marx refers to the relations of production in the following terms. "In the social production of their lives, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of the development of their material productive forces". (Marx, K.:1968.a, p.363). Further, "whatever the social form of production, labourers and means of production always remain factors of it. But in a state of separation from each other either of these factors can be such only potentially. For production to go on at all they must unite. The specific manner in which this union is accomplished distinguishes the different economic epochs of the structure of society from one another". (Marx, K.:1959, vol. 2, p.34).

In this thesis the term relation of production refers specifically to the way in which labourers and the means of production come into contact with each other; in other words, to the manner by which the juncture between human labour and means of production is established. The relations of production thus presuppose (and at the same time determine), a certain social order and authority, various or different rights of possession or ownership of the material requirements for labour (land, tools, means of subsistence). A further distinction can be made between the relations of production, which as described above spring from the productive process (process as a consequence of which new values of use or exchange are created), and the relations of circulation which result from commerce or exchange, and which have to do with the distribution (circulation) of produce, rather than with its production. For further references to the relations of production see Marx, K.: 1959, vol.2, pp.30-36, and vol. 3 chapter 47.2; Marx, K.:1968.a ; Marx and Engels :1964 part A. Amongst other works. see also Dobb, M.:1968, p.7.

- (2) See Marx, K.:1968.a ; Marx and Engels :1964 parts A & B; and Engels, F.:1968 .
- (3) On the concept of landlord-peasant relationship (primarily as applied to the Chilean hacienda) see Kay, C.:1977, pp.103-06. Baraona, R.:1965, applies this concept to the study of the Ecuatorian haciendas. Within Latin America, the term landlord-peasant relationship may nonetheless involve various, and often quite different relations of production (Warriner, D.:1966, pp.226-33). A distinction is thus normally made between two types of peasants. One type

is the peasant who is allotted a piece of land in the estate, and who is required to supply a certain number of non-remunerated (or only partially remunerated) days' labour to the landowner. This type of peasant is regarded as a retainer paying labour-rent, his relationship with the landowner being defined as a 'landlord-tenant' relationship. The other type of peasant also lives and farms a portion of the estate's land, but has to pay rent either in kind or money, rather than 'in labour'. A further distinction is made between the peasant who, by any of the above means is given access to a piece of the hacienda's land (defined as internal peasant economy, i.e., internal to the estate), and the peasant who is legally or otherwise the actual occupant of land which does not belong to the hacienda (defined as external peasant economy). Kay, C. Ibid., and Baraona, R. Ibid. See also Moerner, M.: 1977, pp. 455-82.

- (4) See : Moerner, M.: 1975; Duncan, K. and Rutledge, I.: 1977 (Introduction); Kay, C.: 1976; and Keith, R. et al: 1977 (Introduction).
- (5) See Mariátegui, J.C.: 1955, pp. 64-76. For a comparison between the Chilean hacienda and that of the northern Bolivian highlands see Kay, C.: 1971, part 3.
- (6) See Martínez Alier, J.: 1977, pp. 147-49.
- (7) See for example Gay, C.: 1973, vol. 1, pp. 182-83; McBride, G.: 1936, pp. 148-49; Bauer, A.: 1971, p. 1062; and Lehmann, D.: 1974, pp. 326-33.
- (8) See Wolf, E. and Mintz, S.: 1975. Passim
- (9) See Keith, R.: 1976, chapter 3; and Moerner, M.: 1975, pp. 31-34.
- (10) On the capitalist labour process see Marx, K.: 1959 vol. 1, chapters 6-11; Marx, K.: 1973, pp. 321-26 (on the production of value and surplus-value).
- (11) This section is based chiefly on the following works. Gay, C.: 1973, vol. 1; Góngora, M. and Borde, J.: 1956; Góngora, M.: 1960; Jara, A.: 1961; (and Jara: 1965 and 1973); Baraona, R. et al.: 1961; Bauer, A.: 1975; Carmagnani, M.: 1963; Carmagnani, M.: 1973; Lockhart, J.: 1969; Kay, C.: 1971; and McBride, G.: 1936.
- (12) Subsistence meaning here the crops grown by the Indians in their own traditional manner and which was part of their economy before the arrival of the Spaniards.
- (13) See Jara, A.: 1973; Galdames, L.: 1945, pp. 115-20; and Kay, C.: 1971, p. 94.
- (14) See Jara, A.: 1965 (a compilation of documents of

meetings of the Cabildo concerning the Indians); and McBride, G.:1936, pp.79-81.

(15) See Mellafe, R.:1959, p.226.

(16) Bauer, A.:1975, p.7.

(17) See Kay, C.:1971, pp.94-95; and Lockhart, J.:1969, pp.480-85.

(18) See Góngora, M. and Borde, J.:1956, chapter 2. For a description of central Chile and the various regions mentioned in this thesis see Appendix 2.

(19) Ibidem. See also McBride, G.:1936, pp.104-12.

(20) See Kay, C.:1971, pp.96-97.

(21) See Góngora, M. and Borde, J.:1956, pp.39-40; Gay, C.:1973, vol.1, pp.80-87; and CIDA.:1966, p.5.

(22) See Carmagnani, M.:1973, pp.215-17.

(23) Bauer, A.:1975, p.13.

(24) See Carmagnani, M.:1973, pp.215-18, 265. Population data from Bauer, A.:1975, p.8.

(25) See Carmagnani, M.:1973, pp.35-36; and Sepulveda, S.:1959, chapter 1.

(26) See Carmagnani, M.:1973, pp.42-58, 264-65, 273-74.

(27) Kay, C.:1971, p.98.

(28) Bauer, A.:1975, p.14.

(29) See Góngora, M. and Borde, J.:1956, pp.39-40; and McBride, G.:1936, pp.104-11.

(30) See Góngora, M.:1960, p.44; and Kay, C.:1971, pp.97-99. Góngora nonetheless states that it is very difficult to establish with certainty the origin of the people who obtained préstamos de tierra, records being very scant (Góngora, M. Ibid., p.71).

(31) See Kay, C.:1971, pp.97-99.

(32) Bauer, A.:1975, pp.12-13.

(33) See Carmagnani, M.:1973, pp.264-65.

(34) Ibidem (also pp.199-233).

(35) See Kay, C.:1971, pp.100-04; Carmagnani, M.:1973, pp.218-24; Bauer, A.:1975, p.15; and Góngora, M. and Borde, J.:1956, pp.44-47.

- (36) See Kay, C.:1971, pp.101-03.
- (37) Ibidem. Also Góngora, M.:1960, pp.39-40; and Bauer, A.:1975, p.15.
- (38) Bauer, A.:1975, p.15. McBride, G.:1936, p.114, also maintains that inquilinos existed as early as the 17th-century in some places.
- (39) See Kay, C.:1971, pp.105-09. I avoid using the term 'labour-rent' for analysis since I think that labour should not be identified with a form of rent (labour-rent not being a form of rent proper; this topic is discussed in chapter 4 section 5 of this thesis).
- (40) The literature touching upon the subject of the arrendatario consists chiefly of Kay, C.:1971, pp.101-09, and Bauer, A.:1975, pp.14-15. These are in turn largely based on the only work which deals specifically with the origins of the inquilino, Góngora, M.:1960. Also Gay, C.:1973, vol.1, pp.179-82, and McBride, G.:1936, pp.112-22 contain valuable passages on the process which gave rise to the inquilinos. See Appendix 1.(ii) of this thesis.
- (41) See Galdames, L.:1945, pp.131-37. For a general description of Chile's social and economic life in the colonial period see Bauer, A.:1975, chapter 1.
- (42) See for example Jara, A.:1965, pp.180-201; and McBride, G.:1936, pp.80-85.
- (43) Bauer, A.:1975, p.8.
- (44) See Jara, A.:1973; and McBride, G.:1936, p.120.
- (45) Bauer, A.:1975, p.10. See also Edwards, A.:1966, chapter 2.
- (46) See Pregger Roman, C.:1975, chapter 2. This topic is examined in further detail in chapter 5 of this thesis.
- (47) See Bauer, A.:1975, p.18; McBride, G.:1936, chapter 7; Galdames, L.:1945, pp.299-303; and Edwards, A.:1966 chapter 4.
- (48) McBride, G.:1936, pp.188-89.
- (49) Bauer, A.:1975, p.45.
- (50) See Pregger Roman, C.:1975, chapter 2; and Bauer, A.:1975, chapters 2, 7.
- (51) McBride, G.:1936. Appendix 1.(ii) of this thesis contains relevant comments on the background of McBride's work and his vision of the inquilinaje.

- (52) For a description of inquilinos see amongst others Bauer, A.:1971, pp.1060-69; Izquierdo, G.:1968, appendix 3; and Loveman, B.:1973, vol.1, pp.57-71. For comments on Gay's description of the inquilinos see Appendix 1(ii) of this thesis.

As from the late 19th-century it became a common practice for the hacendados to exert pressure over their inquilinos and have them vote for a candidate of the landowners' choice. See for example Galdames, L.:1945, pp.529-31; Loveman, B.:1973, chapter 2; Bauer, A.:1975, pp.169-70, 222-23; and McBride, G.:1936, pp.212-13.

- (53) McBride, G.:1936, pp.148-49.
- (54) Ibidem. On the subject of the inquilino and migrations see Johnson, A.L.:1978, pp.260-69.
- (55) See McBride, G.:1936, pp.162-63. See also amongst others Marín Molina, R.:1947 passim; Izquierdo, G.:1968 chapter 3; and Pinochet Le-Brun, T.:1916 passim.
- (56) Or rather this was the ideal diet as suggested by Balmaceda, M.J.:1875, p.31. The actual food rations were often poorer than those I have described in the text. See also Loveman, B.:1973, vol. 1, pp.170, 209; and Marín Molina, R.:1947, pp.39-42.
- (57) See McBride, G.:1936, pp.163-64; Bauer, A.:1971, pp.1069-74. On early type of peons (vagabonds, wanderers) see Johnson, A.L.:1978, pp.132-43. For a narrative of the life of the early 20th-century peon see Durand, L.:1967.
- (58) See Bauer, A.:1975, pp.164-66; and McBride, G.:1936, p.155.
- (59) McBride, G.:1936, pp.150-51.
- (60) McBride, G.:1936, p.157, speaks of a few cases where the fichas were accepted beyond the confines of the hacienda. The use of fichas was illegal but this prohibition was widely violated by the haciendas, often being the source of abuse against the inquilinos. See for example Loveman, B.:1973, vol. 1, pp.60-61.
- (61) On the religious life of inquilinos see McBride, G.:1936, pp.158-60.
- (62) Bauer, A.:1975, pp.166-67.
- (63) McBride, G.:1936, pp.158-59.
- (64) McBride, G.:1936, p.165. See also Johnson, A.L.:1978, chapter 9.c. Statistics on the number of inquilinos in Chile are provided in the following chapter (also in Appendix 3 of this thesis).

- (65) See Balmaceda, M.J.: 1875, p. 34.
- (66) The specific organization of haciendas varied in different historical periods and also according to the size of the estate. The organization described here is based on a model of a late 19th-century hacienda as described in Balmaceda, M.J.: 1875. Apparently by the early 20th-century some simplification of the hacienda organization was beginning to take place together with a certain homogenization of different types of inquilinos (Loveman, B.: 1973, vol. 1, pp. 62-67).
- (67) See McBride, G.: 1936, pp. 142-43; and Bauer, A.: 1975, pp. 134-39.
- (68) McBride, G.: 1936, p. 142.
- (69) See Bauer, A.: 1975, p. 41 and chapter 8.
- (70) McBride, G.: 1936, p. 10.
- (71) Ibidem. See also Bauer, A.: 1975, p. 210; and Izquierdo, G.: 1968, p. 74.
- (72) McBride, G.: 1936, pp. 180-82.
- (73) See McBride, G.: 1936, pp. 142-44. From what I observed in Curico many years later (in the 1960s), the trend still was for the hacendado's sons to take a degree in law or in one of the Arts. Usually the offspring showing to have difficulties with his studies left school or college and took charge of the administration of the estate, either living on it, or commuting from one of the provincial cities where he established residence, as opposed to his parents and relatives who lived in Santiago.
- (74) See Bauer, A.: 1975, p. 64
- (75) See Loveman, B.: 1973, vol. 1, pp. 68-69; Bauer, A.: 1975, p. 169; and Balmaceda, M.J.: 1875, p. 33.
- (76) See Bauer, A.: 1975, p. 49.
- (77) The concept of means of production as used in this thesis, refers to the whole of the material components (tools, raw materials, buildings, etc.) necessary for human labour to engage itself in production, and which in themselves are, wholly or partly, the subject or the produce of labour. It refers to the material elements of production considered as one whole, rather than to any single or isolated constituent such as tools for example, which in themselves are not means of production since raw materials are also needed (as is land for farming for example, and many other

components which may be indispensable for production depending upon the complexity of the labour process and the produce). In this thesis the components of the means of production in agriculture are grouped in two categories. One category comprises the instruments of labour (which shall also include seed, farm installations, and all inputs), and the other category comprises the land to which Marx refers as being the subject of labour (part of the means of production). See Marx, K.: 1938, vol. 1, chapter 7.

(78) Balmaceda, M. J.: 1875, pp. 42-44.

(79) The exception being the inquilino's horse which was used for duties involving travelling (also in cases the 'well-off' inquilino was required to put to work his team of oxen for the estate during the ploughing season).

CHAPTER 2

THE HACIENDA'S LABOUR PROCESS

This chapter sets out to study the hacienda's relations of production in connection to its labour process. It also aims at introducing some of the theoretical concepts used in this thesis, thus laying the foundations for the following four chapters, where the topics discussed here will be examined in further detail.

Two basic relations of production intervene in the hacienda's labour process. One is the wage and the other is the inquilinaje relation. In section 1 a comparative analysis of the labour processes that result from the inquilinaje and from the wage relation is made, focusing on their main features at a fairly high level of abstraction. From what follows, it is apparent that these two relations are very different, yet they have co-existed and intermingled within the hacienda's labour process in a manner which has been changing since the mid-19th century. In section 2 the changes in the hacienda are looked at from a long term historical perspective, the changes appearing as a development towards capitalist production, where the emerging wage relation finally prevails over the inquilinaje. I shall therefore maintain that the hacienda has a mode of production which is in transition, its historical transformation being closely related to its two basic relations of production.¹ Finally, section 3 focuses on the hacienda's historical development in connection to changes in the quality of its instruments of labour, its technology and farming methods.

Section 1 :

Theinquilinaje relation

In the preceding chapter it was noted that the inquilino obtains possession of land by supplying labour-power to the hacendado and that this leads to a dual process of production: one which takes place in the fields of the hacendado, and the other which takes place in the land allotted to the inquilino. Thus, the inquilinaje relation has a twofold effect. It provides the hacendado with labour-power and at the same time converts the inquilino into an individual producer. Indeed, on the one hand the inquilino obtains possession of land on which to cultivate the means for his own subsistence, thereby becoming an individual producer, and on the other hand, the hacendado obtains labour-power from the inquilino which he uses to cultivate the fields of his estate.² The twofold effect of the inquilinaje relation results, therefore, in the emergence of two types of production processes within the hacienda, which I shall call the hacendado-enterprise and the inquilino-enterprise.³ Let us now proceed to examine the inquilinaje relation from the standpoint of the hacendado and of the inquilino.

The hacendado obtains labour-power from the inquilino by allotting him land, granting him grazing rights for a few head of cattle or sheep, and 'perquisites' such as food rations and a dwelling for example (or the materials to build one). One can here make a distinction between the inquilino's land allotment and pasture rights, which can be only used for production, and his food rations and dwelling, which can be classified as means of consumption. From now on, all the means of consumption received by the inquilino will be referred to, as 'perquisites'. From a very abstract point of view the inquilinaje could be represented as the supply of labour-power in return for the right to use a piece of land, pasture rights, and 'perquisites', i.e. :

:(land/pasture rights + 'perquisites') - (labour-power);

or : $T+p - L$; where T(terra) stands for the land and pasture rights allocated to the inquilino, p stands for his 'perquisites', and L for the labour-power supplied to the hacendado (the dash, reading for).

One may nonetheless find innumerable variations and diversity of mutual obligations in the inquilinaje, involving the size of the land allotment, pasture rights, labour-power supplied and the 'perquisites'. In order to theorize on this matter, it is necessary to distinguish the essential constituents of the inquilinaje from the accessory ones. I think that the essential feature of the inquilinaje is the right to use a piece of land and grazing fields in return for the supply of labour-power. In fact, if instead of being allotted land the inquilino received only 'perquisites' for his labour-power, the nature of the relation would be entirely different since he would not become an individual producer. If the inquilino was provided only with food, a dwelling and other articles of life for example, then only one production process would emerge, that of the hacendado, and it would be he, who in such a case, would have to provide all the means necessary for the inquilino's livelihood. If otherwise the inquilino was only allotted land but received no food rations, no dwelling, or any other means of consumption in the way of 'perquisites', the nature of the relation would remain unaltered, since the inquilino would still become an individual producer and two production processes would emerge (the hacendado's and the inquilino's). The supply of labour-power in return for the right to possess a piece of land and grazing allowances, therefore, is essential to the inquilinaje relation and we shall now focus on this.

The hacendado's productive process begins once he obtains the inquilino's labour-power for the sowing for example, and it ends at the harvest when he obtains a product (e.g. wheat), a commodity which can be represented

by the letter C'. Such a product embodies a surplus, over and above the expenses of production. The surplus-value appears at this stage in the form of surplus-product and it is symbolized in the apostrophe following the letter C.⁴ We may thus represent all this by:

T - LP..... C'

(where T - L stands for the allotting of land for labour-power, P represents the process of production, the dots its duration, and C' stands for the product).

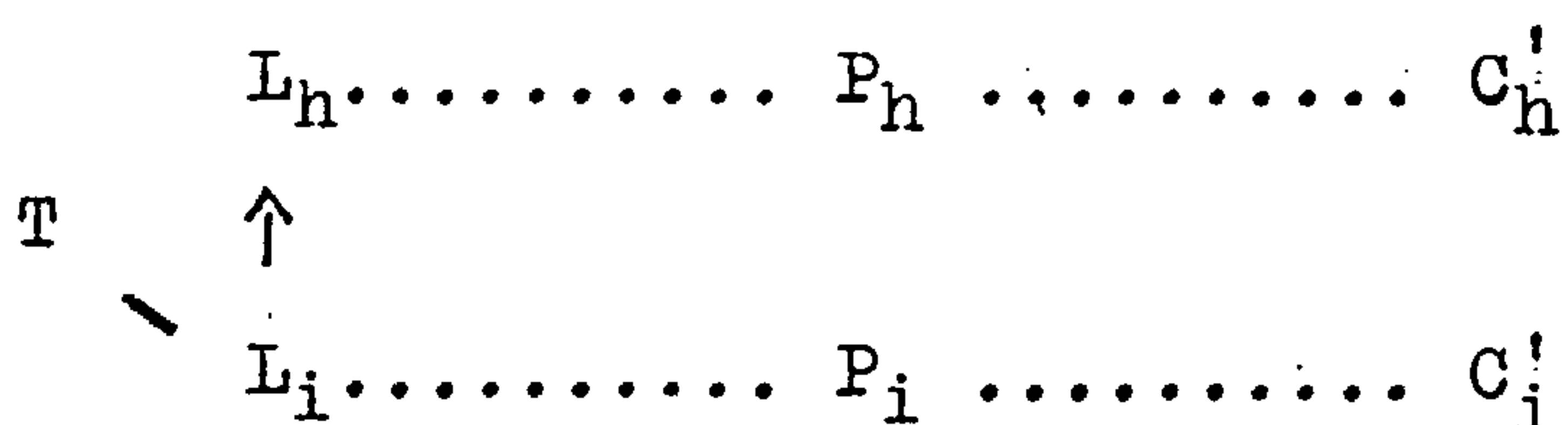
Comparing the allotting of land to the inquilino (T - L) with the capitalist purchase of labour-power (M - L, or money for labour-power), it becomes apparent that only the latter involves money. Furthermore, it is not money per se that makes the capitalist wage relation different from the inquilinaje, but above all the role of money in uniting labour-power with the means of production, i.e., money acting as capital. Indeed, in capitalism money plays a threefold role. Firstly, money acts as a means of exchange; that is to say, as a socially accepted means of payment. Secondly, money serves as a measure of value performing the function of a general equivalent and reserve fund. Thirdly (and most importantly), money acts as capital because it is necessary for the purchase and sale of labour-power, which is in turn one of the basic features necessary for the emergence of capitalist production.⁵ In other words, money acts as capital because capital itself needs to take the form of money since in capitalism it is only with money that labour-power and means of production can be obtained. Thus, for money to perform the role of capital both, labour-power and means of production must first be readily available in the market as commodities which can be freely purchased and sold. For this to occur and therefore in order that money

may perform the role of capital "historical processes are assumed by which the original connection of the means of production with labour-power was dissolved -processes in consequence of which the mass of people, the labourers, have, as non-owners, come face to face with the non-labourers as the owners of these means of production" , the labourers therefore having little choice but to sell their labour-power for a wage.⁶ As a result of such historical processes of dissolution, and once capitalism is born, the workers come into contact with the means of production through an act of purchase and sale of their labour-power, capital thus needing to appear in the form of money before it can at all become productive, living capital.

Unlike capitalist production, however, the inquilinaje does not involve the purchase and sale of labour-power. The hacendado obtains labour-power from the inquilino by allotting him land and in this money does not intervene or perform the role of capital. Here, it is the allotting of land, rather than money, which appears to unite labour-power and the means of production. Further, although in comparing the inquilinaje and the wage relation from the standpoint of the worker there may appear to be some similarities, they are in fact entirely different relations of production. The inquilino is legally the owner of his labour capacity. He may part from the estate at will, and as the free proletarian he does not own means of production (he only owns a few basic farming tools and a little livestock, but not land). Yet, by supplying his labour-power to the hacendado for certain periods of time the inquilino is allowed possession of land (thereby of means of production since he owns the required minimum implements for work), whereas the proletarian who sells his labour-power for a wage is deprived of the objective conditions for independent labour. The inquilino, who may be looked upon as a precarious possessor of land, becomes an individual producer, whereas the proletarian, deprived of personal possession of means of production, instead becomes a social

producer.

Further, as described above, by allotting land to the inquilino the hacendado creates another enterprise, the inquilino-enterprise. Thus, two processes of production and two enterprises emerge, whereas only one results from the capitalist wage relation. This is a main characteristic of the labour process resulting from the inquilinaje.⁷ The two production processes resulting from the allotting of land to the inquilino can be represented by :



(where T - L stands for the allotting of land in return for the supply of labour-power, and the sub-index h and i stand for the hacendado and the inquilino enterprises respectively).⁸

The hacendado and the inquilino enterprises have, moreover, different roles to play which further exemplifies the differences between the wage and the inquilinaje relation. With regard to the physical reproduction of the labourer and therefore of his labour-power, in contrast to the wage earner who receives from his employer the means for his livelihood through his wage, the inquilino is allotted land where he is expected to produce such means by himself. In this sense the role of the enterprise of the inquilino is to reproduce his own labour-power and that which he supplies to the estate; not just his own labour-power but also that of the workers he provides to the estate whenever they are not fully remunerated by the hacendado. The function of reproducing the inquilinaje labour-power thus creates two labour processes in the hacienda. In capitalist production, however, labour-power is reproduced in a totally different way. Firstly, the

worker receives the entire value of his labour-power from the capitalist, directly, in the form of a wage.⁹ Secondly, the value of his own wage is produced by the worker in the one and single resulting enterprise, the capitalist enterprise, since in capitalism there is no such thing as a division of the labour process between worker and employer; the capitalist labour process is one, and one in which the worker produces the value of his own wage at the same time that he produces surplus-value for his employer.

Certainly, the inquilino receives part of the means for his livelihood directly from the hacendado in the way of food rations or the materials to build himself a dwelling for example. Hence, the inquilino does not produce in his own enterprise all the means necessary for his subsistence. Nonetheless, this fact does not alter the role of the inquilino-enterprise, but only affects the magnitude of the value it produces, rather than the purpose of such value, for whatever the inquilino produces in his land, this is to reproduce his labour-power and that of the non-remunerated workers that he provides to the estate.¹⁰

Since the inquilino's position as an individual producer, which causes him to need labour for his own enterprise, depends on a continuous transference of labour-power to the enterprise of another, i.e. to the hacendado-enterprise, a very important contradiction within the inquilinaje relation is created, as Kay maintains. In many ways the fortune of the inquilino enterprise is in direct relation to the size of the land allotted to him, and in inverse relation to the amount of labour-power that he supplies to the estate.¹¹

Section 2 :

The wage relation and the hacienda as a mode of production in transition

The second basic relation of production to be found

in the hacienda is the wage.¹² Having already looked at the inquilinaje, in what follows I shall discuss how the wage and the inquilinaje relation are integrated within the hacienda in a process that ultimately leads to the hacienda's own disappearance. As we have seen in chapter 1, the 19th-century expansion of wheat cultivation on the estates brought about larger requirements of labour-power. With it appeared the inquilinos who supplied the hacienda with year round labour-power, together with the non-resident seasonal workers, the peons, who worked in the estate during the harvest time as the inquilinos were unable to provide all the labour-power necessary at this very busy time of the year. The peons were recruited from amongst neighbouring families of small-holdings, hamlets, villages, and from a floating population living in coastal settlements or occupying marginal hacienda lands.

Prior to the mid-19th century, however, the rural population at large, in places other than Aconcagua or the vicinity of towns and cities, still lived off self subsistence farming and complementary activities such as fishing and household industry. Gay describes that so far as they were able to subsist in their traditional manner they were reluctant to accept employment with the estates, often having little notion about the 'value' of money.¹³ Landowners had thus problems in recruiting seasonal labourers and during these early stages in the development of wheat cultivation (for exchange) the mingaco became a common form of recruitment. The mingaco, originally an old custom practiced by the Indians for mutual assistance in work between members of a community, now consisted in supplying the peons daily with large quantities of alcoholic drink and a sheep for them to roast in the evenings, together with a little money once the harvest had been completed. Although the mingaco was apparently a widespread (and necessary) form of recruiting seasonal labourers until the mid-19th century, it did not survive for long. Bauer maintains

that the hacendados were apparently disinclined to use it because they had to allow excessive drunkenness (in one of his passages on the mingaco Gay mentions this as one of the mingaco's disadvantages).¹⁴

In fact, although the custom of providing a little drink and often a few sheep for the peons to celebrate on completion of the harvest was continued, one does not find references to the mingaco proper being used in haciendas after the mid-19th century. The obvious disadvantage of the mingaco as regards labour productivity was no doubt one factor that led to its disappearance. Also and perhaps more importantly a process of dissolution of the subsistence economy of part of the rural population took place, which created a mass of labouring poor with no option but to seek paid employment in the estates. This provided the social basis for the emergence of wage relations. Thus, during the second half of the 19th-century wages became more and more important as a means of remuneration of peon labourers although payment in kind was also practised. By the turn of the century peons were being chiefly remunerated in money combined in varying proportions with tokens for exchange in the hacienda's store, food rations and other minor payments in kind, substantial differences occurring in the actual cash payment between haciendas in the same area.¹⁵

The spread of rural villages and of local commerce was also an important pre-condition for peons to become increasingly remunerated with money, since payment in tokens or in kind was much more likely to be practised in isolated haciendas where there were few or no places in which the money could be spent. Indeed, a close connection between the spread of hamlets, rural villages and the expansion of wheat cultivation in haciendas has been established by Tscherebilo and Johnson, who show amongst other things that the rural or semi-urban conglomerates served as a source of seasonal labourers for the estates.¹⁶ The spread of rural villages was itself largely the result of the expansion of wheat

cultivation for exchange. The dissolution of the subsistence economy of part of the rural population created a mass of labouring poor, partially (or totally) dispossessed of the means necessary for independent labour, many of whom had to leave their places of birth and settle in hamlets or small rural villages, which in turn created the basis for the development of local commerce in rural areas. Thus, the same process which on the one hand created a mass of seasonal peon labourers for the hacienda to recruit, led, on the other hand, to the establishment of the necessary conditions of local rural trade for remuneration in money to emerge.¹⁷

Although by the turn of the 19th-century the peons were being chiefly remunerated in money, one should resist too facile a judgement as to whether they should be looked upon as a newly-born class of proletarians. The late 19th-century peons were part of a fairly heterogeneous mass of labouring poor consisting of migrants from small holding areas, impoverished minifundistas, vagabonds and dispossessed squatters who as yet had developed no common identity.¹⁸

The development of money as a means of payment of rural workers did not stop at the seasonal peons. At busy times of the year when the inquilinos were asked to supply labourers in excess to their established obligations with the estate, these labourers were often partially or in cases fully remunerated by the hacendados in the same way as outside peons. Further, by the turn of the 19th-century some inquilinos themselves or the labourers they had supplied to the estate as part of their customary obligations began to receive a small cash payment, partial wage payments gradually becoming thereafter an increasingly important part of the inquilino's means of subsistence, particularly as from the 1950s.¹⁹ At this point it is therefore necessary to introduce a distinction between the inquilinaje relation and the

inquilino himself. The former is the relation of production and the latter is the labourer in person, who can be the subject of one or more relations of production. By inquilinaje relation I refer to the allotment of a piece of land (and grazing rights) in return for the supply of non-remunerated labour-power. As described in chapter 1 (section 5), all the labour-power supplied by the inquilino is not necessarily obtained through the inquilinaje relation, since part of it can be remunerated with food rations or tokens for example, or, as from the turn of the 19th-century, partially with money. In such a case, two relations of production, inquilinaje and wage, co-exist and combine even within the worker himself and this can be considered as a sign of the transitional nature of the hacienda.

Although the statistical data of the censuses is inadequate to establish with any accuracy the composition of Chile's rural workers in the second half of the 19th-century, it is apparent that the development of wage relations was a fairly heterogeneous process. Even by the early 20th-century for example Galdames describes that "from one fundo to another, separated by no more than a range of hills, or a stream, the daily rate varies from 0.40 to 1.60 pesos. This is not due as one might think to the abundance or shortage of hands in a given moment (which does influence the rate but is far from being the most important factor), but rather to the various systems of remuneration and the diverse kinds of workers that are used in agriculture."²⁰ It is furthermore apparent that once the inquilinaje appeared (in places where wheat cultivation began earlier), at least some development of wage relations followed suit since the hacienda's growing requirements of labour-power to expand cultivation, which brought about the inquilinaje in the first place, also led to the need of vast numbers of seasonal peon labourers, which was in turn connected with the dissolution of the subsistence economy of part of the population,

the spread of hamlets and rural villages, local trade, and the rise of money, and wages, as a means of remuneration, as described further above. The co-existence of relations of production of different natures(wage and inquilinaje), therefore, became a main distinctive feature of the hacienda since very early stages of its development.

These two relations of production determine wholly different types of labour processes, yet they have co-existed within the hacienda. Firstly, there is the inquilinaje giving rise to a dual process of production, where labour-power is not purchased or sold. Secondly, there is the wage relation, out of which only one production process results, labour-power being purchased and sold. Thus, the nature of the hacienda's labour process is pre-capitalist but also twofold, stemming on the one hand, from the inquilinaje which imprints the pre-capitalist character, and on the other, from the wage relation which gives it its transitional feature. Indeed, the process by which the wage became the predominant relation of production was also one of transition to capitalist production leading to the disintegration of the inquilinaje. In order to discuss this with a theoretical purpose one can define three stages in the process of transition of the hacienda(although it is important to bear in mind that this was not a homogenous process since there were differences even between neighbouring haciendas, as seen above).

The first stage of the hacienda's transition started approximately by the mid-19th century with the rapid expansion of wheat cultivation for exchange, the hacendados stepping up the labour obligations of their inquilinos and curtailing the customary grazing rights of those who had previously settled in their estates as inquilino-arrendatarios(the size of the land allotments of the well-off inquilinos being also reduced).²¹ During this stage, which lasted approximately until the turn of the century, the features of the inquilinaje imprinted

their character on the hacienda's labour process, the wage relation being subordinated to the needs of procuring seasonal labourers and emerging chiefly from this. The hacienda obtained its permanent labour-power largely through the inquilinaje relation, i.e., through the inquilino or the labourers he supplied as part of his established obligations, and who received little or no more than their food rations from the estate. The labour-power thus supplied by the inquilino was nonetheless far from sufficient for the tasks of the harvest, the hacendado having to recruit outside peons who were remunerated in kind and money and, as we have seen, proportionally more and more in money as we move into the 20th-century. Also at busy times of the year (harvest, ploughing) the inquilino was often required to supply labour-power to the estate in excess of his established obligations, in which case it was partially or fully remunerated by the hacendado according to circumstances.²²

There is evidence that during this period the number of inquilinos increased as more of them were settled as wheat cultivation expanded towards lower central Chile and southwards. In the most central provinces (Aconcagua to Colchagua), however, fewer inquilinos appear to have been settled after the early 1860s.²³ Some of those who were settled in haciendas of the most central provinces were known as inquilinos-peons, and they obtained no grazing rights, a far smaller land allotment than the inquilino proper, but were paid a partial wage, and in some circumstances a full wage as paid to outside peons. This type of worker (inquilino-peon) came to exist in the 1870s in an attempt by the hacendados to secure seasonal labourers by settling peons on their estates.²⁴

During the hacienda's second stage of transition, which may be broadly defined as occurring between the early 20th-century and the 1930s, the wage acquired a growing importance as a means of remuneration, although the inquilinaje generally continued to imprint its

character on the labour process of the hacienda. Nonetheless, the changes that began to take place in this period were considerable since now the inquilino himself began to receive a very small cash payment when working for the estate, while in some cases the workers he had previously supplied as part of his customary obligations began to be remunerated by the hacendado. Whoever or whenever the members of the inquilino's household were being employed and fully remunerated by the hacendado, they were said to work as voluntarios (meaning, who work for the estate being freely recruited for a daily or weekly wage, rather than as workers discharging the inquilino's obligations). This was probably the most important development in this period since it marked a trend towards paying wages to some members of the inquilino's household for labour-power formerly supplied on behalf of the inquilino (to discharge his labour obligations). The inquilino nonetheless continued to bear the obligation of having to supply the estate with at least one worker for some 240 days a year, who received food rations and only a very small cash payment (whoever discharged the inquilino's labour obligation was said to work for the estate as obligado).²⁵

As to whether many more inquilinos were settled in this period (1900s-1930s), the data of the Statistical Office suggests a noticeable increase in their number, at least between 1920 and 1936, from 82 to 108 thousand inquilinos. An increase such as suggested by these figures, however, can be misleading due partly to the absence, or very broad definition of, inquilino. The 1936 census defined inquilino as any worker who is housed and allotted land, no mention being made of its size or of pasture rights, no definition at all being entered in the statistical yearbook of 1921 (which contains the above data for 1920).²⁶ Moreover, the 1936 census included all agricultural properties, even the very small semi-urban or urban holdings known as chacras or quintas which were excluded in 1920. Many of these quintas or chacras

had a resident caretaker (usually married and with children), who was housed and enjoyed possession of a tiny backyard plot where he grew his own vegetables; in small urban quintas, which mainly produced vegetables and fruit, the caretaker himself was often able to cope with all the tasks. Were such resident caretakers counted as inquilinos in 1936? The data of the 1936 census (table 1 below) shows that only 12,000 of the 19,400 properties which reportedly employed inquilinos had also employed members of their households either as obligados or voluntarios. In fact, according to the 1936 census data at least as many as one third of all properties with 'inquilinos' employed no member of their households, no empleados (overseers, etc.) and hired no outside peon workers. Indeed, they appear to have employed nobody except the 'inquilinos' themselves, and such a situation reveals that these properties were quite small and that very possibly those employed were not inquilinos properly, but workers who were only housed and received a tiny garden plot at best, being anyway counted as inquilinos because of the broad definition used by the census.

Table 1:

Rural workers employed in Chile in 1936

	No. of workers (in 000's)	No. of properties which employ them (in 000's)
<u>Inquilinos</u>	108.0	19.4
Members of <u>inquilinos</u> ' households(<u>obligados</u> & <u>voluntarios</u>)	106.0	12.0
<u>Empleados</u> (<u>mayordomos</u> , <u>capataces</u> , <u>vaqueros</u> ,etc.)	31.0	11.4
Outside peons	95.0	12.7

Source: Censo Agropecuario 1936, p.34.

I estimate that the total number of inquilinos in the country increased only slightly between 1920 and 1936, and that probably their number declined in some estates of the most central provinces whilst increasing in some places of the south. Because of the aforementioned reasons and also because the census data does not identify how many of the 106,000 members of inquilino households worked as obligados or as voluntarios (or for how long), it is impossible to establish with any confidence how much labour-power was obtained through the inquilinaje or through the wage relation. In a painstaking exercise I dare estimate that the larger estates obtained, on average, probably less than half of their labour-power through the inquilinaje relation by 1936.²⁷

During the hacienda's third stage of development, which occurred broadly as from the 1940s to the 1970s, the wage became the predominant relation of production of the hacienda. This development continuously conflicted with the essential feature of the inquilinaje (i.e., the allotting of land in return for labour-power), as the inquilino entered into a phase of proletarianization. According to Kay, between 1955 and 1965 alone, both the total number and the proportion of inquilinos within the active rural population declined by some 50%, whilst pasture rights of those who remained were reduced to a minimum.²⁸ Kay maintains that this process accelerated even further as from 1966 as a consequence of mechanization and the introduction of minimum wage laws that made cash payments to inquilinos obligatory, their wages having to be no less than 75% of the prevailing minimum wage for peons.²⁹ As the inquilino was gradually converted into a wage earner his own enterprise disappeared, and its role of reproducing labour-power was gradually abolished as he himself, and the obligado, became simple hired workers like the voluntario.

From the very moment there is no inquilinaje relation, neither is there an inquilino-enterprise nor an hacendado-enterprise of which to talk about; the former disappears as the inquilino becomes a wage earner while the latter

is transformed into a capitalist farm. At this point the hacienda as such ceases to exist and gives way to a typically capitalist mode of production. The final proletarianization of the inquilino, however, indeed was quite a conflictive economic and social process.³⁰ After the two major agrarian reforms of presidents Frei (1965-1970) and Allende (1971-73), it seems that there were some pockets where the inquilinaje was still quite important.³¹ Moreover, the disappearance of the inquilinaje was not always followed by a transformation of the hacienda into a capitalist farm since many holdings were expropriated and became state-owned collectives or co-operatives.

Section 3 :

The instruments of labour and farming methods

As described in chapter 1 (section 5), in addition to providing the estate with labour-power the better-off inquilino was often required to bring along his horse (and a team of oxen if he owned one) when working for the hacendado during the planting or harvest season.³² The hacendado thus obtained a few instruments of labour by allotting land to the inquilino and this did not require from him any expenditure of money. The hacendado could also use the labour-power obtained through the inquilinaje relation for investment or maintenance work such as digging and clearing irrigation channels, building up fences, and so on, although this entailed purchasing some materials and tools such as shovels, hammers, nails, for many of the hacendado's instruments of labour were purchased in the market, and this demanded an outlay or an advancement of money. In what follows in this section I shall maintain that the quality of the hacienda's instruments of labour and its farming methods were closely related to the relations of production and the manner in

which labour-power was obtained.

During the first stage of the hacienda's transition, where as we have seen the inquilinaje was the predominant relation, the quality of tools was very poor and there was virtually no mechanization at all. Ploughs were of the most simple design, generally made of wood, and they were pulled by oxen. Most of the wheat grown was a variety of triticum vulgare brought in by the Spanish in the 17th-century, which, due to careless selection of seed throughout the years, had developed a number of degenerated features akin to wild wheat. It was reaped with sickle only, while the scythe was seldom used; the threshing was made with horses running over the stalk, and the overall agricultural methods were very primitive indeed. Agriculture was not at all integrated with livestock breeding; there was no use of animal manure nor were forage crops grown, and in wheat production a two-field system of one year fallow and cultivation in the next, was used.³³ As regards machinery, in 1870-71 there were less than 200 reaping machines in the whole country (table 2 further below), which suggests that no more than 5% of the wheat and barley was cut by machines.³⁴

Further, it is important to bear in mind that most 19th-century agricultural machines were designed to be pulled by horses or mules (except for the steam thresher, and the Russel thresher which could be operated with oxen). In Chile, however, the working animal was the ox, rather than the horse, and this continued to be so even in the 20th-century.³⁵ The horse was used chiefly for human transport, and in the threshing of wheat when herds of 20 to 30 animals were led to run in circles over the stalk. The horse was very rarely used for ploughing or haulage. True, oxen are much more resistant than horses for ploughing through (newly cultivated) hard soils, or for pulling heavily loaded carts through appalling roads. This could be one reason why in Chile there was no shift from oxen to draught horses. The absence of a three-field system of crop rotation, which in Europe preceded the shift

from oxen to drought horses, was probably another reason.³⁶ At any rate, the lack of mechanization in Chile was part of an overall backwardness of the 19th-century agricultural practices. In the USA for example, practically all the wheat and barley was reaped and threshed by machines as early as the 1880s, and whilst in the less mechanized areas of Europe the use of the scythe was widespread, in Chile only the sickle was employed.³⁷

During the second stage of the hacienda's transition (1900s-1930s), there is evidence to suggest a noticeable improvement in the genetical features of the wheat grown, as well as in the kind of hand tools and instruments of labour employed, such as better designs of ploughs and the scythe, the use of which became more widespread. Further, agricultural machinery began to be introduced on a more significant scale than before heralding the arrival of the age of mechanical power to the hacienda. There was a meaningful increase in the total stock of machinery and also new types of equipment were introduced such as tractors and a small number of combines (see table 2 below). There is evidence that in a few estates the degree of mechanization was fairly substantial.³⁸ The majority of hacendados, however, continued to cultivate and harvest their wheat in the traditional manner; although in the 1920s fertilizers began to be more widely employed, still by 1936 less than 25% of the country's cultivated area was fertilized.³⁹ Overall, the new equipment adopted during this period was insufficient to ensure any major change in the ratio of machinery per acreage of crop land, which in turn increased by nearly 75% between the first decade of the 20th-century and 1936.⁴⁰ Thus, by the 1930s Chile's agriculture generally dragged far behind that of neighbouring Argentina.⁴¹ In Chile, when the ox was eventually replaced the age of the tractor had arrived, and when the traditional system of two-field cultivation was finally abandoned, it was for annual cultivation with the aid of chemical fertilizers, rather than for the three-field system. The latter process began to happen on a large

Table 2 :

Stock of some agricultural machines in Chile.⁴²
Chosen years: 1870/71 - 1965. (In 000's machines)

	Ploughs		Sowing	*Reaping	Threshers	Combine	Tractors
	Iron	Wood	machines	machines	(fixed)	harvesters	
1870/71	n.d	n.d	0.03	0.14	0.53	n.d	n.d
1909	n.d	n.d	1.16	4.06	2.67	n.d	n.d
1913	n.d	n.d	2.23	6.16	3.46	n.d	n.d
1921	109	n.d	2.13	6.47	3.47	n.d	0.40
1930	142	96	3.20	9.27	4.54	0.24	1.66
1936	164	108	3.33	9.41	5.07	0.25	1.56
1955	193	n.d	5.70	n.d	5.21	3.45	14.18
1965		285	9.23	15.99	4.93	3.77	22.30

Source: Appendix 6, table A.6.19

(*) : includes pasture/reaping and cereal/reaping machines.

scale in the hacienda's third stage of transition towards capitalist production.

During the hacienda's third stage of transition, there was in fact a major process of mechanization and modernization of farming practices under way.⁴³ Amongst the most important developments was the large scale use of tractors and of fertilizers which brought about a higher labour productivity. Forage plants and new animal breeds were introduced and there was a considerable development of dairy industry. The rapidly growing food industry requiring raw materials stimulated a substantially higher production of industrial crops such as sunflower

and beetroot. There was an improvement in farm installations and a higher concentration of mechanized equipment per area of cultivated land, which in turn led to growing rural unemployment and accelerated migrations to the cities. Between 1930 and 1970 for example, the proportion of the rural population declined from 53% to 29% of the country's total population.⁴⁴

As we have seen in section 2 of this chapter, the inquilinaje was then entering into a phase of rapid disintegration(1950s onwards), and I think that this was connected to the above process of mechanization and increase of labour productivity. The use of machinery, fertilizers, better farm installations and agricultural methods, led to a situation where labour productivity of the hacendado-enterprise was much higher than that of the inquilino-enterprise(about threefold according to Kay and Schejtman).⁴⁵ A situation arose, whereby the inquilino would spend far less of his own labour time producing the value of a wage in the hacendado-enterprise, than the time it would take him to produce the means for his sustenance in his own enterprise.⁴⁶ The hacendado could thus appropriate a larger part of the inquilino's working time by hiring him as a full wage earner than by allotting him land, and I think that this was one of the main reasons that led to the disintegration of the inquilinaje. There is more to this, however, than meets the eye and I shall be discussing this matter further in the following two chapters together with the circulation process and the mode of appropriation of surplus-value.

NOTES : CHAPTER 2

- (1) The term mode of production as used in this thesis means the manner in which production is socially organized within a pattern or appropriation of the surplus which is typical to it (see Marx, K.:1959, vol. 3, p.772). The mode of production therefore rests upon the relations of production and as such it involves a given social structure and order (the mode of production and appropriation of surplus-value typical to the inquilinaje is examined in chapter 4 of this thesis). Marx's Preface to the critique of Political Economy is sometimes quoted to imply that mode of production is, in Marx's view, a purely abstract concept (Amin, S.:1976, pp.13-17). Alternatively, it is cited to suggest that society must necessarily go through the specific economic epochs mentioned in the Preface, i.e., ancient, (Asiatic), feudal and modern bourgeois. The latter tendency implies a considerable simplification of Marx's and Engels' views (Hobsbawm, E.J.:1964, pp.1-25). In his Foremen and in Grundrisse for example, Marx explores the modes of production with a detailed historical analysis and these are seen, even in their periods of transition, as concrete developments which spring from older modes and specific social and economic circumstances; here Marx deals with the modes of production at a much more concrete level of abstraction than in the Preface for example (See Marx, K.:1964, passim, and Marx, K.:1973, pp.471-515). In this thesis the mode of production is examined at a fairly concrete level of analysis.
- (2) Individual producer means here a worker who is in possession of means of production irrespective of whether he owns them or not (e.g., artisan, retainer, inquilino, minifundista, etc.). In contrast to this the proletarian is not in possession of means of production and he can thus be looked upon as a social producer, social in the sense that the objective conditions for his labour are in the hands of the capitalist, to whom he relates, as many others of his kind do, through a daily or weekly act of purchase and sale of his labouring power.
- (3) The title 'enterprise' is from Kay, C.:1971, chapter 1, and it is used purely to distinguish the labour process that takes place in the inquilino's land allotment (and all such activities which are related to it, as looking after his animals, household industry), from the labour process which takes place in the land of the hacendado; it bears no meaning regarding the nature of the enterprise or otherwise.

- (4) Commodity is defined as any product which has use value and exchange value. Although part of the hacendado-enterprise's product does not enter the market (food rations for workers, seed), most of it does. Its labour process being geared towards exchange I shall consider all product of the hacienda as a commodity in the formulae (the part of the product withheld from entering the market is seen in chapter 3). Equally, the surplus is treated here as surplus-value, although in the early age of the hacienda (mid-19th century) it could be considered as a rather embryonic form of surplus-value; the same consideration could be made as regards the inquilino's surplus-labour.
- (5) See Marx, K.: 1959, vol. 2, chapters 1, 2, 19, and Marx, K.: 1964, pp. 110-4. Marx is nonetheless quite explicit in noting that although it is only in capitalism that the wage relations become universal, wages, as a form of payment, existed well before capitalist production appeared. "The right to sell oneself and one's dependants in times of distress, was unfortunately general; it prevailed both in the North among the Greeks and in Asia" (Marx, K.: 1964, p. 103, quoting Niebuhr). Wages also existed in the European manor as a form of payment of harvest labour, without therefore entailing capitalist production. Perhaps one of Marx's most explicit statements on this matter is this:
- "M - L money - labour, or the transformation of money-capital into labour-power is regarded as the characteristic feature, the hallmark of the so-called money system, because labour there appears as the commodity of its owner, and money therefore as the buyer - hence on account of the money-relation (i.e., the purchase and sale of human activity). Money, however, appears very early as a buyer of the so-called services, without the transformation of money into money-capital, and without any change in the general character of the economic system". Marx, K.: 1959, vol. 2, p. 28 (emphasis supplied).
- (6) Marx, K.: 1959, vol. 2, p. 31. See Marx, K.: 1959 vol. 3 chapters 20, 36, 47; Marx, K.: 1973, pp. 499-514; and Marx and Engels.: 1964, parts B, and C, for a more detailed discussion of these historical processes. See also Hobsbawm, E. J.: 1964.
- (7) Kay, C.: 1971 chapter 1, defines the hacienda as a system composed of the enterprise of the hacendado ("landlord's enterprise") and the enterprise of the inquilino ("peasant's enterprise"). Kay's work is the first to develop an elaborate analysis of this kind following Baraona's general typology of the Ecuatorian hacienda (Baraona, R.: 1965). Prior to this

McBride, G.:1936, p.120, referred to the hacienda as a system(of Master and Man), Mariategui, J.C.:1955 pp.64-76, taking a similar view, but in academic circles the hacienda was chiefly looked upon as a latifundia, the emphasis being laid on the large size of the estate as the cause of inefficiency. The inquilinos and independent small-holders alike were looked upon as mere subsistence economies (minifundia), with no definite articulated connection with the hacienda other than of serving as a purely external source of labour-power for the estate. (See for example Barraclough, S.:1965).

- (8) The enterprise of the inquilino produces a surplus and this is discussed in chapter 4 (where I shall argue that such a surplus is what eventually becomes the surplus-labour appropriated by the hacendado).
- (9) See Marx, K.:1938, chapter 7.
- (10) All the man/days' labour the inquilino supplies to the estate and which are not in any way remunerated by the hacendado, plus all the man/days' labour which are spent in the inquilino-enterprise, will be referred to as inquilinaje labour-power. Also, unless otherwise stated when mentioning the inquilino's labour-power this shall include that of the members of his household who work under the terms of the inquilinaje relation. Hence, inquilinaje labour-power means any labour-power of the inquilino's household which is not remunerated by the hacendado.
- (11) See Kay, C.:1971, pp.16-24.
- (12) In the hacienda there was also sharecropping, known as mediería. Although as regards the nature of the hacienda sharecropping was of secondary importance and it appears to have been seldom practiced by inquilinos during the 19th and early 20th centuries, it eventually became much more widespread, especially since the 1950s. This and the main features of sharecropping are discussed in chapter 4.
- (13) Except in Aconcagua (or to the north, Coquimbo), or in the vicinity of towns where wheat cultivation for exchange had been practiced for long (Gay makes quite a clear distinction between the more orderly peon of the north, and the undisciplined peon of central and southern Chile, who was more thieving and unwilling to take up paid employment). See Gay, C.:1973, vol. 1, pp.152-66. Gay was certainly impressed by the precarious and often extremely poor conditions of life of Chilean peasants (1830s-40s), although he was no less touched by their tendency to leisure and

their reluctance to accept any disciplined work for more than a few consecutive days, unless driven by hunger (Gay referred to the inquilinos by name, applying the term peasant -campesino, to rural dwellers in small-holdings or hamlets). Writing about the 1830s-40s peasants (and the rural population at large), Gay describes that :

"There has been little change in their condition to date, because their indifference, their simple habits, the fertility of the soil and the kindness of the weather, have made their day-to-day necessities very few and easy to satisfy. This situation brought to this class a predisposition towards leisure and rest so common in warm countries elsewhere in the world, a vice which unfortunately still persists in Chile because once it sinks in human nature it cannot be overcome unless stimulated by need, the stimulus of all productive force. Indeed, as long as the countryside remains depopulated, and the land of little value, and the food in these places cheap, it is probable that the Chilean rural workers, except those in areas near to the larger towns, will retain a character that makes them live from day to day without caring for tomorrow, let alone the future". (Gay, C.:1973, vol. 1, p.150; my translation).

- (14) On the mingaco see Bauer, A.:1971, p.1072; and Gay, C.:1973, vol. 1, pp.288-89, and vol. 2, pp.34-35.
- (15) See Galdames, L.:1911, pp.170-72; and Bauer, A.:1975, pp.154-55.
- (16) See Tscherebilo, S.:1976, chapters 4-5; and Johnson, A.L.:1978, chapters 4-6. These villages and hamlets were formed following a partial dissolution of the subsistence economy of the rural population, the features of which are examined in greater detail in chapter 5 of this thesis.
- (17) The development of money as a means of remunerating labour-power certainly presupposes at least a partial dissolution of the subsistence economy of a section of the rural population (what Marx calls the 'separation of the peasant from his objective conditions of labour' -land, tools, food). It is this dissolution rather than money alone, that create a mass of peons, who at first appear as small-holders or as their daughters and sons seeking seasonal paid employment, or simply as a mass of vagabonds (the peones ambulantes), who gradually gather in hamlets and small rural villages. The emergence of wage relations is examined here at a fairly abstract level of analysis, the historical features of the dissolution process

being examined at greater length in chapter 5 of this thesis. On the historical process of dissolution of the worker's connection with his objective conditions of labour, and its role in the transition to capitalism in Europe as studied by Marx, see Marx, K.: 1973, pp.499-514.

- (18) In Chile as in England for example, the dispossession of large sections of the rural population led at first to vagabondage, beggary, and banditry, and then to the local labour market. But at that point the wage earners were still a fairly heterogeneous mass of labouring poor, and it was only by the turn of the 19th-century following the development of Chile's industrial manufactures in the largest cities, that the first organic groups of the Chilean proletariat emerged (except for the mining enclaves of the north where this process began to take place a few decades before). Likewise in Britain, it was only once the local village labour market gave way to the large urban market of labour-power, therefore once industrial capitalism had established its rule and the urban artisan and tradesman together with the labouring poor were being absorbed by the forces of capital, into the factory's floor, that a common identity began to develop amongst them during the first half of the 19th-century. Sharing a common style of life was apparently one of the fundamental factors in the process whereby the workers developed a common identity (See for example Hobsbawm, E.J.: 1962, pp.252-53; and Hobsbawm, E.J.: 1977, pp.262-63).
- (19) On the proletarianization of the inquilino as from the 1950s see Kay, C.: 1971, chapters 4-8.
- (20) Galdames, L.: 1911, pp.172-73 (translation according to Bauer, A.: 1975, pp.154-55).
- (21) See Bauer, A.: 1975, chapters 3, and 6; and Kay, C.: 1971, pp.109-21.
- (22) See Balmaceda, M.J.: 1875, pp.42-44 (partly quoted in chapter 1, section 5 of this thesis).
- (23) See Johnson, A.L.: 1978, pp.244-50.
- (24) Ibidem (under the name of peones sedentarios). See also Bauer, A.: 1971, pp.1075-76; and Balmaceda, M.J.: 1875, p.44.
- (25) According to the hacendados' periodical El Campesino (November 1928, p.14), the average inquilino of central Chile was paid some 96 pesos for 240 days' labour supplied to the estate, which corresponded approximately to 10% of his income (the remaining 90%

consisting of produce of his own enterprise). The daily wage rate for whoever discharged the inquilino's labour obligations was thus assessed at some 0.40 pesos, while peon wages at that time (according to Bauer, A.:1975, p.156) ranged between 2.00 - 3.00 pesos daily. (See also McBride, G.:1936, p.152). All this is quite apart from the partial or full wages paid to members of the inquilino's household when they worked for the estate in excess to their established obligations. Hence, the large variation in monetary payments described by Galdames, L.:1911, pp.172-73. Galdames maintains that by the early 20th-century the members of the inquilino's household were paid as little as 0.20 and as much as 0.80 pesos daily (according to the circumstances and category in which the member of the inquilino's household performed his work), while wages for outside peons ranged between 0.80 and 1.60 pesos daily, depending also on the estate's location and the non-monetary benefits received by the workers. On the voluntario and the obligado see Kay, C.:1971, p.120.

(26) The same broad definition was used again in the 1955 agricultural census. See Censo Agropecuario 1955, Vol. 1, p. xv.

(27) For details of this estimate see Appendix 3 of this thesis.

(28) See Kay, C.:1971, p.127.

(29) Ibid. chapters 5 and 6 (also Kay, C.:1978). Schejtman, A.:1970, table 8.8, suggests that in 1965 no less than 50% of the inquilino's income was composed of his wage.

(30) See for example Kay, C.:1971, chapter 7; Lehmann, D.:1974, chapters 2 and 5; Loveman, B.:1973, chapters 9-10; and Chinchilla, N.S.:1973, chapter 5.

(31) See Lehmann, D.:1974, pp.334-35.

(32) Examples of this situation are supplied by Loveman, B.:1973, vol. 1, pp.59, 123, and vol. 2 Documentary Appendix 5.

(33) For a description of 19th-century agricultural methods in haciendas and their technology see: Gay, C.:1973, vol. 1, chapters 13, 16, and vol. 2, chapter 2; Bauer, A.:1975, chapters 4-5; and Hernández, S.:1966 Passim. This topic is examined at length in chapter 5 section 3 of this thesis.

(34) According to the Statistical Office's figures the area cultivated with wheat and Barley in the whole country averaged some 496 thousand hectares in 1871-73

(data from Appendix 6 table A.6.5 of this thesis). The performance of a late 19th-century reaping machine ranged between some 25-100 hectares of wheat a season, depending on the make and operational conditions of the field. A Bell's reaping machine could cut up to an acre of wheat in one hour (i.e., 4.8 hectares in a 12 hour day), whereas makes with a manual rake and a 5 feet cutbar cut between 1/3 and 1/2 acre per hour (i.e., some 2.4 hectares in 12 hour day); see Wright, P.: 1910, vol. 10, p.92, and see also Morton, J.C.: 1855, pp.741-46. The percentage of wheat cut by machines in Chile as supplied in the text (5%), is an estimate based on the above range of performance of a reaping machine, on a two to three week reaping time per season, and on a 10-12 hour working day. The actual percentage of wheat and barley cut by reaping machines was probably smaller than the suggested 5% since, as noted at the foot of text-table 2, the figure of 140 reaping machines includes designs for forage/pasture cutting, and the performance of a reaping machine described above is that stated by the manufacturers under ideal, non-stop operational conditions. For a description of 19th-century agricultural machinery see also Fussel, G.E.: 1952, which contains photographs or plates of most makes.

(35) See Bauer, A.: 1975, pp.103-04; and McBride, G.: 1936, p.177.

(36) Bauer, A.: Ibid. Types of threshing machines designed for oxen existed very early in the history of world agriculture (see for example the early Egyptian design shown in Leonard, J.N.: 1974, pp.148-49). Few of these oxen-power threshing machines were used in Chile, however (the father of Chile's president Arturo Alessandri was proud to have one on his farm in Linares; when the machine had been delivered he and his mayordomo had no idea of how to operate it, the brand-new machine being almost destroyed in their attempts to make it work; as described in Donoso, R.: 1934, p.12).

(37) On the introduction of agricultural machinery in the USA see Rasmussen, W.D.: 1962, Passim.

(38) See Kirsch, H.W.: 1973, pp.52-55.

(39) McBride, G.: 1936, pp.177-78, describes that although in some estates new machines and more efficient methods were being adopted, "the average hacendado would be convulsed with laughter at the thought of putting a huaso (country fellow) on a riding plough or setting an inquilino to run a tractor. In many lines these large estates are operated now [2d decade of the 20th-century] almost as they were in colonial times". Manure was not used for extensive

cereal cultivation and chemical fertilizers were not widely employed. In 1921 for example, less than 11% of the land cultivated with the main crops was treated with any fertilizers, although between 1921 and 1936 a movement towards a wider use of fertilizers was under way (see Appendix 6, tables A.6.22 and A.6.23; fertilizers were more widely used in the south and La Frontera than in central Chile).

- (40) On the ratio of machinery per hectare of land cultivated, see Appendix 6 table A.6.21.a & b. The 75% increase in the number of hectares of crop-land mentioned in the text is calculated according to data in Appendix 6 table A.6.10 of this thesis.
- (41) By the late 19th-century some 1,500 threshing machines were being imported into Argentina every year, and over 15,000 annually by the early 20th-century (Scobie, J.R.:1964, p.175, and see also of the same work chapters 5-6 on the various aspects of wheat growing in Argentina).
- (42) This table should be seen as a general reference only since the quality of machinery is not shown by the figures. Moreover, there were considerable differences in mechanization between regions and provinces (as shown in Appendix 6 tables A.6.20 and A.6.21.a & b).
- (43) The description of the technological changes that took place in the post 1930s is based chiefly on the following works: Rienglen, W.R.:1971 Passim; Smith, S.M.:1974 Passim; Crosson, P.R.:1970 Passim; Weiss-Altaner, E.:1975 Passim; Kay, C.:1971 chapters 4, 6 and 8 and Kay, C.:1978 pp.7-13; Clavel, C. and Maturana, S.:1972 Passim.
- (44) Population data from Hurtado, C.:1966, pp.146-47. See also Weiss-Altaner, E.:1975, pp.37-41.
- (45) Labour productivity in agriculture grew at about 2.2% annually between 1940 and 1965 (Kay, C.:1978, p.8). See also Kay, C.:1971 chapters 6 and pp.242-43; and Schejtman, A.:1970, table 6.2.
- (46) In other words, there was an increase of the relative surplus-value in the hacendado-enterprise.

CHAPTER 3

THE INQUILINAJE, THE CIRCULATION OF COMMODITIES, AND MONEY

In this chapter I propose to study the connection between the inquilinaje, the relations of circulation of the hacendado-enterprise (the sale of produce, the role of money, the circulation of surplus-value), and the emergence of capitalist production. Section 1 is a general comparative analysis between the circuit of capital and the circuit of the hacendado-enterprise. This is followed by a discussion on the role of the inquilinaje as regards the accumulation of capital-value, the role of money, and the historical requirements for the development of capitalist production, this being the main topic of section 2. Section 3 deals with the basic differences between advancing capital for the purpose of paying wages and allotting land to inquilinos for the purpose of obtaining their labour-power. Section 4 focuses on the hacendado-enterprise's produce which is withheld from circulation, being either re-cycled as seed and food rations for workers, or consumed by the landowner and his relatives. Finally, section 5 consists of an introductory study of the hacendado-enterprise's circuit, which contains capital as an embryo, and it examines some of the historical developments leading to the emergence of capitalist production. The discussion of these topics continues in chapter 4 where they are further examined in the light of the mode of production and appropriation of surplus-value typical to the inquilinaje.

Section 1 :

Theinquilinaje and the selling of the hacendado-enterprise's produce: the relations of production and circulation.

Once the process of production of the hacendado-enterprise finishes at the harvest or slaughter for example, the bulk of the produce is sold. Through this sale the hacendado transforms his produce C' , into money M' , the surplus-value (symbolized in the apostrophe) thereby adopting the tangible form of profits, money. The sale may be represented by:

$$C' - M' \quad (\text{commodity} - \text{money})$$

Since the hacendado-enterprise produces for exchange, the basic form of realizing the value and surplus-value of its product is through sale and this requires its circulation in a market. A small part of the hacendado-enterprise's product, however, is not sold, being consumed in the estate re-cycled chiefly as seed and as food rations for workers.¹ The latter is, nonetheless, an accessory to a process of production which is geared towards exchange, and consumption here is totally distinct from that in a subsistence economy such as the minifundia where production is intended for consumption, rather than vice-versa (more about this will be said further below).

Thus, let us focus on the sale of produce ($C' - M'$), which is the first stage and starting point of the hacendado-enterprise's process of circulation and leads to the realization of the value and surplus-value. No apparent differences from the first stage of the circulation of (industrial) capital are revealed by the sale as such, since capitalist production also involves the selling of the product and both value and surplus-value are realized into money. This has misled some students into maintaining that the hacienda is capitalist, or that at least its sphere of circulation is capitalist.

Ratcliff for example, holds that the hacienda's sphere of production is rather feudal because it is based on non-monetary relations such as the inquilinaje, but that its sphere of circulation is capitalist since the hacendado sells his produce in a market and aims at making a profit. Ratcliff maintains that the hacienda is a "labour repressive, quasi-capitalist" mode of production.²

Ratcliff's argument followed upon a general discussion on whether the hacienda was feudal or capitalist, a discussion which remained for some time heavily influenced by what could be described as two trends of thought. One of these trends advocated that the student should focus on the mode of production, which in the case of the hacienda was held to be feudal.³ The other trend laid emphasis on the relations of circulation maintaining that the main feature that distinguished capitalism from feudalism is production for exchange, thus favouring a case for viewing the hacienda as capitalist.⁴ The arguments, however, remained all too often incapsulated with generalities and broad definitions of capitalism and feudalism, not infrequently quoted from Marx's Preface (to the "Critique of Political Economy"), or from Dobb's or Sweezy's writings on transition to capitalism in Europe, and used out of context to substantiate one or other position.⁵ For the past decade or so, however, studies on the hacienda have delivered much more relevant theoretical analysis based upon the particular historical and social conditions of the hacienda, the focus being now increasingly on transition (and therefore on the transformation of the hacienda), rather than on whether it should be seen either as capitalist or feudal in terms of abstract definitions.⁶

There is in fact no such thing as a feudal production with a capitalist circulation as proposed by Ratcliff, that is of course if one can speak at all of feudalism in such a general and purely economic sense (I shall expound on this

topic in chapter 4). The hacienda's sphere of production is closely related in nature to its relations of circulation. To begin with, let us compare some of the main features of the circulation of individual capital with the circulation process resulting from the inquilinate relation.⁷ Let us assume that the labour process can be clearly separated in time from the sale of commodities, i.e., that the production process has a beginning and an end, and that this is in turn followed by the sale of the product (actually in most branches of industry both production and sale take place simultaneously as an uninterrupted process).⁸ The only purpose of this assumption is to simplify the exposition of the argument and it does not modify in any way the conclusions that follow.

Thus, let us assume that the capitalist starts production by buying labour-power and means of production, and that once the process of production finishes the capitalist has at his disposal a certain mass of commodities C' , which embody the value and surplus-value of his product. Subsequently, he sells them and thereby realizes the value and surplus-value into money M' . The sale can be represented by : $C' - M'$ (commodity-money), and in this one stage of the circulation of capital the latter is transformed from commodity into money; here the capitalist appears as a seller. The capitalist is thus left with a sum of money (M') which amounts to the total capital spent in production (i.e., the cost of production), plus the surplus-value. At this point he must re-spend at least part of his money in labour-power (L) and means of production (P_m), in order to reproduce his productive capital and resume another productive cycle. He must therefore transform his money back into productive capital (I am now focusing on the transformations of capital, rather than on whether capital is accumulated or not). The purchase of labour-power and means of production can be

particular case exemplified in formula 1, capital is simply reproduced (rather than enlarged). $M' = M + m$, m being the surplus-value (') ; $m - C(Mc)$ stands for the capitalist's individual expenditure on means of consumption, \underline{m} being the sum of money which the capitalist withdraws from his capital to pay for his living expenses and gratification, $C(Mc)$: Commodities (means of consumption). $C(Mc)$ therefore falls outside the circulation of his capital, i.e, it does not re-enter its cycle.¹⁰

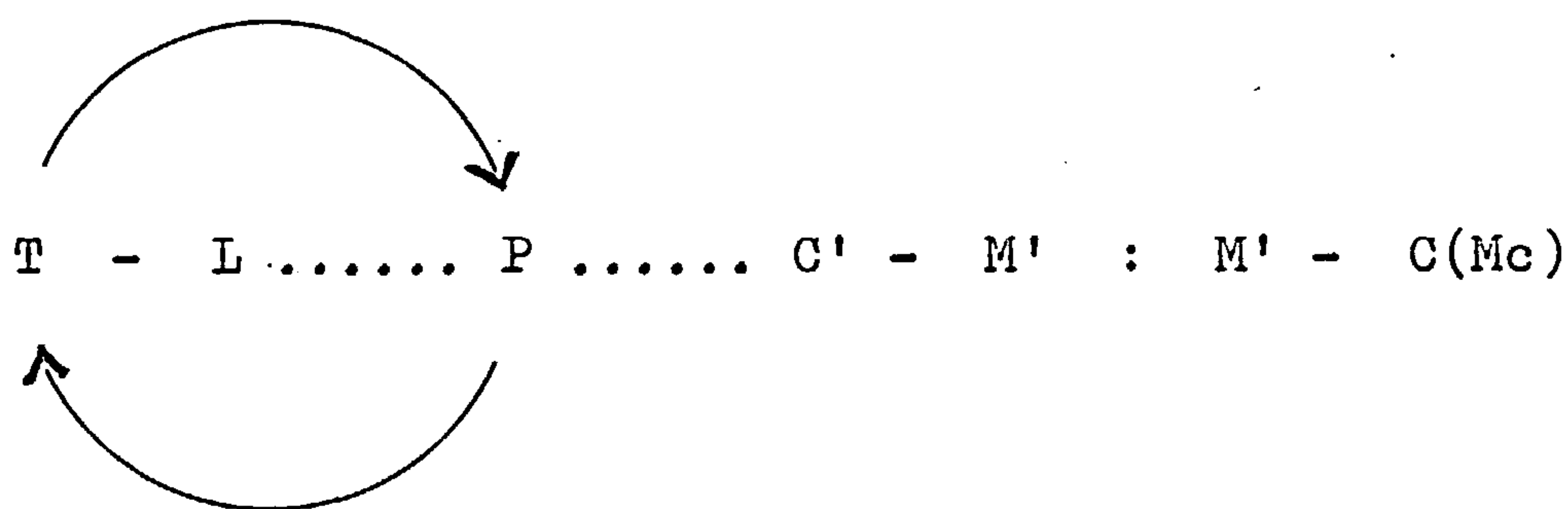
Frank's vision of capitalism, expounded in his analysis of the Chilean economy during the colonial period, is basically concerned with the first stage of the circulation of capital, $C' - M'$, in which capitalists, hacendados, and in fact merchants of all sorts will necessarily appear as sellers, overlooking the second stage in which capitalists and mainly capitalists appear as buyers of labour-power.¹¹ It is here, in the second stage of circulation, that one of the main differences between the circulation process of capital and that of the hacendado-enterprise is revealed. Let us examine the circulation of the hacendado-enterprise's produce and money, assuming for the time being that all labour-power is obtained through the inquilinaje relation.

Assume that in selling the produce of his estate the hacendado obtains a certain sum of money amounting to the value and surplus-value of the produce sold. It is self-evident that the sale of produce provides the hacendado with money but this is in itself no different from any sale whether we assume that the sale is made by an industrial capitalist, an hacendado, or for that matter a merchant (including the slave dealer); all of them sell, they all obtain money. The specific differences between all these cases of selling, lie not in the sale itself but in the circumstances leading up to the transaction and on the forces dictating the subsequent use or

destination of the money. Herein lies a main difference between the inquilinaje and production organized on a capitalist basis. So far as the hacendado is able to obtain labour-power by allotting land to the inquilino and production rests upon primitive or simple instruments of labour requiring little investment, the proceeds from the sale of the hacendado's produce are not necessary to re-start production in his estate. In these circumstances money does not appear as a necessary link between processes of production and the hacendado is thus free to regard the sale of produce, and the money obtained, as a mere means of exchange and a vehicle for personal consumption and enjoyment, rather than as capital; he may squander the proceeds of his estate, expecting he could do the same next year, and again for as long as production in the hacienda continues to depend on the inquilinaje. Thus, so far as the inquilinaje relation is predominant the hacendado is not compelled, as a capitalist is, to regard money as just one phase in the life of capital, which must be spent productively in order to resume production.

Hence, although the hacendado sells his produce and therefore it enters into the general circulation of commodities, the subsequent course followed by his money is not necessarily similar to that of individual capital, since it does not need to be re-cycled into his own enterprise (see formula 2 below). Certainly there are historical circumstances and forces beyond the inquilinaje itself which may influence the way in which the hacendado's money is spent. The hacendado can plough money back into his estate if there are obvious advantages to follow or as a consequence of natural disasters which would make it unavoidable (for example floodings, earthquake, crop disease), but this appears as a fortuitous matter or one of personal choice, in contrast to the circulation of money in an enterprise organized on a capitalist basis, where productive expenditure is

compulsory.¹² Also the hacendado's money can enter into the circuit of social capital without it being spent in his estate, and this may occur by the mediation of usurer's or financial capital for example, or through merchant's capital as we shall see in chapter 5. In all these cases, however, the forces that can lead to productive expenditure in the hacendado-enterprise do not arise from the inquilinaje relation, but from historical circumstances and forces beyond it.



Formula 2

*(Arrows meaning that through the inquilinaje the labour process of the hacendado-enterprise re-creates itself by allotting land to the inquilino, independently of the destination of the money obtained from the sale of its produce)

The hacienda, however, is a mode of production in transition where wage relations co-exist with the inquilinaje and to a varying extent the hacendado always spends money in wages and tools. As wage relations become predominant within the hacienda, the role of money as capital (i.e., as a buyer of labour-power and therefore as a necessary link between processes of production), gradually develops from an embryonic state and eventually takes over every aspect of the hacienda's life. In the hacienda's third stage of transition as seen in chapter 2, the wage becomes the predominant relation of production and as the inquilinaje tends to disappear the hacendado is compelled to look upon money as a necessary but transitory phase in the life of his

capital. Since he must outlay capital to remunerate his workers with a wage, he must try to obtain as much surplus-value from their labour as he possibly can; a minimum return on his overall investment is mandatory (a minimum rate of profit). He therefore needs to buy machinery, improve farming methods and reduce wastage in order to increase productivity, and the larger his outlay of capital is, the bigger his losses if the crop fails. The hacendado is thus forced to use every available means to safeguard the success of his crop, such as using pesticides and fertilizers and to improve farm installations for example. Hence, the disappearance of the inquilinaje relation, in other words, the fact that the hacendado has to remunerate every one of his workers with a wage, entails that the circulation process of the hacienda eventually becomes that of capital. But also at that point the hacienda itself disappears as a distinct mode of production since, as seen in chapter 2, there is no longer an inquilino or an hacendado enterprise; the former becomes a wage paid labourer and the latter is transformed into a capitalist farm. Hence, in so far as the inquilinaje relation exists, the circulation process of the hacendado-enterprise will more or less differ from that of capital, the extent of this difference being dependent largely on the relative importance of the inquilinaje (imprinting its pre-capitalist character on the hacienda), and on the degree to which wage relations have developed in the estate. Thus, in contrast to Ratcliff's argument there is a close connection between the relations of production of the hacienda and the nature of its relations of circulation.

I think that Ratcliff's error stems from a vision of the circulation of capital as a mere sale of commodities; he does not distinguish the circulation of commodities in general from the circulation of capital and of industrial capital in particular, wherein the sale of product is only one step towards the replacement of productive capital

through the purchase of labour-power and means of production. It is furthermore incorrect to assume that the hacendado is a capitalist because he obtains a profit. Although profits are typical to capitalist production, profits are in themselves not at all exclusive to capitalism. If that were so then the 18-19th century plantations based on slave labour should be regarded as being capitalist as, no doubt, trade in ancient societies (Greece, Rome, Byzantium) or any mercantile activity which renders a profit. Monetary wealth, profits, and indeed hoarding existed long before capitalism appeared in the world.¹³ What distinguishes capitalism from the preceding economic epochs is the universal character of profits, and the mode by which the surplus-value is produced and then transformed into profits (and into interests or ground-rent); a mode which rests upon a market of labour-power without which wages, and therefore value itself, can have no general (commonly established) meaning.¹⁴ By definition trade and the circulation of commodities involve their sale and this can often be accompanied by the making of a profit, but only capitalist production involves the purchase and sale of labour-power on a social scale, the formation of socially established rates of wages, average rate of profits, general rates of interests, and so on. The very existence of the large wage differentials between neighbouring haciendas described by Galdames in the early 20th-century for example (seen in chapter 2 section 2), shows the existence of a still immature market of labour-power in rural areas, some workers still being at least partially in possession of means of production, such as the inquilino or the independent small-holder working as a seasonal peon. One should therefore guard against portraying the hacienda as capitalist merely because the hacendado sells his produce, and makes a profit (in money).

Section 2 :

Basic conditions for capitalist production and the role of the inquilinaje

We have seen in section 1 of this chapter that whilst the inquilinaje relation is predominant the hacendado is not compelled to productively invest the proceeds from his estate. This can be an obstacle for the development of the productive forces in the hacienda since the landowner is 'free' to develop the so-called 'inclinations towards unproductive expenditure'. Indeed, historically most haciendas have been run inefficiently and their owners have shown little keenness in modernizing them while maintaining a high level of personal consumption. It is held that during the 19th and early 20th centuries the hacendados spent most of the proceeds from their estates building Santiago-houses, living-off expensive imported goods and travelling abroad in luxury (some lived permanently in European capital cities), rather than in improving agricultural methods and investing in their haciendas.¹⁵ Even in fairly recent times the CIDA report (1966) was strong to emphasize the hacendados' large expenditure in personal consumption as one of the main obstacles for the development of agriculture.¹⁶

Pinto's classic study on Chile's under-development associated the hacendados' apparent lack of entrepreneurial spirit with the very nature of the country's society which historically had offered little room for the emergence of an industrious capitalist class independent of landowners, as well as with the system of land tenure which concentrated ownership in the hands of few.¹⁷ Some structuralist approaches have laid emphasis on the "latifundia-minifundia complex" which is said to be wasteful of resources, non-conducive to investment and inherently inefficient because the haciendas have too much land and the peasants too little.¹⁸ Other works

focus on the market and maintain that unfavourable relative prices for agricultural products were behind the lack of investment in the haciendas.¹⁹ Finally, some scholars such as McBride and Cademartori have argued that relations of production such as the inquilinaje were responsible for the backwardness and poor investment in the estates.²⁰ Cademartori states that :

"(...) The landowners under-estimate the use of machinery for as long as they can continue to pay low wages to their workers and inquilinos. The use of machinery presupposes forms of production and labour relations which are incompatible with the system of inquilinaje and sharecropping".²¹

Arguments concerning the role of the inquilinaje in the development of the productive forces are rarely expounded beyond a general statement, however, and the issue has remained obscured by a lack of systematic analysis. In what follows a study of the role of the inquilinaje is attempted in the light of the historical requirements for the emergence of capitalist production.

As we have already seen in section 1 of this chapter, the specific manner in which labour-power and the means of production meet each other appears in capitalism as an act of purchase and sale. In capitalist production it is capital that sets in motion the productive forces of society; capital taking the form of money to purchase labour-power and means of production.²² Capital thus appears as money since it is only in money that such a purchase can be effected. But in history for money to adopt the role of capital two basic conditions are required. Firstly, that labour-power can be freely purchased and sold as any other commodity. Secondly, the objective conditions of labour (tools, raw materials, means of subsistence for the workers) must exist as

commodities readily available in the market prior to the emergence of capitalism itself, "which allows value existing in the form of monetary wealth to buy the objective conditions of labour on the one hand, to exchange the living labour of the now free labourers for money, on the other".²³

These two basic conditions presuppose a number of historical developments. For labour-power to be sold, a mass of people not only need to be free, but also in a position such that they have little choice other than to alienate their own labouring capability to someone else. This in turn presupposes a historical process whereby they have been dispossessed of means of production and the means for their livelihood; a process leading to a situation in which labour-power and the means of production face each other as the property and possession of someone else. The fact that in some circumstances the direct producers do not own means of production, however, does not in itself lead to the purchase of their labour-power. In the case of slavery it is the slave himself who is purchased, rather than his labour-power. Moreover, even if the direct producer is a free individual, and in addition to this he does not own means of production, a purchase of his labour-power will not necessarily follow. The 19th and early 20th-century inquilino for example, is a free individual and he does not own the land, yet he is the precarious possessor of an allotment and his labour-power is not purchased by the hacendado (in this case ownership has not yet developed into a complete dispossession of the non-owner).²⁴

Further, the purchase and sale of labour-power on a social scale requires a certain previous development of the productive forces, and capital itself in the form of monetary wealth and accumulated values of exchange, must exist prior to the initiation of capitalist production.²⁵ The reasons for this can be summarized as follows.

When buying labour-power, the capitalist advances a certain sum of capital and he does so through a series of regular outlays of money towards wage payments. The longer the period of production involved, the larger the advancement of capital-value required. This is because he must continue to pay wages until such time as the product of his enterprise is finished and sold, at which point he can recover the value of his advancement and re-cycle it as productive capital. Although for the individual capitalist the advancement of capital consists of an outlay of money, from the standpoint of social capital and of the historical development of society it is not a question of a mere advancement of bank notes. Before the first capitalist can start advancing capital in wages at all, a social supply of means of subsistence has to be readily at hand as commodities in a market, so that labourers spending their wages on a daily or weekly basis, will be able to procure the means for their livelihood.²⁶ A social supply of means of production also has to be available so that the capitalist can withdraw raw materials and other inputs from the market for as long as his period of production lasts (the longer the period of production involved, the larger the social supply of different commodities which need to exist in advance).²⁷ Hence, capital both, in the form of money and as a certain social supply of commodities available in the market, must exist prior to the initiation of production on a capitalist basis.

In turn, capital in the form of monetary wealth and as a social supply of commodities presupposes a number of historical developments. To begin with, it necessitates a certain previous development of manufactures (artisanship, petty commodity production), and a certain previous accumulation so that a stock of commodities can be held at all. It necessitates at least the partial dissolution of the productive organizations based on guilds so that commodities and all kinds of instruments of labour can

be freely withdrawn or thrown into the market. It requires a previous development of commerce and this entails transport, storage and market places for commodities to be sold; a certain social division of labour including the existence of merchants, transporters, shopkeepers, and the appropriation of a social surplus, large enough to enable them to profit from commerce which is not in itself productive. In short, a social supply of commodities and the existence of capital as monetary wealth requires a certain previous development of the productive forces, without which the purchase and sale of labour-power on a social scale is not possible.

The latter condition for the emergence of capitalist production, i.e., capital as accumulated money and as commodities for exchange existing prior to capitalist production itself, is a key factor when analysing periods of transition to capitalism. Marx for example, argues that for capitalist production to develop a previous accumulation of capital is required, but that ...

"(...) the accumulation of capital presupposes surplus-value; surplus-value presupposes capitalist production; capitalist production presupposes the pre-existence of considerable masses of capital and labour-power in the hands of producers of commodities. The whole movement, therefore, seems to turn into a vicious circle, out of which we can only get by supposing a primitive accumulation (previous accumulation of Adam Smith) preceding capitalist accumulation; an accumulation not the result of the capitalist mode of production, but its starting point".²⁸

It is apparent that production undertaken on the basis of the inquilinaje relation requires a far smaller capital advancement than is needed for capitalist production, since the inquilino supplies his labour-power without any remuneration. Moreover, it requires far less development of the productive forces than is

necessary for capitalist production. The hacendado allots to the inquilino a piece of land where the latter is expected to produce the means for his livelihood on his own (or at least part of such means if he receives a partial wage), and this requires little or no social supply of commodities available in a market properly. The inquilino obviously needs a supply of means of subsistence to keep himself going until the harvest time, but such means assume here the form of an individual supply, rather than of a social supply held in a market. Part of the means that the inquilino needs for his livelihood are produced and held by himself and the social supply of the hacienda consists of its store, rather than of a commodity market as such. The inquilinaje furthermore necessitates a lower degree of circulation of money and means of exchange than capitalist production, since the inquilino barterers produce for goods in the hacienda's store and the little cash he or the members of his household receive is often (until the early 20th-century) paid in tokens for exchange in the same store. Hence, the inquilinaje appears in this light as a relation of production that belongs to the pre-capitalist age of economic development, and as one that enables the hacendado to undertake production with far smaller capital advances than would be necessary for capitalist production.

Historically in fact, the inquilinaje relation emerged in the first half of the 19th-century, at a time when social capital and the productive forces of the country had not developed enough to permit full capitalist production in industry, let alone agriculture. Industry then consisted very largely of artisanship or petty commodity production; there were very few, small, organized factories.²⁹ Household production (cottage industry) provided for the needs of the rural (and part of the urban) population, which by the mid-19th century accounted for no less than 3/4 of the country's total

population.³⁰ Transportation was extremely slow and difficult, there were no railways and waterways were practically non-existent, produce being hauled on mule-back or ox-carts at best.³¹ Money capital was scarce and landowners had to turn to the merchants for loans, often having to pay usurious interests; prior to the mid-1850s there were no formal banking institutions.

It follows from all this that since the inquilinaje relation permits production with small capital advances, it may contribute to the development of the productive forces during early stages of the hacienda's development, thus contributing to create some of the material conditions necessary for capitalist production to emerge in the estate. Nonetheless, since the inquilinaje does not compel the hacendado to invest, as seen in section 1 of this chapter, it can therefore also turn into an obstacle for the development of the forces of production in the hacienda, hence hampering the emergence of capitalist production at a further stage. Historically, the inquilinaje precedes the emergence of capitalist production in Chile, but it has also been destined to long outlive the circumstances of its birth.

Section 3

Advancing capital and allotting land

The inquilinaje relation permits the hacendado to obtain part of his labour-power in return for a land allotment to the inquilino. It is land then, rather than money which appears here to set in motion the forces of production by uniting labour-power with the means of production. Land ownership stands between the labourer and the means of production, but at the same time enables the hacendado to unite them under his own sway. It

should not be surprising, therefore, that land ownership in itself has such economic and social importance in countries where relations of production such as the inquilinaje exist, or have been in existence until recently. To a certain extent the role of land here could be compared with the role of money-capital under capitalism. In both cases, i.e., the allotment of land and the advancement of money-capital, it is not money or land per se that are important, but above all their power to provide their owners with labour-power and thus with surplus-value.

Allotting land to inquilinos, however, is quite different from outlaying capital for wage payments, although both have the same purpose, i.e., to unite labour-power with the means of production thereby commencing a production process. The differences can be noted at various levels. Firstly, as we have already examined, production undertaken on the basis of the inquilinaje requires smaller capital advances and a lower development of the productive forces of society than are necessary for capitalist production. Secondly, hiring wage labour demands an outlay of money-capital, and although from the standpoint of society this capital is not consumed but only transformed from money-capital into productive capital (or capital producing surplus-value), for the individual hacendado this means spending his own money. By allotting land, however, it is not his advancement which is consumed but the inquilino's, who who lives off the product of his own enterprise and keeps an individual supply of means of subsistence. Moreover, the hacendado could expel the inquilino from the hacienda and recover the land he has allotted together with the inquilino's dwelling, whereas it would be impossible for him to recover any wages he has paid if he dismisses one of his peon workers for example. Thus, in as much as the hacendado obtains labour-power through the inquilinaje relation, he can afford to run his estate inefficiently

since whatever the outcome, at least as regards labour expenses, he loses nothing.

Thirdly, paying wages entails that the hacendado has to remunerate the worker with the money value of his labour-power (assuming of course that such a wage is the worker's only income and that he is to maintain himself alive, fit to work, and reproduce such skills as are necessary for his labour); the worker receives a wage the value of which at least covers his immediate necessities. The exchange within the wage relation is, therefore, value for value, wherein the labour-power obtained by the employer is consumed to produce value and surplus-value anew, whilst the wage is spent by the worker to keep himself alive and fit to work.³² In contrast to this the inquilinaje relation does not entail providing the worker with the value of his own labour-power, but with a piece of land where he is expected to produce the means for his subsistence on his own. Hence, while the non-remunerated labour-power supplied by the inquilino is consumed in producing value and surplus-value for the estate, what the inquilino receives for his labour, the land allotment, remains intact as the property of the hacendado.³³ By allotting land to the inquilino the hacendado obtains labour-power which is reproduced by somebody else, i.e., by the inquilino in his own enterprise.

Section 4 :

Seed and food rations : re-cycling part of the product into the hacendado-enterprise's circuit.

As described in section 1 of this chapter, a small part of the hacendado-enterprise's product is not sold but stored for seed or given to workers as their food rations(possibly up to some 10-15% of the wheat produced

in pre-1930's haciendas was used for these purposes).³⁴ Although part of the hacendado-enterprise's product is thus consumed in the estate itself, one is dealing here with a productive consumption, in the sense that its purpose is to re-cycle part of the product (most agricultural products are at the same time necessary as inputs and a part must be kept for the sowing or breeding). The proportion of produce withheld from circulation in the market can vary according to a number of factors, such as technical developments related to high quality seed, storage systems, and transport facilities to the places where improved quality seed can be obtained.³⁵ Prior to the 1930s the trend is for each hacienda to store its own seed, notwithstanding occasional purchases of new or improved varieties of seed to restore, maintain or improve the quality of the estate's stock. Advertising of improved seed becomes noticeable towards the 1920s in the hacendados' review El Agricultor, but it is only by the 1950s that buying high quality seed on a regular basis turns into a more widespread practice.³⁶

By storing his own seed the hacendado advances part of his capital; he uses part of the product of one season, which is his commodity capital and would otherwise be sold, as seed, and therefore as productive capital for the next season. As opposed to the general circuit of (productive) capital described in formula 1, this part of the hacendado's capital is not transformed into money and is continuously re-cycled in the circuit of his own enterprise.

By using part of his product to provide food rations to the workers, the hacendado also advances capital; he transforms part of his commodity capital directly into labour-power (i.e., without capital going first through the phase of money-capital). Although food rations entail consuming part of the product, consumption appears here in a different light than in a subsistence economy. In

the hacendado-enterprise the purpose of food rations is to obtain labour-power to produce surplus-value. Consumption here serves the process of production of surplus-value and the upkeeping of the worker appears only as a necessary accident within such a process, whereas in a subsistence economy, production serves the purpose of consumption and the maintainance of the worker is the ultimate objective.

Although both, seed stocks and food rations involve an advancement of capital, the former is a transformation of commodity-capital(product) into constant capital(seed), in which capital holds the form of commodity,³⁷ whereas the latter is a transformation of commodity-capital into labour-power, variable capital, or capital producing surplus-value.³⁸ As opposed to the inquilinaje relation, food rations require from the hacendado an advancement of capital, but since capital is advanced here in the form of produce, rather than money, food rations are also different from the wage relation as regards the form of the advancement. Nonetheless, both wages and food rations entail the transformation of a definite magnitude of value(money, food rations), into a variable magnitude of value or a value creating power(labour-power).³⁹

In the case of the mingaco, as we have seen, food and drink constituted the only remuneration for seasonal peon workers and to some extent the mingaco could be considered as a relation of production of its own(some of its features originated from old customs of mutual help passed down from Pre-Spanish times, as seen in chapter 2). The mingaco tended to disappear after the mid-19th century but some payment in kind continued to be fairly common. In chapter 2 the historical significance of remuneration in kind was seen in the light of the emergence of rural villages and local trade, which were necessary conditions for the rise of money as a means of payment for peon labourers. In section 2 of this chapter, we further saw that a certain previous development of commerce and the

productive forces of society was required for money to adopt the role of capital on a social scale. Nevertheless, payment in kind of some sort may still survive for a long time after the conditions for money to adopt the role of capital are fulfilled, and there can be numerous reasons for this such as custom, convenience and time saving. The hacendado's handbook for example, recommends that workers should be given food rations to avoid prolonged stoppages at meal times, and that "if there are any peons working far from the general group, their food should be taken to wherever they are in order to avoid losses of time".⁴⁰ In these circumstances food rations as a form of payment in kind appear wholly subordinated to the wage or the inquilinaje relation. Further, so far I have only referred to the product used in food rations, but the preparation of the food itself required personnel specially assigned to this task (as well as utensils). Cooks were often the wives and daughters of inquilinos who were often remunerated with a partial wage and to this extent food rations required from the hacendado some advancement of money as well.

Finally, it was customary for the hacendado and his extended family to consume products of the estate whilst they stayed there in the summer. Often a few bags of 'porotos del fundo' (beans from the estate) were taken along to the Santiago house. The proportion of the product that the hacendado consumes is, nonetheless, minimal. Unlike the feudal manor, he has no army or court to feed and he would probably spend most of the time in the city. At any rate, his consumption entails consuming his commodity-capital. Unlike food rations for workers his consumption of the estate's products is not productive, in the sense that it is not a mere transformation of capital, from a commodity-capital into labour-power; here it is commodity-capital itself which is consumed, rather than simply transformed; this minimal part of the product consumed by the landowner and his relatives disappears

from the hacendado-enterprise's circuit and from the circuit of social capital in general.⁴¹

Section 5 :

The circuit of the hacendado-enterprise

As we have seen, the hacendado both allots land and advances capital and in this section I shall discuss the manner in which the two relations of production (wage and inquilinaje), combine within the hacendado-enterprise's circuit. Formula 3 represents the circuit of (industrial) individual capital under conditions of simple reproduction, i.e., assuming that the capitalist spends the entire surplus-value in personal consumption and therefore it does not re-enter into the circuit of his own capital.⁴²

$$M_0 - C_L^{Pm} \dots P \dots (C_0 + C'_0) - (M_0 + M'_0) : \begin{array}{l} (M_0) - C_L^{Pm} \dots P \dots \\ + \\ (M'_0) - C(Mc) \end{array}$$

Formula 3

*(The symbols are the same as in previous formulae although commodity-capital, which was formerly represented by C' , appears now as $C_0 + C'_0$, where C_0 stands for the value and C'_0 stands for the surplus-value. The same applies to money-capital previously represented by M' and now appearing as $M_0 + M'_0$).

Once the hacendado's product is sold, he is left with a sum of money amounting to the value and surplus-value ($M_0 + M'_0 + m_0 + m'_0$). At this point, if he is to continue production on the same scale, he needs to replace at least the wear and tear of his means of production together with his living capital, the labour-power, and for this he needs to advance capital. Since, however, he obtains part of the labour-power by allotting land to the inquilino, the hacendado's advancement of capital needs to be much smaller than if all his workers were remunerated with a wage. As regards the replacement of his living capital the hacendado must only re-advance M_0 , and he can thus spend the remaining $M'_0 + m_0 + m'_0$ (which comprises the surplus-value produced by the wage paid labour-power, plus all the value and surplus-value produced by the inquilinaje labour-power), as he sees fit and still be able to resume production on the same scale as before.

One can observe that the hacendado-enterprise's circuit contains the circuit of (industrial) capital, that is to say, the latter exists as a movement, adopting and discarding its three phases in a typical manner within the circuit of the hacendado-enterprise (i.e., money-capital, productive-capital, commodity-capital : $M - C_L^{Pm} \dots P \dots C' - M'$, etc.). Nonetheless, it is also apparent that the hacendado-enterprise's circuit differs from that of capital since part of the labour-power (i.e., the inquilinaje), comes from outside the circuit of capital and, consequently, the amount of money that needs to re-enter the hacendado-enterprise's circuit is smaller than if all labour-power was hired for a wage. Moreover, since part of the labour-power is obtained by allotting land and the hacendado-enterprise depends upon the inquilino-enterprise for the provision of labour-power, the circuit of the former is dependent on the circuit of the latter (more about this will be said in chapter 4).

The value and surplus-value produced by the inquilinaje labour-power joins the hacendado-enterprise's circuit at the phase of production, circulating in the manner of, and as part of, the hacendado's capital, as one mass of commodities, until the product is sold. During this time the inquilinaje labour-power contributes to expand the value of capital. Thereafter, however, the value and surplus-value produced by this source of labour-power need not re-enter the hacendado-enterprise's circuit. This applies even to reproduction on enlarged scale. The hacendado can expand his capital by accumulating an equivalent to the surplus-value produced by the wage paid labour-power, i.e., M'_0 , whilst still spending elsewhere (in personal consumption) the entire value and surplus-value produced by the inquilinaje. Hence, between the time of production and the sale of the product the hacendado-enterprise's circuit is as the circuit of capital. Before and after such time, however, the circuit of the hacendado-enterprise unfolds and part of it falls outside the circuit of the landowner's capital. This follows from the argument in sections 1 and 2 of this chapter, in that if on the one hand the inquilinaje relation permits production with reduced capital advances, on the other it does not compel the hacendado to invest his profits in his estate.

The fact that the hacendado-enterprise's circuit is not typically capitalist, although capital exists within it as an embryo describing its different phases, raises the question of how capital within such a circuit develops and eventually imposes its own laws and movement on the hacendado-enterprise, the inquilinaje relation disappearing. Kay maintains that one of the keys to understanding this question is Marx's concept of "subsumption of labour to capital", and suggests that there is a subsumption of the inquilinaje to capital, which has historically developed from a formal subsumption (second half of the 19th-century), into a real

subsumption(as from the 1950s).⁴³ It seems to me though, that it is not possible to establish a direct parallel between Marx's concept and the inquilinaje, in so far as I understand Marx's ideas on real and formal subsumption. First of all, his concept of subsumption of labour to capital presupposes capitalist production; it refers to a situation in which the mode of production is capitalist, in other words, where all labour-power is hired for a wage and contributes to expand capital directly, within the sphere of production.⁴⁴ Marx's concept does not refer to pre-capitalist modes of production or to cases in which capital penetrates only within the sphere of circulation, whilst the old relations of production subsist(exemplified by India's textiles and the English merchant's capital establishing its sway over commerce, stimulating production for exchange but for the most part leaving the old mode of production unchanged).

Marx's distinction between formal and real subsumption of labour to capital refers in fact to two different stages in the historical development of capitalism. By formal subsumption Marx understands the early phase of capitalism as it developed in Western Europe, where capitalist production and the organized factory already exists but the nature of the labour process as regards tools, division of labour, methods of production, and so on, is still not quite distinct from that of the artisan's workshop. In this early phase of the emergence of capitalist production, profits depend upon the absolute surplus-value and therefore on the extension of the working day. By real subsumption of labour to capital Marx refers to what he calls the modern or the typical phase of capitalism, which developed with the 19th-century industrial revolution and is characterized by a constant tendency to increase the relative surplus-value and the organic composition of capital. In both cases, however, Marx deals with an already established capitalist mode of production of surplus-value. His passages on formal and

real subsumption focus on the features of capitalist development as encompassed during these two distinct phases, rather than on the transition to capitalist production itself (in Western Europe).⁴⁵

Certainly in the case of the inquilinaje one is dealing with labour-power which is creating value directly within the labour process of the hacendado-enterprise, but the links between such a labour-power and the owner of the means of production, the social relations and the mode of production of surplus-value, however, are not capitalist. One is dealing here with a peculiar mode of production which is still in transition to capitalist production which is not at all the subject touched upon by Marx in his writings on formal and real subsumption. Kay's discussion is nonetheless illuminating as to the substance of the questions it raises, namely, what forces lead to the emergence of capitalist production in the hacienda and what historical stages has this process encompassed.

Capitalist production in the hacienda entails, amongst other things, that the surplus-value obtained by means of the inquilinaje is absorbed by the hacendado's capital and invested in his estate with a result such that the inquilinaje itself is dissolved in this process.⁴⁶ In other words, it presupposes the existence of forces influencing that the surplus-value produced by the inquilinaje labour-power be invested in this manner. Such forces, however, may not be found in the inquilinaje relation itself since as seen further above it does not compel the hacendado to invest. It follows from this that any such forces may only be found in historical developments beyond the inquilinaje but also preceding the rise of capitalist production in the hacienda and which create the necessary conditions for it.

Marx's (and Engel's) writings on transition to capitalism, based mostly on evidence on Europe which was

then available, deal extensively with the separation of the direct producers from the objective conditions of labour -tools, raw materials, food, land- as one of the fundamental historical pre-requisites for the emergence of capitalist production. This separation is accomplished through a process of (at least partial) dissolution of the old pre-capitalist mode of production. The process of dissolution is one where tools, materials, and instruments of labour of all sorts, which according to Marx are already there as the creation of the old pre-capitalist society, are then thrown into the exchange market together with the dispossessed workers looking for paid employment.⁴⁷ Amongst the several factors leading to this process of dissolution Marx emphasizes commerce and the growth of trade, particularly their effect on the inter-action between the feudal countryside and the towns.⁴⁸ Marx's and Engels's comments are elusive as regards the possibility of economic forces within the feudal manor contributing to its own dissolution. In a passage of his Foremen Marx writes that :

"Urban labour itself had created the means of production, for which the guilds became as great an embarrassment as were the old relations of landed property in an improved agriculture, which was in turn partly the consequence of the greater sale of agricultural products to the cities, etc".⁴⁹

It seems clear that in Marx's view the old relations of production had to appear at one point as being inefficient before they were dissolved; the old relations of landed property would be transformed only once an improved agriculture had emerged, 'partly' as a result of production for exchange developing in the countryside. An improvement of agriculture is therefore a pre-requisite and a fact which Marx assumes, rather than explores in any depth. (it is possible that Marx may have also partly attributed such an improvement to developments in farming methods and tools during the pre-dissolution age). Dobb has suggested that some

technological progress leading to an increase of labour productivity in the feudal manor itself may have had precipitated its transformation accelerating the expulsion of tenant labour, a topic which has been considerably expanded by Kay in his comparative study of the hacienda and the Eastern European manor.⁵⁰ The evidence on such increase of labour productivity actually occurring in places of Eastern Europe during the second half of the 19th-century seems to be quite conclusive. Kay's research shows that a major transformation of the hacienda's instruments of labour and farming practices was under way as from the 1940s (particularly as from the 1950s, Kay's research on the hacienda focusing on this late period). Moreover, as described in chapter 2 (section 2) there are many indications of a quiet, yet fundamental change in some of the simple aspects of the hacienda's technology taking place generally by the early 20th-century (this change is analysed at length in chapter 5). It is on these changes of a seemingly simple nature that I now wish to focus on, for the topic under discussion here is illuminating in what may be considered as a higher transitional stage of the pre-capitalist mode of production; a higher transitional stage in which tools and the efficiency of the labour process are improved sufficiently for the pre-capitalist mode to appear as inefficient, thereby setting one of the basis for its later dissolution. Let us look into this matter following upon the question posed further above, namely, what historical factors may influence the hacendado's capital so as to be employed to dissolve the inquilinaje.⁵¹

Various historical circumstances connected with the development of wage relations in the hacienda can be distinguished. Firstly, the hacendado advances money to pay wages if he is unable to procure all the labour-power needed through the inquilinaje. One case of this is the peon labourer, wage relations appearing during

very early phases of the hacienda's development as a result of the seasonal character of the labour process (wheat being produced for exchange). Secondly, following the 19th-century expansion of cultivation, the inability of the inquilino-enterprise to supply all the labour-power needed by the estate, unpaid, forces the hacendado to remunerate any labour required over and above the inquilino's established obligations (once these obligations have been increased as much as possible). Here wage relations appear as a result of the limitations of the inquilinaje as a source of unpaid labour-power, rather than connected to any movement towards a dissolution of the inquilinaje itself.

Thirdly, however, a technological break-through bringing about a greater labour productivity in the enterprise of the hacendado leads him to start remunerating part of the labour-power formerly obtained through the inquilinaje. The technological change appears at first (between the late 19th and early 20th centuries) with the use of more efficient simple instruments of labour (plough, scythe), improved wheat plants and animal breeds, followed (or in cases accompanied) by the introduction of harvesting machinery, mechanization accelerating considerably after the 1930s. With this technical change a completely new situation arises for now the development of wage relations is indeed connected to another process leading to the disintegration of the inquilinaje itself. A growing differential in labour productivity between the hacendado and the inquilino enterprises provides one of the material bases for the dissolution of the inquilinaje since the hacendado would appropriate a larger proportion of the inquilino's working time by employing him as a wage earner, rather than by allotting him land to produce the means for his own sustenance. The inquilino in fact, would produce the equivalent to his own wages faster in the hacendado-enterprise, than it would take him to

produce the means for his livelihood on his allotment of land. In these circumstances, the forces of capital which the inquilino originally contributes to expand, are finally turned against him, the hacendado's money-capital now being used to pay wages to the inquilino himself. A historical development of technology bringing about a rise of labour productivity in the enterprise of the hacendado thus appears as a major ingredient in the process of transition to capitalism in the hacienda.

Fourthly, moreover, the hacendado may accelerate considerably the proletarianization of the inquilino if he is short of land to allot. This seems to have occurred in the final period of the hacienda's transformation, being also one of the reasons why the inquilinaje survived longest in the largest estates.⁵²

The dissolution of the inquilinaje is, nevertheless, a process which can be slow. It presupposes the disappearance of personal relations and customary rights which form the corner-stone of the hacienda's hierarchy and traditional way of life; this process is often met with opposition by the inquilinos, but in this the inquilinaje is no exception, for nowhere have the forces of capitalism developed without resistance. The dissolution of the inquilinaje, however, means freeing the inquilino not only from his possession of a land allotment, but also from his obligations of labour and loyalty with the estate. Moreover, the disappearance of the inquilinaje means for the hacendado a higher wage bill (a larger advancement of money-capital), as well as doing away with one of the bases of his authority and political influence. There is still yet another factor to consider, and that is the features and dissolution of, the mode of production of surplus-value typical to the inquilinaje relation, and this is one of the main themes of the following chapter.

NOTES : CHAPTER 3

(1) It can be estimated that no more than 10-15% of the wheat produced in the hacendado-enterprise was recycled as seed and food rations. This estimate is based on the following mid-19th century data.

- i. 18 man/days labour were needed to cultivate one hectare of wheat on irrigated land in the province of Santiago (ploughing, sowing, irrigation, etc), following the traditional methods and employing simple instruments of work. (Gay, C.: 1973, vol. 2 p. 44).
- ii. 6 man/days labour were needed for the reaping of one hectare of wheat. The tarea, a system of piece work, was equivalent to the daily performance of skilled adult reapers; by the mid-19th century the tarea in Santiago was of 0.16 hectares. (Gay, C.: Ibid. p. 34).
- iii. 3 man/days labour were employed for transportation of the stalks to the threshing site (transported in ox-carts). Gay, C. Ibidem.
- iv. 20 man/days labour were needed for the threshing and winnowing (all of this refers of course to the wheat grown in one hectare). Gay, C. Ibid. p. 44, some 8 man/days' labour for threshing and 12 for winnowing (data corresponding to a rough average of the various localities of central Chile considered by Gay).
- v. Another 8 man/days' labour can be added for transportation of the grain to the estate's barns, sacking, overseeing; this figure is only a rough estimate based on the information supplied by Gay.
- vi. The product of one hectare of irrigated land, according to Gay, was of some 13 quintales in the 1840s (30 fanegas per cuadra); about 9 quintales were used for seed (2 fanegas per cuadra). Gay, C. Ibid. p. 45.
- vii. The daily food rations for workers included some 400 grams of wheat (300 grams of flour). Balmaceda, M. J.: 1875, p. 31.

Hence: Yield per hectare	:	13.0	<u>quintales</u>	(100%)
Used as seed	:	0.9	"	(7%)
Used for food rations (55 men):	:	0.2	"	(2%)

The percentage of product used for seed or in food rations was probably larger between the 1860s and the turn of the century due to lower yields (perhaps up to some 15%), and it was smaller than this as from the early 20th

century due to the increase in yields per hectare shown in Appendix 6, table A.6.4. Also the practice of purchasing the seed became more widespread in the 20th century as certified types of seed became available.

- (2) See Ratcliff, R.:1973, chapter 2, p.66. The concept of 'labour-repressive' mode of production is expounded in Moore, B.:1967, pp.434-35.
- (3) See Laclau, E.:1969, Passim.
- (4) See Frank, A.G.:1969, pp.238-40, and Frank, A.G.:1975, chapter 1.
- (5) Amongst the most quoted works are Marx, K.:1968.a; Dobb, M.:1978, and Sweezy, P.:1978. For a critique to Frank's view see Romano, R.:1971, Passim.
- (6) Particularly important are the works of Kay, C.:1971 and Kay, C.:1980, which compare the transition to capitalist production in the hacienda and in the European manor; and Guerrero, A.:1977, which attempts to establish a formal theoretical framework to analyse the Ecuatorian huasipunguero (similar to the Chilean inquilino).
- (7) The following description of the circulation of industrial capital and the general circulation of commodities is based on Marx, K.:1959, vol. 2, especially chapters 1-4; the term industrial capital meaning capital engaged in productive activities (industry, agriculture, mining), as opposed to capital engaged in commerce.
- (8) The same assumption as in Marx, K.:1959, vol. 2 chapter 2.
- (9) Marx, K.:1959, vol. 2, pp.63, 74-75.
- (10) Formula from Marx, K.:1959, vol. 2, p.63.
- (11) See Romano, R.:1971, Passim.
- (12) On this aspect of capitalism see for example Marx, K.:1959 vol. 2, p.120, and Marx, K.:1973, pp.540-42 (amongst other works).
- (13) See Marx, K.:1959, vol. 2, pp.110-11; vol. 3, pp.321-27; Marx, K.:1973, p.506.
- (14) See Marx, K.:1959, vol. 3, chapters 9-10, and pp.767-72; and Marx, K.:1973, pp.539-40.
- (15) See Encina, F.:1955, Passim; Bauer, A.:1975, chapters 4-8; McBride, G.:1936, pp.176-78; as regards the hacendado's pattern of consumption in more recent times see Sternberg, M.J.:1962, chapter 4.

- (16) CIDA.:1966, pp.60-61.
- (17) Pinto,A.:1962, chapters 1-2.
- (18) See Barraclough,S.:1965, Passim. See also CIDA.:1966 chapters 5-6.
- (19) Bauer,A.:1975, chapters 3-4, maintains that shrinking international wheat prices and the small size of the home market were largely responsible for the decline of Chile's wheat production towards the late 19th-century. Mamalakis,M.:1976, pp.142-43, and Echeverría,R.:1969 chapters 2-3, maintain that the governments' price policies discriminated against agriculture as from the 1940's, thus holding back the development of agriculture to the benefit of industrial growth which was stimulated by a policy of cheap food (thus low wages for urban workers).
- (20) McBride,G.:1936, chapter 6 and conclusions; and Cademartori,J.:1971, pp.104-05.
- (21) Cademartori,J.:1971, p.105.
- (22) See Marx,K.:1959, vol. 2, pp.27-36.
- (23) Marx,K.:1964, p.110. This part is also based on Marx,K.:1938, vol. 1, part 8, and Marx,K.:1959, vol. 2 chapters 1-4.
- (24) I.e., it has not developed fully into what Marx describes as the historical process whereby the direct producers are separated from their objective conditions of labour (tools, raw materials, means of subsistence). See Marx,K.:1973, pp.500-03.
- (25) Marx,K.:1973, pp.506-09 (a certain accumulation of monetary wealth and instruments of labour which already exist as the product of the pre-capitalist age).
- (26) See Marx,K.:1959, vol. 2, pp.33-34 (and also chapter 6 "Formation of a Supply in General" and "The Commodity Supply Proper" . The concept of 'social supply' as used in this thesis is based on Marx's definition of 'commodity-capital supply', and the 'productive-capital supply'.
- (27) The period of production is the time during which "capital is held fast in the sphere of production", and it includes the total time of production (the working time), and the necessary interruptions of the labour process (idle periods in agriculture, waiting for the action of natural or chemical agents such as in the aging of wines and spirits, etc.). Marx,K.:1959: vol. 2, p.238.

- (28) Marx, K.: 1938, vol. 1, p.736.
- (29) See for example Kirsch, H.W.: 1973, pp.6-9. More about the development of urban industry is said in chapter 5 section 1 of this thesis.
- (30) See Gay, C.: 1973, vol. 1, pp.159-60; Bauer, A.: 1971, p.1066. Population data from Hurtado, C.: 1966, pp.144-45.
- (31) See Gay, C.: 1973, vol. 2, "De las Vias de Comunicacion" chapters 1-3, 6-7.
- (32) See Marx, K.: 1938, vol. 1, chapters 6-7 (and p.149).
- (33) I am assuming here that the inquilino maintains with his labour the productive conditions of the land allotted to him.
- (34) As detailed in note 1 above.
- (35) The financial circumstances of a particular hacienda may also influence the hacendado's decision on whether to store his own seed, or otherwise buy it in the market. In order to stock his own seed the hacendado has to withhold part of his product (his commodity-capital) from circulation; the 8-10% of the product which is used for seed has to be stored after the harvest, and until the following sowing season (an interval of usually 7 months), it serves no useful purpose.
- (36) Table 3 :
Production of certified wheat seed and total wheat production in Chile: chosen years, 1932-1966.
(in 000's quintales)

	Certified Seed	Wheat production
1932	5	5,766
1935-36*	49	8,450
1959-60*	191	10,775
1965-66*	436	12,311

*(Average annual figures).

Sources: Censo Agropecuario 1936, p.98; Ministerio de Agricultura (Chile): 1970, pp.30-31, 117-20; and Anuario Estadístico 1939 (Agricultura), pp.14-15.

- (37) Constant capital is that part of capital which consists of the means of production (tools, raw materials, fuel, installations), and which therefore transfers its value to the product as the various tools and raw materials are being worn or consumed in the labour process. A further distinction can be made between fixed constant capital which wears out very slowly (buildings, machinery), and circulating constant capital, which consists of raw materials and short-life tools, their value being transferred to the product very quickly or at once (e.g., immediately in the case of raw materials). See Marx, K.:1938, vol. 1, chapter 8; and Marx, K.:1959, vol. 2, chapters 8-11.
- (38) The variable capital is labour-power, the living part of capital which not only transfers its value to the product but also creates value anew. "The value of labour-power is the value of the means necessary for the maintenance of the worker" (Marx, K.:1938, vol. 1, p.149). If the workers are to reproduce themselves, and to this extent labour-power becomes a commodity beyond the mortal individuals, then the value of labour-power must also include the means necessary for the maintenance of the workers' family (Marx, K. Ibidem). In the labour process the worker not only creates the equivalent to such means of subsistence, i.e., he not only transfers the value of his own labour-power to the product, but he also creates surplus-value, a value over and above that of his own labour-power. Labour-power, therefore, is the variable, self-expanding part of capital. See also Marx, K.:1959, vol. 2, chapters 8-10.
- (39) See Marx, K.:1959, vol. 2, pp.219-20.
- (40) Balmaceda, M.J.:1875, p.34.
- (41) This part of the hacendado-enterprise's product is obviously a surplus-product which is directly consumed by the landowner, rather than transformed into money. Here the surplus is realized through use, rather than exchange, thus disappearing from the circuit of social capital. (See Marx, K.:1959, vol. 2, p.110).
- (42) See Marx, K.:1959, vol. 2, chapter 2, "Simple Reproduction".
- (43) See Kay, C.:1978, pp.4-17.
- (44) See Marx, K.:1976, pp.1019-38 (especially p.1023).
- (45) Ibidem. Marx, K.:1959, vol. 3, chapters 18-20, 36, and Marx, K.:1973, pp.456-514, focus on pre-capitalist relations and the topic of transition to capitalist production. The translation in the Spanish version cited by Kay is unsatisfactory, and quite confusing at points.

- (46) We are thus discussing here whether the surplus-value produced by the inquilinaje labour-power is used to develop capitalist production in the hacienda itself, rather than in other sectors of the economy in which case a purely external relationship between the inquilinaje and capital would be established.
- (47) See for example Marx, K.:1973, pp.505-10.
- (48) Ibidem. See also Hobsbawm, E.J.:1964, p.46.
- (49) Marx, K.:1964, p.112 (also in Marx, K.:1973, p.508, a slightly different translation from the German original). Marx analysis of feudal agriculture is confined chiefly to his discussion of labour-rent (Marx, K.:1959, vol. 3, chapter 47), which shall be examined in chapter 4 section 5 of this thesis. See also Hobsbawm, E.J.:1964, p.42.
- (50) Dobb, M.:1968, pp.55-56; Kay, C.:1971, pp.60-63. Hilton, R.:1978, p.16 maintains that some technical transformation in the Western European manor took place, but that nonetheless the main reason for the transition from labour-rent to other forms of rent lay in the peasants' resistance to the imposition of labour burdens.
- (51) The aim here being chiefly theoretical, the historical aspects are examined in further detail in chapter 5 of this thesis.
- (52) This particular historical circumstance leading to the dissolution of the inquilinaje is treated by Kay, C.:1971, chapter 6.

CHAPTER 4

THE MODE OF PRODUCTION AND APPROPRIATION OF SURPLUS VALUE TYPICAL TO THE INQUILINAJE RELATION

In this chapter I shall argue that the inquilinaje relation involves a distinct mode of exaction of surplus-value, which rests upon a mode of production where the labourer produces the means for his subsistence on his own. I shall start by examining the division of the inquilino's working time between his own enterprise and the enterprise of the hacendado, assuming that the inquilino receives no wages and that he himself is the only labourer involved in the inquilinaje relation. This, the subject of section 1, is a study on the production and transformation of the inquilino-enterprise's surplus, from a surplus-product into surplus-labour for the hacendado. The supply of extra-labourers to the hacendado and the inquilino's family work are analysed in section 2, which focuses on the supply of surplus-labour by the inquilino, and the effect that this has over the labour productivity of his own enterprise. The purpose of this section is to discuss the development of wage relations in the light of the limitations of the inquilinaje as a source of surplus-labour.

Section 3 of this chapter deals with the subject of accumulation in the inquilino-enterprise. The production of surplus-value in the hacendado-enterprise and the circuit of the hacienda as a whole are examined in section 4, which focuses on the effect of the inquilinaje relation on the rate of profits and the

mass of profits realized by the hacendado. Finally, section 5 is a discussion on the concept of labour-rent, both as treated by Marx and as applied to the hacienda and the inquilinaje in particular.

Section 1 :

The inquilino-enterprise

In chapter 2 I maintained that the role of the inquilino-enterprise is to reproduce the inquilinaje labour-power of the hacienda (inquilinaje labour-power defined as the amount of labour-power used by the inquilino-enterprise plus the non-remunerated labour-power supplied to the hacendado). This role entails producing the means to cover the immediate necessities of the inquilino and his family whenever these are not provided by the hacendado, through partial wages or food rations. In this section I shall attempt to examine the manner in which such a role intermingles with the mode of appropriation of surplus-value. I shall assume for the time being, that the inquilino's own labour-power is the only labour involved in the inquilinaje relation, that is to say, that he himself discharges his labour obligations, that he supplies no extra-labourers to the hacendado nor obtains any help to work in his own plot.¹ Since I shall deal with inquilinaje labour-power, for the sake of a clearer exposition of the argument I shall initially assume that the inquilino receives no wage or consumption perquisites from the hacendado, in other words, that the product of the inquilino-enterprise covers all his immediate necessities (either the product itself or its equivalent in other articles if exchanged, bartered in

the hacienda's store, or sold to middlemen or in the open market). It is therefore assumed that the inquilino realizes no surplus and that for him the market and the mechanisms of exchange (barter, hacienda's store) are a means of transforming the use value of his produce.²

By realization of a surplus I mean the process by which a surplus becomes a reality. Certainly not all surplus becomes a reality in the hands of its own producer since it can be appropriated by someone else. The non-realization of a surplus by the inquilino does not necessarily mean that he produces none and the following argument is that he does produce a surplus, which is appropriated by the hacendado in a very peculiar way.

The role of reproducing the inquilinaje labour-power entails the inquilino-enterprise in producing the means to cover the immediate necessities of the inquilino. In other words, it is he, who with his own labour and tools, caters for his own necessities. For this process to continue, however, the inquilino must also be able to cater for the replacement of his seed, livestock, and instruments of labour, otherwise he would be unable to maintain production and continue to provide for himself. Thus, the role of reproducing the inquilinaje labour-power entails that the inquilino consumes his product to sustain himself throughout the year and replace his tools, seed, livestock and other implements of work.

The inquilino, however, also has to supply unpaid labour-power to the hacendado and this presupposes that his working time is divided into two parts; one is the time he works in the hacendado-enterprise without any remuneration, and the other is the time he works in his own enterprise. The product of the inquilino-enterprise must therefore provide at least :

- the means to sustain the inquilino while he works in the hacendado-enterprise, unpaid (symbolized by c_h in formula 5 below);
- the means to sustain the inquilino while he works in his own enterprise (symbolized by c_i);
- the means to replace the wear and tear of his instruments of labour, his seed and livestock (symbolized by c_I).

Formula 5 represents the inquilino-enterprise's labour process. The inquilino supplies unpaid labour-power to the hacendado (L_h), for which he is allotted land (T) which, together with his own instruments of labour (I), form the means of production of the inquilino-enterprise (T, I). $L_h - T$ stands for the supply of labour-power in return for the inquilino's right to use the land allotted to him (where L_h , the labour-power supplied to the hacendado, falls out of the inquilino-enterprise's circuit since it enters into the labour process of the hacendado-enterprise); L_i stands for the inquilino-enterprise's labour-power (e.g., the labour-time spent by the inquilino in his own enterprise). The product C' (the value of which comprises : $c_h + c_i + c_I$, i.e. the means to sustain the inquilino and replace his instruments of labour), carries an apostrophe because it embodies a surplus; a surplus over and above the inquilino's immediate necessities during the time he works in his own enterprise (see formula 5 below).

$$\begin{array}{c}
 L_h \\
 | \\
 T, I \\
 L_i
 \end{array}
 \begin{array}{c}
 \diagup \\
 \diagdown
 \end{array}
 \dots P \dots C' \begin{pmatrix} c_h \\ c_i \\ c_I \end{pmatrix} ; (\text{where } C' = c_h + c_i + c_I)$$

Formula 5

It has been argued that the inquilino-enterprise is a subsistence economy (the term subsistence being applied here in the sense that its product is only enough to sustain and reproduce the labourer). Since the inquilino usually consumes the entire product of his enterprise (or its equivalent in value if exchanged for other articles), it is held that his enterprise produces no surplus.³ I think that to a certain extent this idea is misleading and that the inquilino-enterprise does produce a surplus. True, the inquilino-enterprise does not show a surplus at the end of the year, but this is because its product must cover the inquilino's needs not only whilst he works in his own enterprise, but also when he works in the enterprise of the hacendado without being remunerated. Assuming that all the means of production are already replaced, a surplus is everything produced over and above the worker's immediate necessities of life. If by one day's labour the worker produces the means to cover his needs for three days, he produces a surplus, which consists of the means to sustain himself two additional days. Now, the inquilino must produce in his own enterprise, the means to subsist while he works for the hacendado without any remuneration, otherwise he could not work in the hacendado-enterprise

at all, unless paid. It follows from here that since the inquilino produces in his own enterprise more than is needed to sustain himself during the time he works there, he produces a surplus consisting of the means to subsist whilst he works in the hacendado-enterprise without being remunerated. Let us examine this matter in the light of an example.

Let us assume that the inquilino's working time in a year is divided between 120 days' labour in his own enterprise and 240 days' labour in the enterprise of the hacendado.⁴ Thus, the labour process of the inquilino-enterprise consists of 120 days' labour; 120 days in which the inquilino has to produce his means of subsistence for the whole year. In other words, by one day's labour the inquilino produces the means to sustain himself for three days, two of which he spends working in the hacendado-enterprise, unpaid. Since by one day's labour he produces the means to maintain himself for three days, he produces a surplus; a surplus over and above his immediate necessities during the time he works in his own enterprise. The production of this surplus is a vital condition for the supply of unpaid labour-power to the hacendado, since if by one day's labour the inquilino only produced enough to survive just that very day, he could not work in the hacendado-enterprise, unless paid (in kind or money). The means that sustain the inquilino whilst he works in the hacendado-enterprise without being remunerated, therefore, are originally a surplus produced by the inquilino in his own enterprise.

At first the inquilino-enterprise's surplus has the form of a surplus-product, but this is subsequently consumed by the inquilino in order to be able to work for the hacendado without being paid, hence ceasing to exist at this point as a surplus-product. The consumption of this surplus-product, however, does not make the surplus as such disappear. Since the purpose

of such a consumption is the release of (unpaid) surplus-labour to the hacendado, the surplus as such is only transformed, rather than consumed, from a surplus-product into surplus-labour. The surplus of the inquilino-enterprise disappears in its original form of surplus-product, but only to reappear in another form, labour-power. The surplus of the inquilino-enterprise thus goes through a metamorphosis. The inquilino consumes a use value, his product, and releases another use value, his unpaid labour-power. Thus, what is consumed on the one hand, is on the other released.

The consumption of the inquilino's product has an entirely different role to consumption in a subsistence economy such as the minifundia for example. In both cases consumption serves to sustain the labourer, but only the inquilinaje involves a metamorphosis or a transformation of the surplus. Both, the inquilino and the minifundista must physically consume all of their product in order to maintain themselves and be able to work. The latter, however, consumes to be able to work, and then works again to be able to consume, within a process of consumption - production - consumption. The surplus, if any, appears here as a post-festum excess of production over consumption, rather than as the leit motif of production. Any surplus is realized here by the peasant (the minifundista), as a materialized surplus, which he can either accumulate or consume through use or exchange. In contrast to the minifundista, the inquilino works to be able to consume and then consumes part of his product to be able to work for the hacendado without being remunerated. His consumption appears in this light as a mere pre-requisite for the supply of surplus-labour to the hacendado; consumption is in this case nothing but a transformation of the inquilino-enterprise's surplus, from surplus-product into surplus-labour and therefore it appears as a mere accessory to a process of production of surplus-value. Here the surplus is appropriated by

the hacendado, who obtains it as labour-power and therefore as an abstract, potential surplus-value, rather than as a materialized surplus-product.⁵ I think that therefore it is inaccurate to define the enterprise of the inquilino as a subsistence economy.

Moreover, the inquilino works for the hacendado not only whilst he works in the hacendado-enterprise. The inquilino works for the hacendado most of the time, even when he works in his own enterprise. Since by one day's labour the inquilino produces enough to sustain himself for three days, two of which he works in the hacendado-enterprise unpaid, the hacendado appropriates $2/3$ of the product of any one day worked by the inquilino in his own enterprise. This is why in chapter 1 section 5, I stated that the inquilino is only seemingly the owner of his 'own' labour process. He appropriates only $1/3$ of the product of his own enterprise although he consumes it all. This, which might appear as a paradox of the inquilinaje relation, is of course a false paradox, since the consumption of the remaining $2/3$ of the inquilino's product, has the sole purpose of releasing it to the hacendado in the form of unpaid labour-power.

As a general principle one may thus postulate that the inquilino's surplus producing capability in his own enterprise is, at the same time, his surplus-labour, releasing capability. The more means of subsistence the enterprise of the inquilino produces in any one day, the longer the time he can work in the hacendado-enterprise without any remuneration. The division of the inquilino's working time, therefore, is a direct function of his ability to produce a surplus-product whilst he works in his own enterprise.

Formula 6 (below) shows the circuit of the inquilino-enterprise according to the aforementioned division of his working time.

$$\begin{array}{ccc}
 240.L_h & & 240.L_h \\
 | & & | \\
 \begin{array}{c} T, I \\ 120.L_i \end{array} & \begin{array}{c} \diagup \dots P \dots C' \\ \diagdown \end{array} & \left\{ \begin{array}{l} 240.c_h - T \\ 120.c_i - 120.L_i \\ c_I - c_I \end{array} \right\} \\
 & & \begin{array}{c} T, I \\ 120.L_i \end{array} \begin{array}{c} \diagup \dots P \dots \\ \diagdown \end{array}
 \end{array}$$

Formula 6

The inquilino works 120 days in his own enterprise (i.e., 120.L_i), whilst supplying the hacendado with 240 unpaid days' labour (i.e., 240.L_h). At the end of his 120 days labour process (e.g. the harvest), the inquilino has produced enough to sustain himself for a further 120 days' labour in his own enterprise (120.c_i); plus the means to cover his needs for a further 240 unpaid days' labour in the hacendado-enterprise (240.c_h); plus the means to finance the replacement of his instruments of labour (c_I). The surplus, which in this case consists of the means to sustain the inquilino during 240 days, together with the entire product, has the form of an individual supply of commodities.

Subsequently, the inquilino consumes the entire product of his enterprise and he does this during the following productive cycle or agricultural season. He consumes part of his product to replace the wear and tear of his instruments of labour, either by selling to purchase tools, re-cycling output as input (e.g., seed), or financing his own labour time in the case of self-made

tools. In formula 6 this is represented by : $c^I - c^I$.⁶ The inquilino also consumes $120.c_i$ to sustain himself during the time he works in his own enterprise, thus transforming part of his product into labour for his own enterprise. This is represented by : $120.c_i - 120.L_i$. Finally, by consuming the means to sustain himself during the 240 unpaid days' labour in the hacendado-enterprise, the inquilino transforms the surplus-product of his own enterprise into surplus-labour for the hacendado, for which he is allotted land (i.e, he obtains the right to remain in possession of a piece of the estate's land and some grazing allowances). In formula 6 this is represented by :

$$\begin{array}{c} C_{240.L_h} \\ | \\ 240.c_h - T \end{array}$$

(where the 240 unpaid days' labour enter into the circuit of the hacendado-enterprise).

Since the inquilino produces in 120 days a surplus-product consisting of the means to subsist during 240 days, the rate at which the inquilino-enterprise produces surplus is :

$$S_i = \frac{240}{120} = 200\%$$

(the surplus rate being defined as the magnitude of the surplus expressed as a percentage of the amount of labour-power used, both of which appear above in terms of days' labour).⁷ It can be noted that the numerator and denominator of the rate of surplus are composed of the actual division of the inquilino's working time

between his own enterprise (120 days) and the enterprise of the hacendado (240 days). This follows from the above postulation that the inquilino's surplus producing capability in his own enterprise is, at the same time, his surplus-labour releasing capability.

The inquilino sustains himself throughout the year with the product of the previous year (or the previous productive cycle). Thus, by keeping a supply of means of subsistence for the whole year, the inquilino advances the value of his own labour-power; he advances the means necessary to be able to work in his own enterprise and to afford the supply of unpaid labour-power to the hacendado. The existence of this supply of means of subsistence is, therefore, a pre-requisite for both the labour process of the inquilino-enterprise and that of the hacendado-enterprise.

The inquilinaje appears in this light as a relation of production that requires a certain previous development of the productive forces so that the peasant (the inquilino's predecessor, the arrendatario) may be in possession of such a supply in advance to his immediate requirements; it presupposes a previous phase of development of the economy of the peasant, in which the product of his labour becomes large enough for him to afford the supply of non-remunerated labour-power to the hacendado. For the hacendado the settling of a new inquilino is not just a matter of allotting land (or allowing him grazing rights), since the inquilino does not live from hand to mouth and needs the means to sustain himself until his first crop is ready (Bauer seems to miss this point when he analyses the development of the inquilinaje during the 19th-century).⁸ If the inquilino is not in possession of such means he can certainly borrow from relatives and perhaps from the hacienda's store itself. Part of the inquilino's subsistence needs can also be covered by a partial wage and I think this was precisely one of the reasons why

some of the new inquilinos settled towards the 1870s, received partial wages but a very small land allotment (i.e., the inquilinos peones).⁹

So far there have been two all-prevailing views within the study of the Chilean hacienda. One is that the inquilino is a tenant who pays his rent in labour, and the other is that the allotting of land to the inquilino bears in one way or another a cost for the hacendado. I shall now discuss the latter view, and the former view being discussed in section 5 of this chapter.

Some scholars hold that the hacendado forgoes the rent of the land allotted to the inquilino and that, therefore, in addition to any partial wage payments or perquisites, this should be also considered as part of the cost of employing the inquilino. The allotment of land, valued at the estimated commercial rent which the hacendado is said not to receive by assigning it to the inquilino, is looked upon as part of the inquilino's remuneration, and as a cost for the hacendado.¹⁰ A much more sophisticated argument has been to consider the cost of employing the inquilino as being composed of his partial wage and consumption perquisites (food rations, dwelling), plus the opportunity benefit that the inquilino's land allotment would have for the hacendado. This opportunity benefit is defined as the profit which the hacendado would otherwise obtain if the inquilino's land allotment was exploited by the hacendado-enterprise itself, rather than assigned to the inquilino.¹¹ The latter view may, and has been taken to illuminate some of the disadvantages of the inquilinaje vis-a-vis capitalist production in the later years of the hacienda's dissolution, but it by no means entails that such opportunity benefit is in actual fact a cost.

I disagree with the arguments that the allotting of land to the inquilino bears a cost for the hacendado. First of all, for a cost to be such there must be an advancement of capital or an expenditure.¹² In other

words, the hacendado must either pay wages or remunerate his labourers with food rations or perquisites requiring an advancement of capital and an expenditure of some sort (e.g., housing for the inquilinos whenever their dwellings are not built by themselves in their spare time). Any food rations or wages paid to the inquilino are, as a matter of fact, a cost of production and any labour-power obtained from him in this manner, entails a cost for the hacendado. Allotting land, however, does not entail any capital advancement, or expenditure of any sort, as we have seen in chapter 3 (again, I am assuming here that the inquilino maintains with his own labour the productive conditions of the land he is allotted, since his livelihood depends on this).¹³ It is precisely to the view that allotting land to the inquilino bears a cost for the hacendado that I am objecting. Wages, food rations and so on are indeed costs but they are not part of the inquilinaje relation or the inquilinaje labour-power, which as we have seen is financed by the inquilino's own product. The hacendado obtains this part of the inquilino's labour-power by allotting him land to produce the means for his livelihood on his own, for whenever, or for whatever time, he is asked to work without any remuneration. The cost of such a labour-power, therefore, is borne by the inquilino himself, rather than by the hacendado, who obtains it for free, without having to advance any capital.¹⁴

The view that an opportunity benefit, be it in the form of opportunity profits or rents, could be accounted for as a cost of production is misleading. By allotting land to the inquilino, the hacendado-enterprise is barred from cultivating that particular piece of land, which in turn means that profits which the hacendado-enterprise might have otherwise obtained by cultivating that land do not appear (as a money-profit for the hacendado). Instead, the hacendado obtains the inquilino's surplus-labour. This much is true. But it does not

follow from here, however, that such a hypothetical (opportunity) profit is an actual cost of production of the hacendado-enterprise. An opportunity profit is only an imaginary surplus-value if productive resources were used elsewhere or in a different form, an opportunity profit being therefore neither a real cost nor a real profit. Real cost and real profit are in turn mutually exclusive concepts, in the sense that the profit is surplus-value realized into money and surplus-value is everything but the cost of production.¹⁵ The estimated (opportunity) benefit from alternative use of the estate's resources could certainly influence the hacendado's future decisions as to whether he will employ the inquilino as a full-wage earner instead of allotting him land (a choice at any rate which presupposes the emergence of capitalist production), but by considering alternative future use of his resources the hacendado does not alter in any way the cost he has actually incurred.¹⁶

The hacendado does not forgo the rent of the land allotted to the inquilino either. He obtains all of it and probably more; he obtains the entire surplus produced by the inquilino-enterprise and this comprises any possible rent that such land could render, with the peculiarity that he obtains the surplus in the form of surplus-labour. Under no circumstances can the rent be any bigger than the surplus itself, since if there is no surplus there is nothing from which to pay the rent. Ground rent, irrespective of its form, is a share of the surplus and since the inquilino's entire surplus is appropriated by the hacendado, the latter obtains in fact the value of any possible rent.¹⁷ Even if we assume that an hacendado might not himself be the landowner, that is to say that he rents the estate, and therefore that a certain proportion of the rent that he pays is for the land allotted to the inquilino, the core of the matter does not change. The rent that the

inquilino's land allotment could render would only pass from the hands of the hacendado-renter into the hands of the proprietor of the estate. Few hacendados, however, were renters since they themselves were usually the landowners. In 1930 for example (which is the first year in which data on the renting of land is available), 5% of all rural properties in Chile were leased, and this situation had not changed by the 1960s.¹⁸ Moreover, haciendas were often 'rented' to a member of the hacendado-family, or to one of the heirs in cases where the estate remained undivided.¹⁹ Thus, the entire surplus-labour exacted from the inquilino, which comprises the value of any possible rent that his land allotment could render, is usually appropriated by the same person, the hacendado.

Section 2 :

The supply of surplus-labour to the hacendado

Thus far I have assumed that the inquilino is the only worker involved in the inquilinaje relation and that his own working time is equivalent to the entire inquilinaje labour-power. In reality, as we have seen in former chapters, the inquilino is also required to supply the hacendado with extra-labourers who are usually members of his household, and from whom the inquilino also obtains help to work on his own plot. Moreover, the inquilino is allowed to send a replacement to discharge his labour obligations with the estate. Thus, the inquilinaje relation involves the supply of more labour-power than just the inquilino's, and this affects the proportion in which the total

inquilinaje labour-power is distributed between the two enterprises, as well as the surplus which the inquilino-enterprise can produce.

Let us continue with our previous example where the inquilino works 120 days in his own enterprise and 240 days in the enterprise of the hacendado. Let us assume now that besides his own labour-power, the inquilino supplies the hacendado with 60 additional unpaid days' labour (e.g., of a peon obligado), and that he obtains 80 days' help from members of his household to work in his own plot (help meaning unpaid labour). Thus, the inquilino-enterprise's labour process consists of a total of (120 + 80) 200 man/days' labour, whilst the hacendado is supplied with a total of (240 + 60) 300 man/days of non-remunerated labour. In order to be able to supply these 300 man/days' labour without any remuneration, the inquilino-enterprise must produce with its 200 man/days' labour the means for a worker's sustenance during 500 days (300 days to be supplied to the hacendado and 200 days for the inquilino to continue to reproduce his own labour process). Thus, the inquilino-enterprise has to produce a surplus consisting of the means for a worker's subsistence during 300 days' labour, at a rate of :

$$S_i = \frac{300}{200} = 150\%$$

Nonetheless, there is a limit to the surplus and the rate of surplus that the inquilino-enterprise can produce, since (other circumstances remaining unchanged) additional labour in a small area of land tends to become less and less productive. The inquilino must use every productive resource available to him in order to survive and respond to the hacendado's demands of surplus-labour, making intensive use of the soil of his

allotment and resorting to the family labour of his extended household.²⁰ Thus, whenever the hacendado steps up his demands of non-remunerated labour-power, a process is triggered-off whereby the inquilino is forced to use more and more labour in his own enterprise in order to finance such additional demands of unpaid labour-power, which in turn leads to a fall in the labour productivity of the enterprise of the inquilino. Hence, one of the consequences of increasing the exploitation of workers through the inquilinaje relation is the decline of the labour productivity of the enterprise of the inquilino, who is thus forced to survive at the expense of intensive family labour.²¹

The fact that the inquilino has to produce with his highly labour intensive process the means to supply non-remunerated labour-power to the hacendado, means that the inquilinaje is a relation which is based upon the exaction of absolute surplus-value.²² The inquilinaje relation also appears in this light as a form of exploitation of all the members of the inquilino's household, including women and children, who, according to the hacendado's handbook "should be obliged to make bread, prepare food, milk cows, make butter and cheese, shear sheep, sew and mend sacks for the bagging of wheat (...) and other labours in which they not only can be substituted for men, but this can be done with advantage".²³ Further, the inquilino's extended household itself appears in this light as the result of a system of labour exploitation in which the worker is expected to produce the means for his subsistence on his own(i.e., in the inquilino-enterprise).²⁴

Since the surplus that the inquilino may produce in his own enterprise has a limit, there is also a limit to the amount of non-remunerated labour-power that he can supply to the hacendado. Once the labour productivity of the inquilino-enterprise has reached a point where additional labour is unproductive, the hacendado has to

remunerate any additional labour-power he may require.²⁵ I think that this was another reason why, in the midst of the 19th-century growing labour requirements, the hacendados paid partial wages to many of the newly settled inquilinos (e.g., the inquilinos peones) and to some of the workers supplied by the inquilinos. Although such wages were usually only a fraction of the prevailing rate for outside peon workers, they enabled the hacendados to obtain additional labour-power which the inquilino-enterprise could not finance entirely on its own.

Further, an increase of the workers' exploitation through the inquilinaje relation leads to an inefficient use of the labour-power available in the estate. As the hacendado steps up his requirements of non-remunerated labour-power, the inquilino is forced to use more and more labour in his own enterprise and, as we have seen, this leads to a decline in the labour productivity of the inquilino-enterprise. As this process develops the inquilino must use more labour in his own enterprise, where labour productivity is low, than surplus-labour he can release to the hacendado-enterprise, where labour productivity is higher thanks purely to a more adequate labour to land ratio (quite independently of the quality of its instruments of labour, a topic which will be examined further on). Thus, by stepping up his demands of unpaid labour-power the hacendado sets forth a process whereby proportionally more and more labour-power is used where it is less productive(i.e., in the inquilino-enterprise), and less and less of it is released to where it is more productive(i.e., to the hacendado-enterprise). This brings about an unbalanced use of productive resources of the hacienda and one can observe an over-concentration of labour in tiny plots of land which are exploited to the utmost of their productive capacity, whilst large areas of the hacienda remain uncultivated.²⁶ The exaction of surplus-labour

by means of the inquilinaje relation thus leads to an inadequate use of labour-power in the hacienda and, consequently, to a lower labour productivity than if all workers were hired as full wage earners. The limitation of the inquilinaje is that the exaction of surplus-labour depends upon, and leads to, a labour process which has a low labour productivity, i.e., the inquilino-enterprise. This feature of the inquilinaje may partially explain the so-called 'unbalanced' agricultural development in countries with relations of production similar to the inquilinaje, and perhaps contribute to enhance our knowledge of what Martinez defines as 'deformed capitalist development' in Chile.²⁷

Once the rate of surplus of the inquilino-enterprise starts to decline as a consequence of the hacendado's demands of unpaid labour-power, the labour productivity of the hacienda would be higher if the hacendado remunerated any additional labour-power he may require from the inquilino, since this would permit him to obtain more of the latter's surplus-labour. For this reason, and also because there is a limit to the amount of non-remunerated labour-power that can be exacted from the inquilino, the emergence of wage relations appear here as a necessary step towards the expansion of the productive forces of the hacienda, rather than as a consequence of such a development. In this case wage relations emerge as a result of the limitations of the inquilinaje itself, rather than as a consequence of historical developments in technology and farming practices of the hacendado-enterprise, as discussed in chapter 3. Let us focus on the development of wage relations in the light of the hacienda's transition to capitalist production.

One can distinguish two completely different historical situations in which labour productivity of the hacendado-enterprise was higher than that of the inquilino-enterprise. Although in both cases the trend

was for a wage relation to develop, only one of them led to the disintegration of the inquilinaje as a mode of exaction of surplus-labour.

The first of these situations was typical to the hacienda's first stage of transition. During the second half of the 19th-century the hacendados expanded wheat cultivation by using more land and labour, rather than by noticeably improving the instruments of labour or the traditional agricultural practices. In this period the nature of the labour process of the inquilino-enterprise was quite similar to that of the hacendado, agricultural methods relying heavily on the use of labour-power and simple instruments of work.²⁸ The hacendados thus expanded wheat production by stepping up their demands for labour-power from their inquilinos two to threefold between the 1850s and the 1880s,²⁹ and as we have seen this involved a process leading to a decline in the labour productivity of the inquilino-enterprise. In such circumstances, the labour productivity of the hacendado-enterprise appeared to be higher chiefly because of a more adequate labour to land ratio, rather than as a consequence of any noticeable improvement in the labour productivity of the hacendado-enterprise itself. In turn, the fall of labour productivity in the inquilino-enterprise, as we have seen, restrains the amount of non-remunerated labour-power it can supply. Thus, once the hacendados stepped up their demands for unpaid labour-power as much as they could, a process which in most provinces of central Chile took place between the 1850s and the early 1870s, they had no alternative but to start remunerating some of the additional labour-power required from their inquilinos, whilst paying partial wages to some of the newly settled inquilinos(the inquilinos peones).³⁰

The wage relation developed in this context as a consequence of a decline of labour productivity in the inquilino-enterprise and its consequent inability to

supply all the labour-power that the hacendado needed, unpaid. Thus, on the one hand, through the inquilinaje relation the hacendado obtained a substantial part of the inquilino's labour-power without having to advance any capital. On the other hand, by paying partial wages the hacendado obtained additional labour-power from the inquilino's household. In these circumstances the wage relation developed as a complement to the inquilinaje, emerging as a result of the limitations of the inquilinaje as a source of non-remunerated labour-power; the wage relation emerged then as a pre-requisite for the development of the productive forces, rather than as a consequence of such a development. Wage relations thus existed at an early stage of the history of the hacienda, but this should not be seen as a strong sign of disintegration of the inquilinaje (its basic features remained predominant until the 1930s, some of the characteristics of the inquilinaje surviving into the 1960s).³¹

The second situation in which wage relations developed, although beginning to gather momentum during the hacienda's second stage of transition, was typical to its third stage (particularly as from the 1950s). This time wage relations developed as a result of an increase in the labour productivity of the hacendado-enterprise itself, which was going through a phase of technological change.³² This brought about a higher relative surplus-value in the enterprise of the hacendado, which meant that the inquilino would produce the equivalent to his means of subsistence in far less time in the hacendado-enterprise than in his own enterprise. Labour productivity of the hacendado-enterprise was thus higher not only due to a more adequate labour to land ratio (as had been previously the case during the 19th-century), but also because it had more efficient conditions of production altogether, particularly as from the 1950s following the rapid process of mechanization and other technological

improvements, as described in chapter 2 (section 2). Thus, on the one hand, the technological change and the process of mechanization led to an ever widening gap of productivity between the two enterprises. On the other hand, however, mechanization itself led to a decrease in the hacendado's labour requirements, which is totally opposite to the situation in the 19th-century. In these new circumstances, the wage appeared as a means of proletarianizing the inquilino, rather than as a mere means of obtaining from him additional labour-power (as had been the case during the 19th-century). In these conditions the development of the wage relation leads to the disintegration of the inquilinaje, appearing as a consequence of the development of the productive forces of the hacienda, rather than as a pre-requisite for it (as had been the case during the 19th-century).

I shall now focus on the role of the inquilino as an employer of labour-power. Lehmann and Kay maintain that during the 1960s in some cases the inquilino had to pay wages to the extra-labourers that he supplied to the hacendado. Nevertheless, this seems to have been rather unusual and in pre-1930's Chile the labourers supplied by the inquilino were almost invariably members of his household who received no monetary remuneration.³³ I think that this was because paying wages to the workers supplied to the hacendado always places the inquilino in a very difficult and conflictive situation indeed. He has to hire and remunerate labour-power, but he is obliged to perform such a function only to maintain his position as inquilino and discharge his labour obligations with the estate. Hiring labour-power would in fact act upon him in a twofold manner. On the one hand, he would be pressed to perform a function typical to a capitalist but, on the other, he is not a capitalist and cannot become one since the labour-power that he hires produces surplus-value in the enterprise of the hacendado. By employing paid workers the inquilino thus faces a very

conflictive situation, whereby he has to hire and remunerate labour-power which contributes to expand the capital of someone else. As a petty entrepreneur the inquilino is thus doomed from the outset.

Occasionally the inquilino has to pay wages to the labourers that work in his allotment of land, although as in the previous case this is rather unusual and such labourers are often members of the inquilino's household who receive no monetary remuneration. In this particular case, however, the situation of the inquilino is, in principle, not as conflictive as seen above, since the labourers that he hires contribute to expand, at least initially, his own enterprise and labour process. The amount of labour-power which the inquilino can hire for his own enterprise is nonetheless very limited given the small size of his allotment. Also, since labour productivity of the inquilino-enterprise is low, the surplus that such labourers are likely to produce is small. Moreover, any such surplus is liable to be ultimately appropriated by the hacendado, who can increase his demands of unpaid labour-power from the inquilino. In general, the realization of any surplus by the inquilino depends upon the amount of unpaid labour-power that he is required to supply to the hacendado, although there are numerous historical factors which intervene in this such as custom, the inquilino's hierarchy in the estate, mechanisms of control exercised by the hacendado, and other factors which I shall now analyse in the following section.

Section 3 :

Accumulation by the inquilino-enterprise

So far I have argued that the role of the inquilino-enterprise is to reproduce the inquilinaje labour-power of the hacienda (i.e., to produce the means to sustain the labourers working in the inquilino-enterprise and the non-remunerated labourers that work in the enterprise of the hacendado). I have furthermore maintained that the surplus-product of the inquilino-enterprise undergoes a metamorphosis whereby it is transformed into surplus-labour, and as such it is appropriated by the hacendado. Any accumulation or expansion of the inquilino-enterprise, therefore, presupposes that the inquilino may supply to the hacendado less unpaid labour-power than the surplus of his own enterprise can finance. This in turn depends upon the class power of the hacendado to exact from the inquilino as much unpaid labour-power as he possibly can.

Historically, such a power has been quite extensive; it went hand in hand with the landowners' political control over local government, police, and, up to the 1920s, with their influence in central government. The inquilinos' votes contributed to the election of the hacendados' candidates to Congress, and with their power in national politics the landowners were able to isolate their estates from outside influences and perpetuate the mechanisms of subordination of the inquilino to the hacienda.³⁴ After the political turmoil of the 1920s and early 1930s (which as we shall see in chapter 5 led, amongst other things, to a new political constitution, the rise of urban middle-class ideologies, nationally organized trade unions, and political re-alignments), the landowners lost much of their traditional hold over central government. The hacendados nonetheless continued to exercise their

power in the countryside, by maintaining their control over the rural municipalities, and by preventing successive governments from legislating, or enforcing, laws on rural employment.³⁵

Prior to 1928 there were no regulations whatsoever on rural employment and the hacendados could require "whatever the market would bear, short of slavery, as a condition of employment and residence within the hacienda. The only prohibition existing referred to the use of scripts (vales) tokens for exchange for goods in the hacienda's store ; this prohibition was widely violated".³⁶ Later on (post 1930s), government regulations on pay and on social security for inquilinos were not enforced, and the law itself had innumerable loop-holes which enabled the hacendados to enjoy a virtual ban on rural unions and strikes until the mid-1960s.³⁷

Historically most inquilinos have been only slightly better-off than the level of mere subsistence (subsistence level meaning the minimum use values which, by historic or regional patterns, are considered necessary for the inquilino and the members of his household to remain alive and fit to work).³⁸ During the 1830s Gay described that some inquilinos of a few "respectable hacendados" were quite well-off peasants, some of whom even owned land and employed paid peons, but that the inquilinos in the large majority of the estates were often abused by the landowners, who demanded excessive labour services and took advantage of the inquilinos' precarious position, demanding up to a 50-75% share of their produce for the lease of instruments of labour and seed.³⁹ It seems clear today that the well-off inquilinos described by Gay were still retaining some features of the old arrendatario peasants (described in chapter 1), and whose transition to inquilinos had not as yet been fully accomplished. Further, with the mid-19th century expansion of wheat cultivation the hacendados

rapidly stepped-up their inquilinos' labour obligations, and what Gay had described as abusive during the 1830s, became the norm in the second half of the 19th-century as the inquilinaje relation consolidated.⁴⁰

The landowners' association (S.N.A) itself acknowledged on several occasions the appalling condition of inquilinos by the 1870's and 1880's.⁴¹ Bauer refers to these years as a time of "tightening of screws" of inquilinos and as a time of "economic levelling off of lower rural society" when the better-off first class inquilinos lost many of their customary rights, their labour obligations being increased two to threefold between the middle of the century and the 1880's.⁴² In some cases the inquilinos were unable to procure their subsistence, having to resource to credit through a system that was known as compra en verde, by which the inquilino obtained in advance goods or money for his unripe field crop which was rated at only a fraction of its market price.⁴³ Scott (who visited Chile in 1906) drew a 'particularly revealing' picture of the inquilino's virtues shining through his miserable conditions. Scott wrote that "there is no country in the world which has so valuable a working class (with the possible exception of Japan and China)" and "the fact that they live and work on exceedingly low wages (chiefly on beans) is one of their most important characteristics".⁴⁴ "It is true that he [the inquilino] seems miserable. The houses are often mere shanties of adobe bricks, or even reeds and sticks. They are dark, and appear excessively dirty inside. There is usually a table, covered by white glazed American cloth, with wooden boxes or forms instead of chairs. But the darkness is cool in hot weather, and there are not quite so many thousand flies inside. Fleas and other insects no doubt multiply exceedingly, but then the trouble and expense of washing days (the bane of an English labourer) is avoided."⁴⁵

The fact that I have so far maintained that the product of the inquilino-enterprise is enough only to reproduce the inquilinaje labour-power, however, does not necessarily mean that all inquilinos lived at a subsistence level, or that none of them ever realized a surplus. For the majority, their product, together with any partial wages and food rations, was little more than they needed to cover their most immediate necessities. For some, debt, malnutrition, ill health and high infant mortality were common features of their lives.⁴⁶ Others, amongst a more fortunate minority, managed to improve their living conditions and accumulate a little wealth.⁴⁷ The assumption that the inquilino lives little above a subsistence level describes the trend of a system, which as we have seen depends to a large extent upon the exaction of absolute surplus-value. Precisely because the cases where the inquilino accumulated were part of an exceptional situation it is necessary to examine them. In what follows, therefore, I shall be chiefly concerned with the factors influencing the appropriation of a surplus by the inquilino.

The basic condition for an inquilino to realize a surplus is that he may supply less unpaid labour-power to the hacendado than the surplus of his own enterprise can finance. This is a rather unusual situation and arises mainly through a lack of control of the inquilino's labour obligations and his pasture rights. The evidence available to me suggests that this occurred mainly in the largest haciendas where the hacendado was a permanent absentee or when some inquilino received preferential treatment in reward for his loyalty to the estate.⁴⁸ The inquilino's most frequent form of accumulation was livestock, rather than money or instruments of labour. I think that there were several reasons for this, one of them being that for the inquilino the market was basically a means of exchanging the use value of his product, rather than a means of realizing a surplus.

As we have seen, the inquilino-enterprise has a low labour productivity; it thus takes the inquilino more days' labour than average to produce a certain mass of commodities, say for example wheat. Every ton of wheat produced by the inquilino-enterprise, therefore, embodies more man/days' labour than average. Thus, by selling or bartering his product in the hacienda's store he would exchange a product that requires a large number of his working days, for another product that requires a smaller number of working days; he would exchange products that have the same price but that take him longer to produce. Hence, at least in principle, the inquilino is likely to lose value by selling or bartering part of his product.⁴⁹ Before examining this any further let us look into the historical changes that occurred as regards the importance of the market for the inquilino.

During the second half of the 19th-century the inquilino produced most of his own food and his household economy provided for a large part of his domestic needs such as clothing and utensils. It is impossible to assess with any degree of certainty how much of his product was bartered for goods of the hacienda's store, such as sugar, alcoholic beverages, needles, candles, the occasional mirror, metallic tools, and so on.⁵⁰ At any rate it is clear that he traded almost exclusively with the hacienda's store. According to Bauer the hacendado had complete control over the means of transportation, not only because he had access to rail transport but also because only the "large estate had enough land to support sufficient number of oxen or mules to transport produce to markets" (and railway stations).⁵¹ In this period the inquilino was almost totally dependent on the hacienda's store, both for the outlet of produce and the supply of goods, the landowner often taking advantage of this situation to the detriment of the inquilino.⁵²

As we move into the 20th-century most of the above features remained although there are some indications that some change began to take place, at least in the central provinces or in areas within easy reach of urban centres. There are indications that inquilinos began to buy more manufactured goods, especially ready-made clothing.⁵³ There is also evidence that by the 1920s, in at least a few haciendas of central Chile, some inquilinos complained of not being allowed to trade with middlemen, and they insisted on having the right to perform their own marketing functions and seek credit from merchants or middlemen.⁵⁴ Marin, who gathered information on several field surveys carried out by social workers of the University of Chile, also provides evidence on inquilinos trading their produce outside the hacienda; he shows that in the late 1930s and early 1940s, the inquilinos and small peasant proprietors of central Chile often sold their most valuable products to middlemen or passing travellers, products such as eggs, chicken, garden vegetables and milk, whilst subsisting on a diet based largely on bread, potatoes and beans.⁵⁵

In the hacienda's third stage of transition, particularly since the 1960s, the inquilino sold a larger proportion of his produce than in the 19th-century, and less of it to the hacendado.⁵⁶ Schejtman for example, who worked with a sample from the 1965/66 ICIRA survey, shows that in an area of central Chile 90% of the inquilinos sold up to 50% of their garden crops and a higher proportion of their wheat production; 75% of the inquilinos' sales went to middlemen, 14% went straight to the market and only 10% to the hacendado.⁵⁷ Schejtman's study may not be representative of the whole country, let alone of relatively isolated areas where contact with middlemen was more difficult, but it shows a trend, and a pattern which is different to that of the second half of the 19th-century. The post 1930s development of industry, especially of consumer goods

such as textiles, cheap bicycles, radios and so on, and the development of road transportation by lorries were probably amongst the most important factors behind this change (middlemen were often established village merchants who owned a lorry).⁵⁸ As important as the latter was the legislation stipulating that inquilinos should receive no less than 25% of the minimum rural wage in cash, which was later on enforced and raised to no less than 75% of the minimum rural wage in 1965, and this rapidly incorporated the inquilino into a pattern of market consumption.⁵⁹

It is unclear to me the extent to which dealings with middlemen may have been favourable to the inquilino as compared to his transactions with the hacendado. The fact that in some central areas of the country a large part of the inquilino's sales went to middlemen could suggest that this appealed to him as being a more favourable means of transacting his produce than if he sold it to the hacendado. Yet, it is possible that factors other than price may have acted upon his decision to sell to middlemen, such as the provision of credit which the hacendado may have been unprepared to supply if he was trying to employ the inquilino as a wage earner for example, or the advance of goods which middlemen could offer and which were not available in the hacienda's store (a greater variety of clothing, different brands of tobacco, cheap radios, bicycles, etc.).⁶⁰ The development of rural commerce and middlemen, and the breaking of the hacienda-store's exclusive control over trade in the estate appears in this light as part of a process by which the links of dependence of the inquilino with the hacienda were dissolved. In this period too (1960s), the inquilinaje relation itself entered into a rapid phase of disintegration, and the relative isolation in which the hacienda workers had traditionally remained was broken by the intervention of government agencies and political parties, and by the new laws allowing effective peasant unionization.⁶¹

I have argued that in principle the inquilino's most viable means of accumulation is livestock. This form of accumulation exempts him from having to sell or barter produce in order to accumulate. Other forms of direct accumulation, such as building up a larger stock of seed for example, are restricted by the small size of the inquilino's land allotment and so far as he is unable to obtain more land to expand his field crops this form of accumulation is denied him.

Accumulation in money has even more limitations since Chile has had an inflationary economy; annual rates of inflation of over 30% were not unusual after 1875.⁶² Moreover, the banking system was completely alien to the inquilino who was very often illiterate. Finally, the inquilino also faced a number of restraints as regards the accumulation of instruments of labour. Since his land allotment was small the quantity and type of instruments of labour he could acquire was limited to a few manual tools such as iron ploughs, a rack, sickles and other minor tools. The 1965/66 ICIRA survey, for example, showed that out of a sample of 213 inquilinos of central Chile, 45% did not own a plough and only 19% owned two or more ploughs (this is the earliest available statistical data on the number of tools owned by inquilinos).⁶³

Accumulation of livestock was thus the most viable means of accumulation open to the inquilino whenever he managed to realize some of the surplus produced by his own enterprise. It served as a reserve fund for years of bad harvest and had the advantage that once the herd was large enough, or whenever the inquilino was in urgent need of cash or food, he could slaughter or sell at once, preferably direct to the cattle market. Meat prices in Chile usually increased as fast, if not faster, than the official rate of inflation and therefore livestock was for the inquilino a more adequate means of accumulating than money (Anthrax and foot and mouth disease were the major dangers threatening the inquilino's most

precious possession, his cattle).⁶⁴

The inquilino usually looked upon his livestock as a reserve to be kept and sold in cases of urgent need or emergencies such as illness or disability for example, rather than as a working capital as such.⁶⁵ Moreover, accumulating livestock beyond a few head of cattle usually entailed avoiding the hacendado's customary power to control and restrict the inquilino's pasture rights. The hacendado's handbook recommended that the potrerizo's duties (man in charge of overseeing the upkeep of fences and the hacienda's grazing fields), should include "preventing the inquilino from having any more animals than he is allowed to, and seeing that if he does, he will not put them to graze in the fields of the estate".⁶⁶ During the second half of the 19th-century, as we have seen in chapter 1, an average inquilino was granted pasture rights for no more than 2-4 animals (horses or cattle), and a minority, those known as inquilinos de a caballo, were allowed grazing rights for up to 10-12 animals. Evidence indicates that pasture rights were reduced as we move on to the 20th-century, and towards the 1930's the inquilino was usually allowed grazing rights for no more than two animals (horses or cattle), although it is not clear whether he actually owned as many animals as he was entitled to graze.⁶⁷ Apparently such grazing rights continued to be curtailed after the 1930's. The 1965/66 ICIRA survey for example, shows that out of a sample of 213 inquilinos of central Chile, 67% owned no horses or cattle, 18% had only one animal (horse, cow or mule), and only 15% possessed more than one of such animals.⁶⁸

In short, the inquilino's accumulation was very modest. The conditions that permitted the inquilino to accumulate were unusual, and his opportunities of accumulating whenever such conditions existed were narrow, and always restricted by certain limits imposed

by the hacienda's rules and the hacendado's property rights.⁶⁹ Any chances the inquilino might have had of bettering his own condition were mediated by his relationship of dependence with the hacienda. This relationship of dependence impressed McBride perhaps even more than did the inquilino's poverty, because -he wrote, "there is virtually no chance for the labourer to acquire property, and thus develop that sense of ownership considered essential as a stimulus to advancement".⁷⁰

In section 2 of this chapter I discussed the role of the inquilino as an occasional employer of wage paid labourers for his own enterprise, arguing that the surplus which such labourers might produce was liable to be ultimately appropriated by the hacendado, who could step-up the inquilino's labour obligations (hence appropriating it as surplus-labour). It is nonetheless possible that under some circumstances the inquilino-enterprise's surplus will exceed the requirements for the supply of unpaid labour-power to the hacendado. Yields vary from one year to another and for the hacendado it is virtually impossible to establish the inquilino's rights and obligations in such terms that the latter will produce no more, but no less either, than is needed to supply the surplus-labour required by the estate. Custom is also an important constituent of the inquilinaje relation and for the hacendado it is not easy to increase the inquilino's labour obligations overnight if the latter has had an exceedingly good harvest for example. Assuming that the inquilino supplies less non-remunerated labour-power than he can afford (e.g., favourable treatment from the hacendado or following an exceptionally good harvest), the inquilino could appropriate at least some of the surplus produced in his own enterprise.

The size of the land allotted to the inquilino is, nevertheless, quite small, and the amount of labour

he can employ is therefore limited. Thus, he has a fairly narrow scope for expanding his enterprise by hiring paid labourers. If the inquilino is to expand or accumulate at all he has to find ways of obtaining more land or pasture rights and, as we have seen, this was not easy. Lehmann for example, reports a case in which one of such ways was to use the pasture rights of a worse-off fellow inquilino to fatten cattle, then splitting the profits between them.⁷¹ Cases such as this, however, require in one way or another the complicity of the mayordomo or the administrator who had to turn a blind eye on the whole business; the case reported by Lehmann was regarded by inquilinos of neighbouring estates as a very irregular situation indeed. Being promoted to the category of overseer (capataz, llavero, mayordomo, etc.) therefore provided the inquilino "with one of the few opportunities for improvement in rural Chile",⁷² especially prior to the 1950's.

In more recent times (since the 1950s) one of the ways that the inquilino had of bettering his condition was by obtaining sharecropping land. The Chilean sharecropping agreement, known as mediería, is a relation of production whereby the landowner provides the land, usually half of the seed and other necessary inputs, and decides what is to be produced (mainly wheat). In his turn, the sharecropper, who is known as mediero, puts up the other half of the seed, all the tools, and simple instruments of labour, working animals, and runs with all the labour expenses. The product is halved between the mediero and the landowner once the latter has deducted his contribution of seed and other inputs, hence the name mediería (by 'halves'). The mediería became important amongst inquilinos by the 1950's, originating a rather peculiar combination of inquilinaje and the mediería (previously the mediería was practiced chiefly by independent small-holders who obtained sharecropping land in the estates).⁷³ Whilst retaining their position as inquilinos and, therefore, their land allotments and

labour obligations, some inquilinos also obtained sharecropping land within the estate and they were known as inquilinos-medieros. The earliest evidence I have found of inquilinos obtaining sharecropping land dates back to the first third of the 20th-century, although sharecropping was then practiced mostly by minifundistas and independent small-holders, rather than by the hacienda workers.⁷⁴

Although further discussion of the mediería itself is outwith the scope of this thesis, I shall briefly examine some of its features in connection with the development of the mediería amongst inquilinos. The inquilino-mediero possessed a slightly larger number of instruments of labour and animals than the inquilino proper.⁷⁵ The inquilino-mediero worked on his sharecropping land (usually consisting of a couple of hectares), with the help of members of his household, although he sometimes hired a few wage paid labourers for the harvest. The mediería thus provided the inquilino who managed to realize a surplus with an opportunity of petty-investment and accumulation. In this case, however, the situation that enabled the inquilino to use any possible surplus in accumulation arose from a relation of production other than the inquilinaje (i.e., by the mediería). Moreover, the mediería required from the inquilino the advancement of seed, instruments of labour and sometimes wages for a few harvest workers, and this meant that at one point the inquilino had to realize a surplus and accumulate a little wealth before being able to enter into a sharecropping agreement.

These requirements of a certain previous accumulation by the inquilino before he may enter into a sharecropping agreement, particularly as regards his capability to dispose of sufficient labour-power, may partly explain why the mediería started to become more widespread amongst inquilinos only in the late period of the hacienda's history. As the mechanization process of the

hacendado-enterprise created large rural unemployment in the 1950s and 1960s, the inquilino was left with a growing reserve of idle household labour, which he could then use for sharecropping. In his turn, due to the relative abundance of seasonal labourers and his diminishing labour requirements, the hacendado was no longer anxious to employ every possible member of the inquilino's household during the harvest time, and the landowner was probably happy to enter into sharecropping agreements with the inquilino on the marginal lands of his estate. Thus, the material conditions for the mediería to develop amongst the better-off inquilinos were created, both as regards the hacendado's willingness and the inquilino's ability to finance an advancement of seed, instruments of labour, and dispose of sufficient labour and run with any wage expenses if non-family labour had to be employed.

Moreover, there is another very important reason for the development of the mediería amongst inquilinos in the 1960s. Kay maintains that through the mediería the hacendados avoided the enforcement of legislation on rural employment, which stipulated that they had to pay their inquilinos at least 75% of the minimum rural wage for peons, but said nothing about medieros.⁷⁵ The minimum wage laws for inquilinos threatened the very basis of the inquilinaje relation (based upon the supply of non-remunerated labour-power), and under these circumstances the mediería developed as a relation that to a certain extent continued to permit the hacendados to produce with small capital advances.⁷⁶

The mediería and the inquilinaje are nonetheless completely different relations of production and, moreover, the mediería is not a substitute for the inquilinaje as regards the perpetuation of the hacienda (as studied in this thesis). Firstly, the mediería gives rise to only one productive process where all value and surplus-value are produced, whereas in the case of the inquilinaje, the labour process is divided between the enterprise of the

inquilino and that of the hacendado. Secondly, through the mediería the hacendado does not obtain unpaid labour-power but a harvested product; the mode of appropriation of surplus-value is therefore also totally different to that of the inquilinaje.

Section 4 :

The hacendado-enterprise

Let us recapitulate on the main argument advanced in the previous sections of this chapter. The inquilino supplies unpaid labour-power to the hacendado which the inquilino himself finances with the surplus-product of his own enterprise. The inquilino-enterprise's surplus is thus transformed from a surplus-product into surplus-labour for the hacendado; that is to say, the surplus of the inquilino-enterprise goes through a first metamorphosis here, where it is transformed from a surplus-product into surplus-labour. Since, however, such a surplus has now the form of labour-power, it is standing value rather than materialized value; it is abstract value, value existing in a potential way which needs to be used and spent productively in order to become a product and therefore real surplus-value. The surplus of the inquilino-enterprise, therefore, must go through a second metamorphosis whereby the standing surplus-value (the inquilino's unpaid labour-power) becomes real surplus-value, and this occurs in the process of production of the hacendado-enterprise.

Since the re-transformation of the inquilino-enterprise's, surplus from labour-power into commodities occurs in a productive process, the value of such a surplus continues to expand, i.e., the labour-power that the inquilino supplies to the hacendado will produce once again more value than its own. Since by working in his own enterprise the inquilino produces three times as much as he needs to

sustain himself whilst he works there, other circumstances remaining equal, he will continue to do the same thing whilst he works in the enterprise of the hacendado. Thus, in the process of using the inquilino's surplus-labour and transforming it into commodities, the hacendado-enterprise not only re-converts the inquilino-enterprise's surplus back into the shape of produce, but also creates surplus-value anew.⁷⁷

Let us discuss this in the light of the former example, according to which the inquilino spends one third of his labour time in his own enterprise and spends the remaining two thirds in the enterprise of the hacendado without being remunerated. I am thus assuming here that labour-power produces three times its own value and, for the time being, that both enterprises have equal labour productivities. Hence, the inquilino works one day in his own enterprise and produces the means to sustain himself for three days, two of which he will spend working in the hacendado-enterprise without any remuneration. At this stage, the surplus-of the inquilino-enterprise consists of produce; a surplus-produce which (if either stored or exchanged for other goods) will provide the inquilino with the means to sustain himself for two additional days.

Whilst working two days for the hacendado without being remunerated, the inquilino lives off his surplus-produce, which is thus transformed into surplus-labour for the hacendado. By these two days' labour in the hacendado-enterprise, however, the inquilino will continue to produce just as much as he did in his own enterprise (we are assuming here equal labour productivities), that is to say, he will produce three times the value of his own labour-power, i.e., three times over the means necessary to sustain a worker for two days. He will thus produce an equivalent (in commodities) to the value necessary to maintain a worker for six days and for which he is paid nothing. Hence, for the hacendado this product is all surplus-value since it costs him nothing. Part of such a surplus-value, however, is originally produced by the inquilino in his own enterprise,

and is now only realized by the enterprise of the hacendado: this is the value of the labour-power supplied by the inquilino, or the equivalent to the means necessary to sustain the inquilino during his two days' labour in the hacendado-enterprise. The hacendado-enterprise's surplus-value over and above this, which in this case consists of the equivalent (in commodities) to the value necessary to sustain a worker for 4 days, is the surplus-value produced by the inquilino in the hacendado-enterprise itself.

In fact, since the labour process of the hacendado-enterprise consists of 2 days in which the value of the produce, if expressed in terms of days' labour, amounts to the means necessary to maintain a worker during 6 days, the value of the surplus produced by the inquilino in the hacendado-enterprise itself is equivalent to the means necessary to maintain a worker during (6 days less 2 days) 4 days. The surplus-value realized by the hacendado-enterprise, however, amounts to its whole produce since the inquilino is paid nothing (I am not considering here the replacement of the hacendado's seed, instruments of labour, and other inputs such as fertilizers for example).

Let us exemplify this by assuming that the inquilino lives on 2 pounds of wheat a day. Thus, by one day's labour he produces in his enterprise the means to sustain himself for three days, namely, 6 pounds of wheat. He produces, therefore, a surplus of 4 pounds of wheat which he then consumes in order to be able to work two days in the enterprise of the hacendado without being remunerated. The 4 pounds of wheat thus cease to exist as a surplus for the inquilino and become two days surplus-labour for the hacendado. By his two unpaid days' labour, however, the inquilino produces 12 pounds of wheat, i.e., 6 pounds per day, just as much as he produced while working in his own enterprise. The entire 12 pounds of wheat are thus a surplus-value for the hacendado since he pays nothing to the inquilino. Nevertheless, only 8 pounds are the

surplus-value produced in the hacendado-enterprise itself, since 4 of these, which would be the equivalent to wages in capitalist production, are a mere re-transformation of the inquilino-enterprise's surplus back into the shape of surplus-product. These 4 pounds of wheat correspond to the value of the labour-power supplied by the inquilino, which the hacendado obtains without having to advance any capital.

Since whilst working in the hacendado-enterprise the inquilino produces in two days a surplus the value of which, if expressed in terms of days' labour, would sustain a worker during four days, the rate at which the hacendado-enterprise produces surplus-value is :

$$S_h = \frac{4 \text{ days}}{2 \text{ days}} = 200\%$$

This rate is in turn equal to the inquilino-enterprise's rate (i.e., 200%, both enterprises having equal labour productivities according to our assumption). The enterprise of the hacendado, however, appropriates all the surplus-value.

As regards the hacienda as a whole, the inquilino works a total of three days; (one day in his own enterprise and two days in the enterprise of the hacendado). The total product of his labour (in both enterprises) would sustain a worker during nine days, the product for three days being produced in his own enterprise and that for the remaining six days in the enterprise of the hacendado. The inquilino therefore produces a total surplus-value which is equivalent in value to the means necessary to sustain a worker during (9 less 3 days) six days. Thus, the rate of surplus-value of the hacienda is :

$$S_{Hc} = \frac{6 \text{ days}}{3 \text{ days}} = 200\%$$

*(sub-index Hc standing for, hacienda)

The mode of production and appropriation of surplus-value typical to the inquilinaje provides a further insight into the efficiency of the hacienda as a whole. For the hacendado the inquilinaje labour-power is convenient because he obtains it without having to advance any capital. Whatever the inquilino produces in the hacendado-enterprise is all surplus-value as far as the hacendado is concerned, since the inquilinaje labour-power costs him nothing. From the standpoint of the hacienda as a whole, however, this is not so since the means which sustain the inquilino while he works in the enterprise of the hacendado have to be produced at any rate. The fact that such means are produced by the worker on his own land allotment does not involve a lesser labour time to produce them. On the contrary, since as we have seen the inquilino-enterprise has a lower labour productivity than the enterprise of the hacendado, the fact that the means of subsistence are produced by the inquilino-enterprise demands a longer socially necessary labour time than if these were produced in the enterprise of the hacendado, which in turn means that less social (total) surplus-value can be produced. The hacendado's interest in appropriating surplus-labour without advancing any capital (i.e., through the inquilinaje), is thus conflictive with social efficiency and the production of the largest possible amount of surplus-value in the hacienda.

Formula 7 (below) follows from formula 6 and it illustrates the circuit of the inquilinaje labour-power within the hacienda. The inquilino-enterprise's labour process (i) consists of 120 days, and the value of its produce is enough to sustain a worker during 360 days, of which 240 days' labour are supplied to the hacendado without any remuneration. These 240 days' labour enter into the circuit of the hacendado-enterprise (h), where the inquilino continues to work producing three times the value of his own labour. The 240 unpaid days' labour of the inquilino yield the hacendado a product which could

sustain a worker during $(240 \times 3) 720$ days; this product is entirely realized by the hacendado-enterprise as surplus-value. The surplus-value that the inquilino produces in the hacendado-enterprise itself, however, is equivalent to the means that sustain a worker for only 480 days. The remaining surplus-value realized by the enterprise of the hacendado (i.e., a product which could sustain a worker for 240 days), corresponds to the value of the labour-power supplied by the inquilino, which is produced in the enterprise of the latter; the value of such a labour-power is appropriated by, rather than produced in, the hacendado-enterprise, as we have previously seen. In this manner the inquilino's surplus-labour is converted into surplus-value for the hacendado; the hacendado uses the inquilino's surplus-labour to produce commodities such as wheat, which he then sells thereby transforming the inquilino's surplus-labour, which in practice could be measured in weeks, months and years of his life, into money.

$$(h) \quad \begin{array}{c} P_m \\ \dots P \dots 720.C' - 720.M' \\ 240.L_h \end{array}$$

$$(i) \quad \begin{array}{c} T, I \\ \swarrow \quad \searrow \\ 120.L_i \end{array} \dots P \dots C' \quad \begin{array}{c} (240.ch - T) \\ (120.c_i - 120.L_i) \end{array} \quad \begin{array}{c} T, I \\ \swarrow \quad \searrow \\ 120.L_i \end{array} \dots P \dots$$

Formula $\gamma^{(78)}$

The circuit of the hacienda as a whole

As we have seen in chapter 3, the hacendado obtains labour-power, both by advancing capital for the purpose of paying wages and by allotting land to the inquilinos. I shall now examine the circuit of the hacienda taking into account that the hacendado obtains labour-power through these two relations of production. Although the inquilino himself may receive a partial wage, for reasons of simplicity in the exposition of the argument I shall assume that wage earners and inquilinos are entirely different people. This assumption has no effect whatsoever on the conclusions that follow, since we shall deal here with abstract labour-power and focus on the circuit of the hacienda and the rate of profit, rather than on who performs which task. In practical terms the analysis that follows can be applied to situations in which the inquilino is partially remunerated, by accounting for his remunerated labour-time as part of the wage paid labour-power, and his non-remunerated labour-time as part of the inquilinaje labour-power.

Let us assume that the labour process of the hacendado-enterprise consists of 480 man/days' labour; that the current daily wage is 0.25 dollars and that the hacendado obtains half of his labour-power by paying wages, i.e., 240 days' labour for which he pays (240 x 0.25 dollars) 60 dollars in wages. Let us equally assume that the hacendado obtains the other half of his labour-power (240 days' labour) by allotting land to the inquilino, who supplies these 240 days' labour without receiving any remuneration. As in former examples, the inquilino works 120 days in his own enterprise where he produces the means to sustain himself throughout the year (i.e., during the 120 days that he spends in his own enterprise plus the 240 days that he spends working in the enterprise of the hacendado, unpaid). Finally, let us assume that the hacendado spends 100 dollars in means of production which need to be completely

replaced by the end of the year, and that labour productivity of his enterprise is 400% as opposed to 300% of the inquilino-enterprise.

Formula 8 (below) describes the process whereby the inquilino works 120 days in his own enterprise. These 120 days' labour valued at the current wage rate are worth a total of (120 days x 0.25 dollars daily wage) 30 dollars. During this time the inquilino produces three times the value of his own labour-power (30 dollars x 3), 90 dollars, with which he may sustain himself throughout the year, i.e., these 90 dollars provide the inquilino with a daily income of (90 dollars : 360 days) 0.25 dollars, which is just as much as the daily wage rate. Since it only takes the inquilino 120 days to produce his means of subsistence for the whole year (equivalent to the value of an annual wage), he can thus afford to supply 240 non-remunerated days' labour to the hacendado.

In his turn the hacendado advances a total capital of 160 dollars; he buys 100 dollars worth of means of production and pays 60 dollars in wages. By paying 60 dollars in wages the hacendado obtains labour-power amounting to 240 days' labour, which together with the 240 days' labour obtained from the inquilino, totals 480 days' labour. At the current wage rate these 480 days labour-power would cost the hacendado (480 days x 0.25 dollars) 120 dollars, but he actually pays only 60 dollars because he obtains 240 days' labour from the inquilino, free, without having to advance any capital. The hacendado therefore advances 60 dollars in wages and obtains labour-power to the value of 120 dollars.

In the hacendado-enterprise labour-power produces four times its own value, that is to say, the labour-power obtained by the hacendado produces a value of (120 dollars x 4) 480 dollars. The hacendado-

enterprise's product, however, will also embody the value of the means of production which according to our assumption need to be completely replaced and, therefore, their entire value is transferred to the product (i.e., their entire value is depreciated). Hence, the value of the hacendado-enterprise's product is (480 dollars + 100 dollars) 580 dollars.

$$\begin{array}{lcl}
 \text{(h)} & 160.M & - \\
 & & \begin{array}{l} 100.Fm \\ (60+60)L_h \end{array} \searrow \begin{array}{l} \dots P \dots 580.C' - 580.M' \end{array} \\
 \\
 \text{(i)} & \begin{array}{l} T, I \\ 30.L_i \end{array} \searrow \begin{array}{l} \dots P \dots C' \end{array} & \begin{array}{l} (60.ch - T) \\ (30.c_i - 30.L_i) \end{array} & \begin{array}{l} T, I \\ 30.L_i \end{array} \searrow \begin{array}{l} \dots P \dots \end{array}
 \end{array}$$

Formula 8

Since the value of the labour-power obtained by the hacendado is of 120 dollars, and since such a labour-power produces 480 dollars over and above the cost of replacing the means of production, the surplus-value

produced in the hacendado-enterprise is of (480 - 120) 360 dollars. The rate of surplus-value produced in the hacendado-enterprise itself is (480 dollars surplus-value : 120 dollars value of labour-power) 400% . The hacendado nonetheless appropriates more surplus-value than is produced in his own enterprise since he pays nothing to the inquilino. The hacendado's total expenses (i.e., his advanced capital or his cost of production), are 160 dollars, while the value of his product is 580 dollars. He therefore appropriates (580 - 160) 420 dollars surplus-value, instead of only 360 dollars which is the surplus-value produced in the hacendado-enterprise itself. The 60 dollars difference corresponds to the surplus produced by the inquilino in his own enterprise, and which is supplied to the hacendado as non-remunerated labour-power, in other words, the 60 dollars difference corresponds to the value of the labour-power supplied by the inquilino, which he himself finances by producing in 120 days of labour (worth 30 dollars at the current wage rate), enough to sustain himself during 360 days's labour (worth 90 dollars). The value of such a labour-power supplied by the inquilino (corresponding to wages in the case of capitalist production), is only transformed in the hacendado-enterprise, rather than produced, into surplus-value.

The hacendado-enterprise's profit amounts to (580 dollars value of the product less 160 dollars cost of production) 420 dollars. In turn, the rate of profit is (420 dollars profit : 160 dollars advanced capital) 263%. Thus, on the one hand, the inquilinaje relation enables the hacendado to realize a high rate of profit, at any rate, higher than if he had to obtain all his labour-power by advancing capital to pay wages. On the other hand, however, the inquilinaje entails a limit to the mass of profit (total profit) since it leads to an inefficient use of the hacienda's labour resources, as I have previously maintained. In fact, the inquilino would spend less time in producing the value of his wages

in the hacendado-enterprise where labour productivity is 400%, than the time it takes him to produce his means of subsistence in his land allotment, where labour productivity is 300% according to our example. The larger the productivity differential between the two enterprises, the more apparent it becomes that the inquilinaje turns into an obstacle for the growth of the mass of profit (or the increase of the relative surplus-value).

Section 5 :

The concept of labour-rent : a critique

Most scholars take the view that the inquilino is in one way or another a service tenant, that is to say, a peasant paying rent in labour for the right to use a piece of land.⁷⁹ True, that some qualifications to this view have been made by Kay who maintains that the inquilino is also a semi-proletarian remunerated with a partial wage.⁸⁰ His observation, however, has to do with the transition of the inquilino into a proletarian, rather than with the inquilinaje relation itself. The view that the inquilinaje is a typically Chilean form of labour-rent thus remains unchallenged until the present day and, with the proviso that the inquilino can be partially remunerated with a wage, he is said to be a tenant, whose rent is paid in labour and service, rather than in kind or money.

The former view is now deeply rooted in Marxist scholarship of the hacienda, and to a certain extent it stems from Marx's own writings he himself regarding labour-rent as the simplest form of ground rent typical to feudalism, and as a mode of appropriation of surplus-labour.⁸¹ It seems to me though, that in some respects

Marx's ideas on feudal serfdom have sometimes been applied to the hacienda in a rather simplified way. As seen in chapter 3 (section 1) some students maintain that the Chilean hacienda is feudal in nature (its feudal character arguably being retained at least until the first third of the 20th-century), other Latin American haciendas being also defined as wholly or partly feudal.⁸² Certainly, as I have maintained throughout, the inquilinaje is not capitalist and to this extent (for as long as it is preserved) neither is the hacienda. But the fact that the hacienda is pre-capitalist, however, needs not entail that it should necessarily be feudal. Some students forget that Marx also maintained that it was capitalism which first imposed a universal mode of production, and that prior to this one could find a diversity of modes of pumping the surplus out of the direct producers, which could show "infinite variations and gradations in appearance, which can be ascertained only by analysis of the empirically given circumstances".⁸³

To regard the hacienda or (more specifically perhaps) the inquilinaje as feudal, may reflect after all an excessive degree of generalization and possibly some misunderstanding of what feudalism was, quite apart from the fact that feudal societies went through different periods of historical development in which their character was partially transformed. Feudalism everywhere rested upon very specific forms of personal ties and reciprocal obligations between a man and his superior (which varied according to local custom). Although various degrees of violence and compulsion were used to feudalize peasant allods, the ties and obligations were originally and for the most part accepted voluntarily by the would-be dependant, not infrequently for protection.⁸⁴ In many places the population of early feudal times was not altogether unfamiliar with earlier forms of obligations and services which had been originally only the mark of

of their subordination to a village chief, head of a tribe or clan.⁸⁵ In Chile, however, it was the conquest of the Indian by an alien invader, and the destruction of his values and way of life, that made possible the subordination of those who, with time, eventually became the inquilinos. As opposed to the feudal lord or the earlier local military chief, the hacendado (or the earlier 17-18th centuries estanciero) was not a military chieftain, and he was not looked upon as a defender by either the inquilino or his ancestors. Certainly the inquilino seldom failed in deference to the hacendado, as described in chapter 1, but his relationship with the landowner bore no resemblance with the feudal ties. The relationship between the hacendado and the inquilino resembled neither vassalage nor serfdom (the inquilino was not the man of another man).⁸⁶ The inquilino was, unlike the serf, free, but he had none of the established rights of the vassal and his respect for the hacendado owed little or no resemblance to genuine acceptance of lordship (of which perhaps the highest expression in feudalism was homage and military service). The inquilinaje was not heritable. No law (customary or otherwise) sanctioning the scope of the inquilino's right to choose his partner in marriage ever developed in Chile; in Chile there was no such legal problem as an inquilino marrying a woman born to the land of another hacendado, for there were no rival lords and the inquilino's son could claim no right over his father's land allotment.⁸⁷

It is not within the scope of this thesis to engage in further comparisons of what are very fundamental differences in the nature of the ties, rights and obligations which developed in feudalism and in the hacienda. The tendency to regard the hacienda as feudal stems not from Marx, but from an older mis-identification of feudalism with the manorial system, and this is probably the most illuminating aspect to consider.

Bloch, who as early as the 1930s was suggesting that feudalism might have existed in places other than in Europe alone, argues that the manor was nonetheless older than feudal society and that it had no claim to a place amongst the feudal institutions proper. Further, he maintains that when the relationships truly characteristic of feudalism fell into decay the manor lived on, but with different characteristics, becoming more territorial, less personal, and more economic. As to the mis-identification of the manor with feudalism Bloch writes a very revealing passage.

"Feudalism, manorial system -the identification here goes back much farther. It had first occurred in the use of the word vassal. The aristocratic stamp which this term had received from what was, after all, a secondary development, was not strong enough to prevent it from being applied, even in the Middle Ages, to serfs (originally closely akin to vassals properly because of the personal nature of their dependence) and even to ordinary tenants. What was then only a kind of linguistic aberration, especially frequent in somewhat incompletely feudalized regions like Gascony or Leon, became a more and more widespread usage, as familiarity with genuine vassalage faded. (...) It became customary in spite of etymology, to describe as 'feudal rights' the burdens to which peasant holdings were subject. (...) But here again the historian must interpose. Though an essential element in feudal society, the manor was in itself an older institution [its roots being in the Roman colonus] and was destined to last much longer. In the interest of sound terminology it is important that the two ideas should be kept clearly separate." 88

A comparative study between the Chilean hacienda and the European manor has already been made by Kay.⁸⁹ Some similarities of the hacienda, particularly with the 18-19th centuries manorial estate prevailing in Eastern Europe, are striking. Although different in origin, both the hacienda and the Eastern European manor reached a height in their development with the expansion of

demesnes' cultivation, following the growth of commerce stimulating agricultural production for exchange, but also preceding the rise of capitalist production in the estates. During this interval -a transition period- the manorial demesne of Eastern Europe and the Chilean hacendado-enterprise increased cultivation by stepping up the labour burdens placed upon the land of serfs (and other manorial dependants), and inquilinos, respectively. The manor's serf and the hacienda's inquilino were thus required to labour a certain (and at points growing) number of days for the lord or the hacendado, without receiving any remuneration. The inquilino, and the manor's serf (or any dependant upon whose land labour burdens were placed), had to produce the means for their sustenance by farming their fields with their own tools and family labour, and they had to produce no less than was required to fulfil their labour obligations with the estate without being remunerated (or to support the members of their family who worked for the estate in such condition).

At one point both the Eastern European manor and the Chilean hacendado-enterprise, moreover, had to begin remunerating at least partially the additional labour burdens imposed upon their serfs and inquilinos respectively (burdens exceeding customary obligations or beyond what was possible for the self-sustaining labourer to afford), remuneration in money becoming more and more important with time, harvest workers being paid a wage.⁹⁰ Finally, the processes of proletarianization of these originally self-sustaining workers of the manor and of the hacienda, had in cases, much in common; the so-called peasant economy was subdued from the outset (economically and politically), and was eventually dissolved, there being little room for the emergence of a strong small peasantry or a class of landed gentry for example.⁹¹ The hacienda, therefore, although not feudal, may be considered as being closely akin to, or as an

indigenous variation of, a manorial estate. This conclusion (which could, as to a certain extent it already has, widen considerably the debate on the hacienda), seems to be in accordance with Hobsbawm's view that "the basic social relations which are necessarily limited in number, are 'invented' and 're-invented' by men on numerous occasions, and that all monetary modes of production (except perhaps capitalism) are complexes made up from all sorts of combinations of them".⁹²

It could be argued that since the labour processes of the hacienda and of the above-described type of manor (based upon the exaction of labour), have common features, Marx's passages on serfdom as a form of labour-rent could likewise be useful to study the inquilinaje. Certainly the use of Marx's writings for such a purpose can be attempted although (it goes without saying) such an exercise entails a kind of analysis which is very abstract indeed. One is of course abstracting from the fact that Marx's passages on labour-rent refer to serfdom as it existed in Western Europe until the Middle Ages. The serf described by Marx farms the demesne with his own implements of work, rather than with implements provided by a lord who also hires harvest labour, as in the case of the 18-19th centuries' Eastern European manor or the Chilean hacienda. Marx deals with a typified serf whose produce, both from the fields of the lord and from his own, is clearly aimed at use, rather than exchange, trade being only a means of exchanging use values. One is, in short, abstracting from all features other than from those directly concerned with the mechanics by which the surplus is exacted from the direct producer. Not even with such a proviso, however, would I agree with using Marx's writings on serfdom to define the inquilino, or for that matter any type of labourer, as a service or 'labour-tenant'. This is because I am critical of the concept of labour-rent itself.

Marx in fact refers to ground-rent in two completely different senses. One sense in which he uses the term

ground rent-refers to the capitalist rent, which occupies him more than any other form of rent. Another sense in which he uses the term ground-rent refers to the feudal 'labour-rent' which claims only a marginal part of his attention. These two senses in which Marx uses the term ground rent relate to entirely different modes of production. Moreover, they entail wholly different concepts of ground rent which are impossible to reconcile, as we shall see below, and I think that for the sake of sound terminology, amongst other reasons, 'labour-rent' should not be viewed as a form of ground rent proper. In what follows my argument is that labour should not be called rent or ground-rent called labour.

Let me put forward here what I consider to be the most essential aspects of Marx's theory of ground-rent in relation to his general theory of value, starting with the capitalist ground rent.⁹³ According to Marx the existence of a capitalist ground-rent presupposes the realization of surplus-profits by the farmer. These surplus-profits, which are subsequently paid to the landowner for the use of his land, constitute the value of the rent, providing the objective basis for its existence. The actual conversion of these surplus-profits into rent, however, is possible due to the private ownership of land, which enables the landowner to claim such surplus-profits for himself (private land ownership thus being a basic precondition for the actual transformation of surplus-profits into ground-rent). Marx maintains that this type of rent can only exist in capitalism, since "to be able to speak at all of a surplus over and above the average profit, this average itself must already be established as a standard and as a regulator of production in general as in the case of capitalist production. For this reason there can be no talk of rent in the modern sense, a rent consisting of a surplus over the average profit, i.e., over and above the proportional share of each individual capital in the

surplus-value produced by the total social capital, in social formations where it is not capital which performs the function of enforcing all surplus-value."⁹⁴

Marx's theory of capitalist ground-rent rests upon his general theory of value. With the exception of Ricardo, classical economists had generally assumed that thanks to the intervention of natural powers, agriculture produced more value than any other industry; a value over and above the wages of labourers and the farmer's profit and which 'is returned' to the landowner as rent for the use of the natural, value-creating power of his land. Smith maintained that the "rent may be considered as the power of those powers of nature the use of which the landlord lends to the farmer", an argument which Marx disproves in his volume 2 of Capital showing that Smith, at points, confuses the source of value (labour-power), with the component parts into which value resolves itself once it is produced (wages, profit, and rent).⁹⁵ According to Marx's theory of value, it is labour-power that produces all surplus-value and, therefore, ground-rent is nothing but a post-festum distribution of the surplus-value between the farmer and the landowner (i.e., the surplus-value must be created before it can become a revenue).⁹⁶

The rent is thus determined by the amount of surplus-value, rather than vice-versa, and as Marx himself argues, for the rent to pass into the hands of the landlord, it must first be "in those of the farmer".⁹⁷ Hence, the capitalist ground-rent appears in the light of Marx's theory as intervening within the sphere of circulation of the surplus-value, rather than within the sphere of its production. Ground-rent appears as a relation of circulation, rather than as a relation of production; it appears as a mere partition of the surplus-value between the farmer and the landowner, and as such it does not modify in any way the surplus-value itself. Whether the farmer pays rent or not does not alter in any way the

value and surplus-value of his product. If the farmer pays rent this only means that the surplus-value (produced by labour-power), is thus shared as profit and rent, between the farmer and the landowner, instead of becoming entirely a profit for the farmer alone.

Marx further argues that since value is determined by the amount of labour-power, labour-power is itself a variable value, capable of producing more value than its own, the surplus-value, which is thereupon divided between the capitalist farmer (profit) and the landowner (rent). In contrast to this, ground-rent is a fixed, non-variable, value, the existence of which depends upon the production of surplus-value in the first place.⁹⁸

Marx nonetheless uses the term ground-rent in a sense which is different from the one I have described above.

This is his concept of labour-rent that appears in a rather brief introduction to his theory of capitalist ground-rent, wherein he discusses the feudal corvee.⁹⁹

Here Marx treats the labour of the serf in the fields of the lord (the corvee), as being the simplest form of ground-rent and one typical to feudalism, namely, labour-rent. He argues that since here ground-rent is an expression of labour-time, ground-rent is not only equal to the surplus, but also determines it.¹⁰⁰ Since ground-rent assumes here the form of labour it appears as the very source of the surplus, appearing therefore as a relation of production rather than as a mere relation of circulation. This is totally different to the sense in which Marx refers to the capitalist ground rent,

I think that it is inappropriate to regard labour as a form of ground-rent, since this entails defining ground-rent as a source of surplus (and therefore, of value), and as a relation of production, which is totally opposed to Marx's theory of value and his concept of ground-rent under capitalism, where the rent is only a relation of circulation. Further, it is apparent that Marx's brief writings on the corvee do not explore beyond the most

general aspects of the serf's labour, the aim being to examine the various phases in the historical development of ground-rent, from what Marx refers to as the simplest form of ground-rent, i.e., labour-rent, where both surplus-labour and rent are 'identical', to more complex forms of ground-rent where surplus-labour and rent do assume separate identities, such as rent in kind, in money, and the capitalist ground-rent. In the light of Marx's analysis it could be equally argued that since rent does not as yet assume its own identity in the case of the corvee (labour-rent), a rent proper does not exist at that early stage. His analysis of the corvee is in fact quite general in this respect.

In the following quote for example, Marx argues that everything produced by the serf in the fields of the lord is a surplus for the latter:

"If we consider ground rent in its simplest form, that of labour-rent, where the direct producer, using instruments of labour (plough, cattle, etc.) which actually or legally belong to him, cultivates soil actually owned by him during part of the week, and works during the remaining days upon the estate of the feudal lord, the situation is still quite clear, for in this case rent and the surplus-value are identical". 101

Why is it, however, that the direct producer (a serf) is able to work in the fields of the lord, unpaid, in the first place? Marx is not concerned with this question at all. He only discusses the appropriation of the surplus assuming the division of the serf's labour-time as a given fact (i.e., the time spent by the serf working in his field being defined as necessary labour, and the time spent by him working in the field of the lord being defined as surplus-labour). Marx does

explore why such a division of the serf's working time is at all possible. There can be no supply of non-remunerated labour to the lord, unless the process by which labour produces a surplus starts in the field of the serf. The very fact that the serf works in the demesne without any remuneration presupposes that he must first produce a surplus in his own field, a surplus over and above his immediate necessities during the time he works in his land. Such a surplus is what permits the serf to work in the demesne without being remunerated and, therefore, makes the division of his working time possible. Marx only refers to the final form of the surplus, i.e., the product of the serf in the fields of the lord. True, only one surplus appears at the end of the day, that produced in the field of the lord, but this is because the serf, who originally produces a surplus in his own land, has no alternative but to consume it in order to be able to work for the lord, unpaid. Thus, what could otherwise have been a surplus for the serf, becomes surplus-labour for the lord.

Moreover, the division between necessary labour and surplus-labour is an abstraction since (under normal circumstances) all labour produces more value than its own.¹⁰² In capitalist production for example, during the time which Marx calls necessary labour-time or the time during which the worker produces the value of his own wage, the worker also produces surplus-value, otherwise there would be no surplus-labour of which to talk. Assume that a wage-earner who labours for 8 hours produces in only 4 hours the value of his own daily wage, these 4 hours being the necessary labour-time. Thus, 4 hours of his labour-power (the necessary labour-time), produce the value of 8 hours of his labour-power, hence, in the first 4 hours of work he produces a surplus-value consisting of half his daily wage; in the first two hours of work he produces a surplus-value consisting of 1/4 of his daily wage, and so on. The

abstract distinction between necessary labour and surplus-labour can be useful to examine the amount of the worker's labour-power appropriated by the employer at the end of the day, rather than to distinguish between different parts of his actual working time, which is a continuum. This abstract distinction can be made at any rate in the case of capitalist production, since the necessary labour and the surplus-labour form part of the same working process and take place in the one enterprise, i.e., in the capitalist's factory or in his estate. In the case of serfdom, however, we face in fact an actual division of the labour process (as in all such cases where the self-sustaining worker is required to labour a certain number of non-remunerated days in the demesne). Here, the surplus is determined by both the labour process in the field of the serf and that in the field of the lord. Since both of these labour processes consist of labour, both produce a surplus (the surplus produced in the serf's field being transformed into surplus-labour for the lord). In this case, the distinction between necessary and surplus-labour must be applied to both labour processes, otherwise important circumstances in the production of the surplus are concealed (particularly if there are any productivity differentials).

In the following quote for example, Marx argues that the appropriation of the surplus depends upon the distribution of the serf's working time. He starts by looking at the possibility of the serf appropriating some surplus.

"To what extent a labourer (a self sustaining serf) can secure in this case a surplus above his indispensable necessities of life, i.e., a surplus above that which we would call wages under the capitalist mode of production, depends, other circumstances remaining unchanged, upon the proportion in which his labour-time is divided into labour-time for himself and labour-time for his feudal lord". 103

Marx carries on referring to the surplus in general as being determined by the amount of unpaid surplus-labour exacted from the serf, without examining why the serf's surplus-labour is possible in the first place.

Certainly, as Marx argues, the surplus of the lord is determined by the surplus-labour exacted from the serf, but what economic circumstances determine in turn the surplus-labour of the serf? ...This is not discussed (Marx only refers to the social circumstances influencing the exaction of the serf's surplus-labour, such as custom and coercion). Marx's basic remark is that ground-rent, appearing here as unpaid surplus-labour, is what determines the surplus, ground-rent and surplus-labour assuming no separate identity.

"This surplus above the indispensable requirements of life, the germ of what appears as profits under the capitalist mode of production, is therefore wholly determined by the amount of ground-rent, which in this case is not only directly unpaid surplus-labour, but also appears as such". (emphasis supplied) 104

The concept of labour-rent, as a type of ground-rent, the value of which consists of labour, leads Marx into maintaining that in the particular case of the corvee, ground-rent (appearing as surplus-labour) determines the surplus. If one examines the serf's labour process in greater detail, however, it becomes apparent that his 'labour-rent' is in turn wholly determined by what was originally a surplus produced by the serf in his own land, and which is later on consumed by him in order to be able to work in the field of the lord without being paid. Such a surplus (over and above the serf's immediate necessities during the time he works in his own land) therefore makes the existence of his surplus-labour possible, determining the limit to the amount of 'labour-rent' which the lord can demand from the serf. Hence, 'labour-rent' depends ultimately on a surplus

being produced by the serf when working in his own land, his 'labour-rent' being nothing but a transformation of such a surplus, from a surplus-product into surplus-labour. This fact is concealed by the rather imprecise connotation of the term labour-rent, wherein ground-rent does not assume an independent identity.

For all the reasons expounded above I think it would be more appropriate to view the corvee as a relation of production based upon the exaction of surplus-labour, rather than as a form of ground-rent proper (the term ground-rent being thus reserved for all such cases where rent appears as a relation of circulation, such as rent in kind, in money, or the capitalist rent). For the same reasons I think that the inquilinaje is best seen as a relation of production based upon the exaction of non-remunerated surplus-labour, rather than as a form of tenancy entailing 'labour-rent'.

NOTES : CHAPTER 4

- (1) The focus here is on inquilinaje labour-power, rather than on whether such a labour-power is provided by the inquilino himself or by members of his household, a topic which is analysed in section 2 of this chapter.
- (2) This hypothesis is discussed at length in section 3 of this chapter.
- (3) See for example, Barraclough, S.:1965, Passim. Kay, C.:1978, p.1-2, takes the view that the inquilino-enterprise is a subsistence economy, a view which is qualified in the sense that the inquilino is also said to supply surplus-labour to the hacendado.
- (4) This example aims at illustrating the mode of appropriation of surplus-value, rather than any one particular situation, since as seen in previous chapters the rights and duties of the inquilinaje varied according to regional and historical circumstances. The figure of days' labour appearing in the text is taken from the hacendados' periodical Boletín(SNA), November 1928, p.194. It corresponds, admittedly, to the situation of an average inquilino in central Chile. For these 240 days labour the inquilino (or whoever discharged his labour obligation) was paid an equivalent to 13-20% of the wage paid to outside peons (see note 25 of chapter 2). Hence the inquilinaje labour-power supplied to the hacendado was 13-20% lower than the stated 240 days' labour. In the example I have assumed the inquilino receives no wage at all.
- (5) Kay makes a sharp distinction between the inquilino-enterprise and the minifundia. "One is the traditional small peasant proprietorship; the other is the tenant peasant enterprise within the hacienda" (Kay, C.:1978, p.1). He also maintains that "the labour-time spent by the tenant family [the inquilino-family] on the tenancy plot can be considered as necessary labour as it satisfies subsistence needs. The labour spent by the tenant family on the demesne is surplus-value whose product is appropriated by the landlord" (Kay, C.:1978, p.2). Necessary labour is thus distinguished from surplus-labour, but the way in which the production of means of subsistence intermingles with the production of surplus-value is not explored further by Kay.
- (6) To simplify the formal presentation of the argument I

have not exemplified the replacement of instruments of labour with figures. Certainly, I am assuming here that the inquilino is able to replace the wear and tear of his instruments of labour, his seed, and working animals; that the hacendado's labour demands are not excessive to the point of threatening the very survival of the inquilino-enterprise.

- (7) The rate of surplus expressed in these terms being based on Marx, K.: 1938, vol. 1, chapter 9.
- (8) See Bauer, A.: 1975, pp. 159-66 and Bauer, A.: 1971, pp. 1081-83.
- (9) This topic is discussed with a greater historical emphasis in chapter 5 section 3 of this thesis.
- (10) See O'Bray, J.: 1966, pp. 126-27.
- (11) See Kay, C.: 1971, chapter 3 section 6, and Kay, C.: 1978, pp. 12-14.
- (12) See Marx, K.: 1959, vol. 3, chapter 1 (Cost-Price).
- (13) The inquilinaje does not entail any advancement of capital, as described in chapter 3, section 3.
- (14) O'Bray, J.: 1966, pp. 126-27, takes the view that the cost of employing inquilinos consists of their wages, food rations, housing facilities with which they are provided, plus, the estimated commercial rent of the land allotted to them. O'Bray argues, amongst other things, that inquilinos are quite expensive labourers to employ, the hacienda studied by him being therefore not at all a profitable concern. Not surprisingly he reaches this conclusion, quite apart from the fact that inquilinos in that particular estate were assigned 'nice' houses, worth some 2,000 dollars each which O'Bray rightly considers as being a cost of employing these inquilinos. Thiesenhusen, W.C.: 1967, pp. 245-46, aims at showing that O'Bray's conclusion of low profitability only applies to that particular estate (studied by O'Bray), which Thiesenhusen sees as a rather unique case for its high standard of housing and pay to inquilinos. Yet, that the hacendado of the estate in question obtained part of the inquilinos' labour-power without having to advance any capital is not a subject which is touched upon in these or in other articles. Questions as to how many days the inquilinos worked in their own enterprise, or for how long they worked in the enterprise of the hacendado without receiving a full wage, are not even raised. Thus, the issue of profitability of this estate (and of haciendas in general), has been debated on the extraordinary assumption that the inquilinaje is in this respect no different from the wage relation.

- (15) The cost of production includes all expenses in raw materials, installations, buildings, machinery, and all such items which have been previously defined as constant capital, plus, the labour expenses such as wages and perquisites provided to the workers which require an advancement of capital from the employer. In short, cost of production is advanced capital (this definition corresponds to Marx's concept of price-cost, see Marx, K.:1959, vol. 2, chapters 6-8).
- (16) Had the hacendado-enterprise actually taken over cultivation of the inquilino's land allotment, there would be no longer an inquilinaje relation to talk about. The alternative use which the hacendado might have given to the inquilino's land allotment is irrelevant as regards his actual (current) costs, which are nil for the particular case of the inquilinaje labour-power.
- (17) See Marx, K.:1959, vol. 2, chapter 19, and vol. 3, chapter 48.
- (18) See Censo Agropecuario 1930, pp.9-17 (94% of all properties comprising 90% of the land were managed by the landowner or his administrator, while the rest was leased; figures exclusive of the provinces of Chiloe, Aysen and Magallanes). Ministerio de Agricultura (Chile):1970, p.128, supplies data on the renting of agricultural land in 1970, which are quite similar to that for 1930.
- (19) McBride, G.:1936, pp.141-44.
- (20) See for example Kay, C.:1978, p.5.
- (21) The inquilino-enterprise is thus labour intensive and has a low labour productivity. Fairly recent research has established that in some areas of central Chile the labour-productivity of the inquilino-enterprise is on average only about 1/3 of that of the hacendado-enterprise (see Kay, C.:1971, chapter 3 section 6; see also CIDA:1966, pp.161-63).
- (22) This is quite independent of the possible higher organic composition of capital of the hacendado-enterprise. The inquilinaje always depends upon the exaction of absolute surplus-value, since it is the inquilino-enterprise's labour productivity which determines the amount of non-remunerated labour-power it can supply to the hacendado. For a definition of absolute and relative surplus-value see Marx, K.:1938, vol. 1, chapter 12.
- (23) Balmaceda, M.J.:1875, p.45 (my translation).
- (24) This point is developed by Guerrero, A.:1977, pp.10-14, in connection with the Ecuadorian huasipunguero (closely akin to the Chilean inquilino)

- (25) Dobb, M.: 1968, pp. 55-56, suggests that a low labour productivity of the peasant economy may have been one of the factors which contributed to the decay of labour rents in the Western European manors, and to their commutation to other forms of rent (in kind or money). He suggests that a low labour productivity in the serf's economy was one of the factors which led some manorial lords to employ wage paid labourers. Kay, C.: 1971, p. 57, argues that in Eastern European manors wages appeared for the first time "when the landlord demanded labour from the peasants beyond the fixed customary labour-rent".
- (26) The literature on the hacienda is indeed rich in references to the wasteful use of resources and inefficiency. See for example, Barraclough, S.: 1965, Passim; CIDA: 1966, chapters 5 and 6; Kay, C.: 1976, pp. 858-59; Hernandez, S.: 1966, Passim; and McBride, G.: 1936, pp. 177-78.
- (27) See Martines, A. and Aranda, S.: 1970, Passim.
- (28) The hacienda's labour process during this period as is described in chapter 2 section 3 of this thesis; the labour process will be featured at length in chapter 5 sections 2 and 3.
- (29) See Bauer, A.: 1975, pp. 160-65.
- (30) Partial wages of the mid-1870s inquilinos-peones ranged between 1/3, and the full wage paid to outside peon workers (Balmaceda, M. J.: 1875, p. 44).
- (31) The analysis here is focused on the development of wage relations amongst the hacienda's resident workers (inquilinos and members of their households). Chapter 3 section 5 of this thesis deals with the development of wage relations from a wider perspective, involving the early appearance of wages as a means of payment of outside peon workers (also chapter 2 section 2). The historical aspects in connection with this process are examined at greater length in chapter 5.
- (32) As described in chapter 2 section 2 of this thesis.
- (33) See : Lehmann, D.: 1974, p. 359; Kay, C.: 1971, p. 10; Bauer, A.: 1971, pp. 1074-75; and McBride, G.: 1936, pp. 155-56.
- (34) See : Bauer, A.: 1975, pp. 166-70, 220-23; Loveman, B.: 1973, chapter 2; and McBride, G.: 1936, pp. 187-230.
- (35) See Loveman, B.: 1973, chapters 3-7.
- (36) Loveman, B.: 1973, vol. 1, p. 60.
- (37) Ibid., chapters 4-7; and Lehmann, D.: 1974, chapter 5.

- (38) See McBride, G.: 1936, chapter 6; Kay, C.: 1978, p. 13; Galdames, L.: 1911, pp. 173-74; Marín Molina, R.: 1947 Passim; and Pinochet Le-Brun, T.: 1916, Passim.
- (39) See Gay, C.: 1973, vol. 1, pp. 185-87. Appendix 1(ii) of this thesis contains relevant comments on the type of inquilinos observed by Gay in the 1830s-40s.
- (40) See Bauer, A.: 1971, pp. 1068-69.
- (41) For a compilation and discussion of articles in the hacendados' periodicals, the SNA's Boletín and El Agricultor, see Izquierdo, G.: 1968, pp. 109-32.
- (42) Bauer, A.: 1971, p. 1076, and Bauer, A.: 1975, p. 161.
- (43) The compra en verde was a fairly old practice in places where wheat cultivation for exchange had existed in the colonial days. See Gay, C.: 1973, vol. 1, p. 186. See also Bauer, A.: 1975, pp. 97-98.
- (44) Scott Elliot, G. F.: 1913, p. 249.
- (45) Ibid. pp. 282-83.
- (46) According to the data of the Anuario Estadístico 1872, pp. 1-5, 11% of all babies died before reaching the age of one. Some 60% of all deaths were children of less than 7 years of age. See also on this topic, Marín Molina, R.: 1947, chapter 1.
- (47) This does not mean purely that the inquilino can be better-off than the outside peon worker (as he often is), but that depending upon the historic and regional circumstances there can also be noticeable differences in the economic (and to some extent social) status of the inquilinos themselves. By the mid-19th century these differences were quite substantial in some cases, but they nonetheless tend to disappear in the following decades as the hacendados step up their inquilinos' labour obligations, and they are further abolished as the process of transition to capitalist production accelerates during the 20th-century (Lehmann, D.: 1974, pp. 334-35). Under certain circumstances however, these differences can continue for quite some time, circumstances which are mainly connected to a slow development of capitalist production in the estates (this is the case of some inquilinos in the Putaendo Valley, described in Baraona, R.: et. al.: 1961, p. 255).
- (48) See Bauer, A.: 1975, p. 138; and Lehmann, D.: 1974, pp. 335-36.
- (49) On the general theory behind the transformation of value into prices see Marx, K.: 1959, vol. 3, parts 1 and 2.
- (50) See Bauer, A.: 1975, pp. 99-101. The proportion of the

inquilino's product which was traded for goods in the hacienda's store no doubt varied between different regions and haciendas. Gay, for example, noted that in the 1830s-40s most of the inquilino's utensils and clothing were produced by his household industry, although he also observed that imported English cotton was, in some places, beginning to replace the traditional hand spun and woven wool dress (Gay, C.:1973, vol. 1, p.163). In lower central Chile (Talca province), the textile household industry retained much of its importance during the 19th-century. Although the rural population continued to manufacture their own clothing, sandals, hats, ponchos, and other garments, it seems that the number of hilanderas and tejedoras (women who spun and wove) declined gradually with the impact of cheap cotton imports which began to replace the locally woven, hand-spun, heavier woollen cloth. See Bauer, A.:1971, pp.1066-67.

(51) Bauer, A.:1975, pp.99-100.

(52) See McBride, G.:1936, pp.156-70 (also Bauer, A.:1975, p.97).

(53) See Bauer, A.:1975, p.149.

(54) See Loveman, B.:1973, vol. 1, p.100.

(55) Marín Molina, R.:1947, p.41.

(56) By describing the sources of outlet for the inquilino's produce in the post-1930's I aim at showing the long term historical trends, rather than to expound a detailed analysis of such a period, which falls outwith the scope of this thesis.

(57) Schejtman, A.:1970, table 8-7, p.147.

(58) See Scott, C.D.:1972, pp.26-27; and Nisbet, C.:1967 Passim. State agencies were also important in the channelling of the produce of small producers, especially as from the 1960s. See also CIDA:1966, pp.179-80.

(59) See Kay, C.:1971, pp.130-35.

(60) In the late 1960s I witnessed a few cases of inquilinos of the coastal area of Curico buying in the village's store articles such as portable radios (on credit). On Sundays most inquilinos bought king size filter cigarettes which, together with the bicycle, became a symbol of status in rural Chile.

(61) See Lehmann, D.:1974, chapter 2; and Kay, C.:1971, chapter 7.

(62) On inflation see for example Mamalakis, M.:1976, p.23, and chapter 6; and Fetter, F.W.:1931, Passim.

- (63) See Kay, C.: 1971, p. 240, table A-4.
- (64) See Schejtman, A.: 1970, p. 167-68; and Kay, C.: 1978, p. 10.
- (65) Lehmann, D.: 1974, p. 359.
- (66) Balmaceda, M. J.: 1875, p. 42 (my translation).
- (67) See McBride, G.: 1936, p. 154. An indication of the pasture rights granted to inquilinos in the province of Concepcion (1914) can be found in Loveman, B.: 1973, vol. 1, p. 59, and evidence in vol. 2 Documentary Appendix 5, suggests that reduction of pasture rights was a common occurrence and one of the main sources of the inquilinos' complaints during the 1920s-30s.
- (68) See Kay, C.: 1971, table A.5, p. 240.
- (69) The 1965/66 ICIRA field survey showed that 64% of the inquilinos interviewed had no surplus at all once they had catered for their families' basic needs (see Schejtman, A.: 1970, p. 167).
- (70) McBride, G.: 1936, p. 157, advocating the need for an agrarian reform. Appendix 1(ii) of this thesis contains further comments on McBride's vision of the inquilinos.
- (71) See Lehmann, D.: 1974, p. 336.
- (72) Bauer, A.: 1975, p. 138.
- (73) See Kay, C.: 1971, pp. 121-36, 161-71; and CIDA: 1966 pp. 52-53. See also Urrutia, A.: 1969, vol. 1, chapters 1-2.
- (74) McBride, G.: 1936, p. 152, describes that in some places the piece of land allotted to the inquilino for grain cultivation (which usually consisted of land for dry farming and was known as regalía para trigo, as stated in chapter 1 section 5), was cultivated "on shares (half and half) with the hacendado in payment for seeds and the use of tools and oxen, and as rent for the land." It is unclear in McBride's description whether this situation arose from an inability on the part of the inquilino to dispose of sufficient seed or instruments of labour to cultivate his allotment, or whether it arose from the inquilino being allotted slightly more land than usual for the purpose of sharecropping.
- (75) See Kay, C.: 1971, p. 240.
- (76) Marx maintains that sharecropping is a transitional form to capitalist rent. See Marx, K.: 1959, vol. 3, pp. 782-84 (see also Marx, K.: 1968.b, vol. 2, pp. 24-25). Through the mediería, the hacendado obtains more than

half of the product of the land whilst advancing very little capital. Assuming that the seed is 10% of the product (e.g., wheat), the hacendado advances half of the seed, and therefore 5% of the total product obtained in the harvest is actually advanced by the landowner. Once the crop is harvested the hacendado claims back his initial seed outlay, and the remaining product (95%), is thereupon halved between himself and the sharecropper. The hacendado thus obtains (47.5% + 5%) 52.5% of the product while his advancement of capital amounts so far to only 5%. Certainly the hacendado has to incur other expenses such as half of the fertilizer (if used), and sometimes he also provides some of the tools or working animals. Yet, the fact that the other half of all inputs and all labour expenses (and often many of the tools) are advanced by the sharecropper, means that the landowner has to advance much less capital than if he undertook production on a capitalist basis.

(77) I am certainly not arguing here that, by virtue of this analysis, the inquilino produces more surplus than if he was a tenant-peasant paying rent in kind or money for example (provided he had sufficient tools and land, of course, other circumstances remaining unchanged). The analysis expounded so far entails nothing beyond viewing the hacienda's labour process as one in which value and surplus-value are produced simultaneously (in both enterprises), in a continuum, rather than in terms of value and surplus-value each being produced separately; the inquilino's labour-time producing a surplus in the hacendado-enterprise, but not in his own (or vice versa). The inquilino's labour-time produces a surplus continuously (at different rates if one wishes to consider differentials in labour productivities), irrespective of the enterprise in which it is used, but this does not mean that therefore (by virtue of this consideration alone), he produces any more or any less surplus-value than other types of labourers. For example, assume that our inquilino becomes overnight a tenant-peasant paying rent in kind, disposing of sufficient tools and land to work there the year round. In such a case he could work 360 days in his own enterprise and, since he would continue to produce three times the value of his own labour (as our inquilino exemplified in the text does), his produce would sustain a worker during (360 days x 3) 1,080 days, of which he himself would consume 360 and the remaining 720 could be supplied to the hacendado as surplus-product, rent in kind. This amounts exactly to the surplus which the inquilino could produce by supplying his surplus-labour to the hacendado, as is shown by the example which follows in the text.

The labour-time spent by the inquilino in his own enterprise might be considered as necessary labour, since

he consumes the entire product in order to maintain himself. Such a consideration is nonetheless an abstraction which in the case of the inquilinaje entails a considerable degree of generalization since one is dealing here with two enterprises, the supply of surplus-labour to the hacendado depending on the inquilino's ability to produce more than he needs while he works in his own enterprise.

- (78) I have assumed that the instruments of labour (tools, seed) are replaced, omitting this from the formula merely to make it more simple to follow; to consider the replacement of instruments of labour in the formula would not add to the substance of the argument I am expounding here.
- (79) See for example Bauer, A.: 1975, pp. 50-52, 165; Kay, C.: 1971, chapter 1; Kay, C.: 1978, pp. 7-8; and Lehmann, D.: 1974, pp. 328-29.
- (80) Kay, C.: 1971, pp. 19-26 (also Kay, C.: 1978, p. 5).
- (81) See Marx, K.: 1959, vol. 3, chapter 47.
- (82) See for example Laclau, E.: 1969, Passim; and Lindqvist, S.: 1979 chapter 5.
- (83) Marx, K.: 1959, Vol. 3, p. 791 (see also vol. 2, pp. 34-35, 109-17).
- (84) See Bloch, M.: 1962, vol. 1, pp. 245-46, 258-62.
- (85) Ibid. p. 85. See also Engels, F.: 1969 Passim. See also the comments of Hobsbawm, E. J.: 1964, pp. 62-64.
- (86) On the ties of vassalage and serfdom in Western European feudalism see Bloch, M.: 1962, vol. 1, chapters 11, 13, 19. Appendix 1(ii) of this thesis contains relevant comments on Gay's and McBride's descriptions of the inquilino's personal 'ties' to the hacienda.
- (87) The hacendado ran no court of justice. On the legal and customary prerogatives of the hacendados and on their differences with feudal ones, see Loveman, B.: 1973, chapter 1.
- (88) Bloch, M.: 1962, vol. 2, p. 442. (see also vol. 1, chapters 18-20).
- (89) See Kay, C.: 1971, part 4.
- (90) Ibid. p. 57.
- (91) Ibid. p. 229.
- (92) Hobsbawm, E. J.: 1964, p. 59.

- (93) This part is based on Marx, K.: 1959, vol. 2, chapter 19, and vol. 3, chapters 37-39, and 47.
- (94) Marx, K.: 1959, vol. 3, p. 764.
- (95) See Marx, K.: 1959, vol. 2, chapter 19.
- (96) Ibid. p. 371.
- (97) Ibidem.
- (98) Marx, K.: 1959, vol. 2, chapter 19.
- (99) See Marx, K.: 1959, vol. 3, pp. 770-74.
- (100) Ibid. p. 770.
- (101) Ibidem.
- (102) See Marx, K.: 1938, vol. 1, chapter 10 section 2; and Marx, K.: 1959, vol. 2, pp. 385-86.
- (103) Marx, K.: 1959, vol. 3, p. 770.
- (104) Ibidem.

CHAPTER 5

THE DEVELOPMENT OF THE HACIENDA FROM THE MID 19TH-CENTURY TO THE 1930's

As stated in the introductory section to this thesis, (chapter 1, section 1), this chapter focuses on the historical processes connected to the hacienda's transition towards capitalist production. The importance and details of some developments, which were only summarily described in previous chapters, are now discussed at greater length. Evidence will be brought to bear which hopefully will contribute to enhance our knowledge of the hacienda's mode of production during the second half of the 19th-century; of its extremely simple technology and farming methods, of the timing of the expansion of commercial wheat cultivation, and of the factors which curbed such an expansion in the estates of central Chile during the last quarter of the century. Fresh evidence will be also raised on what appears to have been a subsequent technological break-through by the turn of the 19th-century, a break-through perhaps imperceptible to the observer today for it was the sort of quiet and gradual improvement of basic tools, seed, and animal breeds, which heralded the arrival of the far noisier and more visible age of mechanical power.

Section 1 of this chapter discusses Chile's political and socio-economic development between the mid-19th and the early 20th-centuries, focusing on the supremacy of merchant's capital which was facilitated by the existence of pre-capitalist relations of production such as the inquilinaje. This section discusses the transition towards capitalism from a wider perspective than the hacienda alone. Section 2 examines the post-1840s

expansion of wheat cultivation which followed the development of trade and of Chilean exports of wheat and flour. This section also gives an account of the existing interpretations of the hacienda's development during this period, and the reasons which are offered for the relatively early stagnation of production and exports of wheat and flour from the central provinces of Chile; reasons which so far have been associated with the very substantial fall of the international wheat prices between the mid-1880s and the early 1900s. In section 3, evidence is led showing that in central Chile both production and exports of wheat and flour, stagnated and declined long before the international price of wheat slumped. Issue is taken with some hypotheses on the hacienda's development which seem to be based on inadequate or faulty evidence. The reasons for the stagnation of production and the decline of wheat exports from central Chile lie mainly in the hacienda's mode of production, rather than in the market itself. Both sections 2 and 3 deal with approximately the same historical period, i.e. from the mid-to late 19th-century (a period defined in previous chapters as the first stage of the hacienda's transition).

Finally, section 4 discusses the quiet technological break-through which, as from the first third of the 20th-century, gave rise to a new momentum in the hacienda's history, contributing to trigger-off a process which was to lead to the disintegration of the inquilinaje in the years to come. In this section, such changes as affected the hacienda during the first third of the 20th-century (i.e., second stage of the hacienda's transition) are discussed, and this is in turn followed by a Finnis, which comments on the main social and political transformations involved.

Section 1 :

Chile's society, merchant's capital, and the inquilinaje

As shall be described in this section, in Chile merchant's capital was able to establish a virtually unchallenged supremacy in the decades following the country's independence from Spain. The supremacy of merchant's capital was made easy by the existence of pre-capitalist relations such as the inquilinaje, which was the predominant relation of production of the hacienda. Merchants merged very quickly socially and financially with the wealthiest hacendados of central Chile, setting up joint stock companies in banking, mining and transport. There was little room, or social basis, for the emergence of an industrial capitalist class independent of the merchants and hacendados. The transition to capitalism as encompassed in Chile was thus achieved through the merchants establishing sway over production, it was largely determined by the very nature of the country's society and was also connected to the character of world capitalist development during the 19th-century, Chile becoming from the outset an exporter of raw materials and an importer of manufactured goods. In this section, therefore, I shall glance at the historical developments that influenced the character of Chile's society and economy by the mid-19th century, looking at merchant's capital as regards its role in transition to capitalist production. The aim is to locate the discussion on transition as seen in previous chapters within a wider perspective than the hacienda alone, and to seek to establish the possible contribution the inquilinaje can make for a further understanding of this topic.

I shall begin by describing the historical circumstances which gave rise to the supremacy of merchant's capital in Chile, and this is followed by a

general theoretical discussion on this subject. The final part of this section glances at Chile's socio-economic development until the early 20th-century, and at the role of merchant's capital in the development of capitalist production in industry. This section should also serve as a general background for the discussion of aspects relating to agriculture in particular, which shall be examined in greater depth in the following sections.

As stated in chapter 1, the process of political independence from Spain was neither preceded nor followed by any immediate radical change in the nature of Chilean colonial society.¹ Once the republic was established in 1818, however, there was increasing conflict between three regional upper class groups (or 'elites' as they are often described), which gradually turned into an open struggle for hegemony in the formative years of the national state in Chile. The most powerful was the Santiago landed aristocracy, which by the 1820s was composed chiefly of a small number of owners of large haciendas in central Chile, i.e., by the 200 or so families of the vecindario noble as mentioned in chapter 1, many of whose members had already occupied high rank posts under the Spanish colonial administration. The other two regional upper class groups were the aristocracy of Concepción in the south, composed of landowning families whose estates were by then chiefly engaged in livestock breeding (many of these 'aristocrats' holding high positions in the army garrisons of the south), and the group of La Serena in the north whose main interests were in mining and (secondarily) agriculture. The struggle of these regional upper class groups characterized the country's political arena during the 1820s and was channelled through two major political groups.

One of these political groups, the Pelucones, advocated an authoritarian and centralized system of national government, representing from the outset the interests of the Santiago landed aristocracy. The other

political group, the Pipiolos, was composed of supporters of federalism, and it embodied the aspirations of the regional upper class groups of Concepción and La Serena. The more liberal thinkers of Chilean politics who opposed the principle of authoritarian government joined the Pipiolos, while the conservatives, and in particular the Church, adhered to the Pelucones in pursuit of a strong and centralized government.²

At first the Pipiolos succeeded in installing a federal republic following O'Higgins resignation in 1822, but they failed to achieve stable government. The federal constitutions of 1826 and 1828 were shortlived, governments being elected into office and very quickly brought down, until eventually a military uprising in the garrisons of Santiago organized by the Pelucones put an end to the Federal Republic by defeating the forces of the Pipiolos at Lircay in 1828.³ Inquilinos, the rural population in general and the urban poor took virtually no part in the country's political life, the above-mentioned political events not affecting the hacienda, and no peasant movement developed as a result of these conflicts. Armed clashes were for the most part confined to given geographical areas and the Generals kept firm control over the soldiers drafted from amongst the rural and urban poor.⁴ The small guerrilla movements previously organized to fight the Spaniards were dispersed once independence was achieved, and what remained of them turned to banditry, raiding haciendas without befriending inquilinos. There are few accounts of inquilinos themselves being armed in gangs and then it was always to fight for their patrones against bandits and cattle rustlers.⁵

After Lircay in 1828 the Santiago landed aristocracy set about to organize a highly centralized system of autocratic government which they soon shared with merchants, and together they managed to establish a virtually unchallenged control almost to the complete exclusion of the regional groups of La Serena and

Concepción(until 1859).⁶ Congress was disbanded until a new constitution could be drafted, while many of their political opponents(Pipiolos and provincial leaders) were deported and others executed. Diego Portales emerged as the most outstanding political figure of this movement (which was soon to become the Conservative Party), implementing what he called the principle of 'firm, sober and impersonal government'. Under his leadership a new constitution was adopted in 1833 and administrative measures were taken to create the fabric of government, some of these measures having a long-standing effect and remaining until 1925.⁷ This gave the new born republic a very solid institutional order and, although it was ultimately the kind most suited to the Santiago landed aristocracy, it did at last bring a period of stability after more than two decades of war and political turmoil, which had worn out the spirits of the groups in conflict and damaged the country's economic prospects. The opening of Chile to world trade, following the abolition of colonial restrictions, together with the 1833 constitution which created stable institutional conditions, and the expansion of industrial capital in Britain needing sources of raw materials, resulted in the rapid development of trade and of merchant's capital, heralding a new phase in the country's economic history.

It was in Valparaíso, the oldest and one of the few natural ports of central Chile, that a merchant community, which had been small and of secondary importance during the colonial period, developed rapidly from the increase in trade following the mid-1830s. Exports of mining products to Europe (chiefly of copper and silver), and of agricultural products to neighbouring countries (mainly flour and wheat) had a sustained growth between the mid-1830s and the mid-1840s. Thereafter, exports boomed by 1848, trade diversifying into other raw materials, and imports of manufactured goods also growing very quickly indeed.⁸ This was known as the export/import boom of 1848-56 which contributed to seal the supremacy of

merchant's capital, particularly of the Valparaíso 'merchant community' composed of Chileans, European immigrants, and British commercial houses which operated with most of the carrying trade between Santiago, Valparaíso and abroad, dealing with exports or raw materials and imports of manufactured products. Moreover, the Valparaíso merchants were engaged in money lending operations and they supplied most of the credit available in the country, the development of merchant's capital thus appearing bound together with that of interest bearing capital.⁹ Further, the merchants of Valparaíso merged very quickly with the Santiago landed aristocracy as we shall see in due course.

This development of merchant's capital until the 1850s was accompanied by changes in urban and rural Chile, but it was not, however, accompanied by any noticeable emergence of capitalist production except for in a few foundries and mines in the north, this region being at any rate totally distinct, economically and socially, from the rest of the country. Even in the largest cities of Santiago and Valparaíso, industry consisted of petty commodity production and household crafts, while in the countryside pre-capitalist relations were widespread.¹⁰ There was consequently no abstract labour, or an average rate of profit established on any social scale, nor were there general rates of interests as would exist in capitalism, let alone a formalized credit or banking system.¹¹ Until the late 1850s money lending operations remained informal by today's standards, the main suppliers of credit being, as described above, the Valparaíso merchants headed by British commercial houses. The rates of interests were often very high, and varied between individuals depending, amongst other things, upon the security of payment offered by the borrower (prior to the introduction of the Commercial Code in the late 1850s, legal dispositions concerning debts and slow payers were vague). Credit

offered to hacendados consisted mostly of goods supplied to them in advance of their future delivery of crops to the merchants, in other words, credit was extended and paid in kind, rather than in money, and this situation continued until the late 1850s when the formal banking system was introduced.¹²

Neither had the urban proletariat developed by the mid-19th century. Besides the independent artisan, the most common occupations amongst the lower class were those of street vendors of various kinds, service workers such as carriage drivers, town criers (serenos) and soldiers. There was a fairly high proportion employed in domestic services working either for private individuals or the Church. There was also what in those days might have been considered as a sizeable urban floating population living off petty street commerce, casual labour, begging or theft. By that time Chile was in fact largely an agrarian society, about three quarters of the population living in the countryside, rural villages and hamlets. Life in the capital still reflected some of the characteristics of the old colonial period. The population of Santiago reached 90,000 and that of Valparaíso 50,000, which together accounted for 14% of the country's total population(one million).¹³ The inhabitants of towns were still at least partially engaged in agricultural related activities.

Yet, it should be noted that several important changes had taken place since the 1820s. The population of Santiago and Valparaíso had grown considerably and it is a well established fact that migrations from rural areas of Aconcagua made no negligible contribution to this, also leading to a gradual spread of rural villages, hamlets and small holdings in the provinces of Aconcagua and Santiago.¹⁴ Apparently the area under commercial wheat cultivation in these provinces steadily expanded while livestock production increased in the lower provinces of central Chile.¹⁵ There is also evidence that petty commodity

production and urban artisan industry also grew between the time of independence and the mid-19th century.¹⁶ One should therefore guard against portraying Chile's economy as static before the middle of the century, or before the export/import boom of 1848-56 began. There was an on-going process of differentiation between town and country in some areas of central Chile, and between rural and urban economic activities; agriculture was expanding gradually, artisan and petty commodity production increased and there was growth of commerce, both of regional and international trade controlled by the Valparaiso merchants as well as of local commerce in towns and cities.

There was, however, as stated further above, no significant emergence of industrial capitalist production by the middle of the 19th-century either in rural areas or in the largest cities of central Chile. There is in fact no reason to expect a rise of capitalist production from a general development of commerce alone, for the same reason that changes brought about by merchant's capital may not necessarily be of a capitalist nature.¹⁷ That the development of commerce and of merchant's capital need not entail capitalist production has already been shown by Marx, amongst other scholars.¹⁸ Marx completely discarded the idea that it was commerce and merchant's capital which led to the emergence of capitalist production; if such were the case then ancient Rome and Byzantium would have entered into the history of free labour and capital. He argued that since commerce promotes production for exchange it tends to have a dissolving effect upon all those social organizations geared at producing use values, to this extent commerce being a necessary prerequisite for the emergence of capitalism (and a very important prerequisite indeed). Capitalism, however, does not result from commerce but from the old (pre-capitalist) mode of production which provides the material and social basis for capitalist production to emerge, and from historical processes which detach

the direct producers from their objective conditions of labour(tools,raw materials,food), throwing the now 'free' labourers, and the objective conditions of labour, into the exchange market.¹⁹

Further, Marx shows that merchant's capital developing independently from the emergence of production on a capitalist basis(i.e., establishing sway over trade without capitalist production emerging, hence "capital developing on the basis of an alien mode of production which is also independent of it"), is an obstacle for the development of capitalism.²⁰ The independent development of merchant's capital, argues Marx, "stands in inverse proportion to the economic development of society", for it holds capital penned within the sphere of circulation.²¹

The supremacy of merchant's capital, in the sense this term is used by Marx and is adopted in this thesis, specifically refers to a historical phase in the economic development of society wherein capital prevails within the sphere of circulation, rather than in the sphere, or as a mode of, production, capital thus promoting the exchange of commodities independently of the mode in which they are produced. There is, therefore, a crucial distinction to be made between merchant's capital in capitalism where it is subordinated to the laws of capitalist production(in which case one can refer to it as commercial capital), and merchant's capital in previous modes of production where commerce itself establishes sway over production. The process of transition to capitalist production thus entails at some point the subordination of merchant's capital to industrial capital, and of commerce to production.²²

It follows from here that the manner by which the latter is accomplished depends on both, the strength of merchant's capital and the character and solidity of the

old mode of production.²³ On the evidence of Western Europe (chiefly Britain) Marx distinguishes two main courses of transition to capitalist production, which may occur in different branches of industry.²⁴ One of these courses is when "the producer becomes merchant and capitalist, in contrast to the natural agricultural economy and the guild-bound handicrafts of the medieval urban industries. This is the really revolutionizing path", argues Marx.²⁵ The other course is when the merchant himself becomes a capitalist, establishing "direct sway over production".²⁶ Marx maintains that since merchant's capital has a tendency to hold capital penned within the sphere of circulation, this course of transition is often conservative and much slower than when the direct producer becomes a capitalist himself.

Comparing the Chilean process with the two courses of transition described by Marx, one could say that in Chile it was the process of the merchant establishing sway over production that prevailed. It appears that the reasons for this were on the one hand connected to the stage of development industrial capital had reached in Europe (chiefly in Britain) and, on the other hand, to the very nature of Chile's society and economy.

By the time merchant's capital emerged as a free and predominant form of capital in Chile with the abolition of the colonial restrictions on trade, industrial capital was already in the process of achieving supremacy over merchant's capital in Britain.²⁷ Within Chile as within many countries which are today known to us as the 'under-developed world', however, merchant's capital continued to retain its supremacy, establishing itself in the carrying trade of raw materials and manufactured goods to and from the industrialized nations.²⁸ Thus, while in world terms merchant's capital was becoming the agent of, and was being subordinated to, industrial capital, this very fact made merchant's capital all the more powerful

within Chile, for now it was capitalist production in Britain with its ever growing output and need for raw materials and exchange, that was behind merchant's capital in Chile. The post-1830s strength of merchant's capital in Chile sprung not merely from a growth of commerce itself, as had been the case of the 18th-century mercantile expansion during the Spanish colonial period, or for that matter from the 19th-century abolition of the colonial trade restrictions alone, but most of all as a consequence of an expanding British industrial capital needing sources of raw materials and outlets for manufactured products. Under these circumstances any development of industrial capital in Chile outwith the hold of merchant's capital was unlikely.

The form of transition to capitalist production in Chile was also connected to the very nature of the society and the kind of pre-capitalist relations in existence which had to give way to, and at the same time provide, the point of departure for the emergence of the new capitalist society. This remains the least theoretically explored subject of all and perhaps here the inquilinaje as studied in previous chapters may add to our understanding. In mid-19th century Chile there was little or no social basis from which a class of industrial capitalist could have developed outside the ranks of hacendados and merchants.²⁹ Artisans had no tradition of tradesmanship to draw upon such as that which resulted from the medieval guilds in Britain or France for example. No Yeomanry and no independent group of manufacturers existed in Chile with power enough to challenge the supremacy of merchants and hacendados, and out of whom an industrial capitalist class could have emerged.³⁰ In their turn, the hacendados in general and the Santiago landed aristocracy in particular had virtually no historical basis from which to derive a spirit of capitalist entrepreneurship, their estates being run on the basis of the inquilinaje. The clase derrochadora (the extravagant

class) as the Santiago landed aristocracy was known, spent massively on luxuries which were mostly imported from Britain or France, and this in turn meant business for the Valparaíso merchants and made easy the supremacy of merchant's capital.³¹

Further, the merchants of Valparaíso acted as informal financiers dealing with remittances of money abroad (e.g., money sent abroad by the hacendados to relatives living in Europe), and opening personal credit accounts in their stores for the use of the wealthiest landowners. Since wheat, flour and pelts were important items of trade, during the late 1840s some of the major commercial houses of Valparaíso began to operate a system of personal accounts enabling the hacendados to withdraw a given amount of goods from their stores. The hacendados' accounts were settled by future deliveries of hacienda products which were priced at the time the credit was extended.³² This system of personal accounts apparently yielded high profits to the merchants as the hacendados' produce was rated usually at a price far lower than that on the open market, high interest being implicit in this whole operation.³³ Prior to the creation of the formal banking system in the mid-1850s merchants very rarely advanced money to the hacendados, credit being extended and paid mostly in produce, as was described above.

Merchant's capital thus bound together with interest bearing capital in this rather embryonic form, and controlling the carrying trade as noted at the beginning of this section, found little resistance in establishing its hold in the pre-industrial phase of Chilean society.³⁴ The supremacy of merchant's capital was also facilitated by the existence of the inquilinaje relation, thanks to which landowners could afford to produce with only very small outlays of capital, and needed not realize a pre-established minimum rate of profit to stay in business (as would have been required had capitalist production prevailed in their estates). The hacendados were

thus able to spend their money freely and could afford to withstand heavy charges for their debts without entering into conflict with the merchants of Valparaíso. The existence of the inquilinaje thus contributed to mitigate (and perhaps to some extent remove) a source of conflict between the wealthiest landowners and merchants, providing one of the objective bases for their quick socio-economic merging in one tightly knitted regional upper class group.

Indeed, the Santiago landed aristocracy and the Valparaíso merchants soon developed common economic interests. Although it is not possible to establish here how much of the hacendados' income was spent in extravagances or in sheer consumption, it is apparent, however, that the wealthiest amongst the Santiago landed aristocracy did begin to invest money in joint stock companies started by Valparaíso merchants.³⁵ Also, as the Santiago landed aristocracy has been accurately described, it was not a self-perpetuating or a closed class(not at least for whites if they acquired wealth), and many of their members soon began inter-marrying with merchants of Valparaíso who were only too happy to be accepted into the ranks of the traditional upper class. Their interests thus rapidly merged by marriage and business and this inter-locking of central Chile's upper class is a feature that appeared quite early in the country's history.³⁶ The merchants of Valparaíso started setting up joint stock banks and by the mid-1850s a formal banking system was beginning to develop, giving rise to the establishment of general rates of interests and to a process of concentration of capital. Joint stock companies were created in mining and transport, also set up by Valparaíso merchants with a view to exploiting and exporting the country's mineral resources which were in world demand. Initially, these mining companies were chiefly commercial concerns buying, transporting, sometimes smelting, and exporting the ores mined by independent producers or small firms

operating with extremely simple technology. The owners of large haciendas of central Chile held some 30% of all shares towards 1860, the development of joint stock companies thus becoming a key factor in permitting their rapid integration with the merchants of Valparaíso.³⁷ Yet, as we shall see below, it appears that it was still some time before this process of integration would fully involve the regional upper class groups of Concepción and La Serena.

By the mid-19th century Chile's economy had thus entered into the world circuit of production and circulation of commodities through the mediation of merchant's capital, exporting raw materials and importing manufactured goods, thereby becoming dependent from the outset on the cyclic phases of industrial capital in Europe with which trade was established(i.e., state of inactivity, mounting revival, prosperity, over-production, crisis, stagnation, state of inactivity, mounting revival, etc.).³⁸ In fact, Chile's 19th-century export/import economy developed in phases of fast expansion followed by abrupt recessions and periods of stagnation, the first major crisis emerging towards 1859 bringing the old conflicts of the three main regional upper class groups to the fore.

The factors which precipitated this crisis began to develop in the latter part of the 1850s following the 1848-56 export/import boom. During this time there was a growing accumulated deficit in the country's balance of trade as the export/import boom had triggered-off larger imports than exports. This in turn created severe pressures on the newly created financial system.³⁹ Chile's banks and government had therefore been forced to engage in heavy borrowing from the British and as the debt mounted more loans were contracted to amortize previous ones and to pay for the standing interest, thus giving way to a growing indebtedness and financial dependence on British capital(chiefly upon the British commercial houses of Valparaiso). In addition to this, prices of Chilean

exports had oscillated in a very erratic way throughout the decade contributing to add pressure on the young banking system.⁴⁰ Thus, the country's finances were already quite precarious when the 1859 slump in world commodity prices took place. Pregger Roman maintains that it was the manipulation of credit by Valparaíso merchants in collusion with the Santiago landed aristocracy, together with discontent in some provinces with their autocratic government, which largely accounted for a violent rebellion led by the regional upper class groups of La Serena and Concepción in 1859. This rebellion was strongest in the north where it turned into a violent uprising, the town of Copiapó and the city of La Serena holding out in arms for nearly four months against troops sent in from Santiago.⁴¹ A mine owner and political leader (Gallo) rallied considerable support in the north for a programme of bourgeois democratic reforms, while in Talcahuano (and to a lesser extent in Valparaíso) a mass of dock workers and urban poor became involved for the first time in street riots. In Santiago itself there were splits both in the Liberal and Conservative parties over constitutional issues such as the property qualifications of suffrage rights and the authority of the Chilean courts of justice over the ecclesiastical hierarchy. Also the Church was shaken by internal disputes the country's political arena becoming by this time very explosive indeed.⁴²

Although the uprisings in La Serena and Concepción were firmly repressed by the army, the events of 1859 forced a political re-alignment ending the form of autocratic government as exercised by the Santiago landed aristocracy and the Valparaíso merchants since the 1830s. The crisis of 1859 may be seen as following from a process which had actually started much earlier, i.e., in the mid-1830s, a process triggered-off by the growth of commerce leading to the development of joint stock companies in banking, transport and mining, and which made

it necessary to introduce changes to modernize the Chilean state in line with the requirements of a rapidly changing country. There was a political compromise between a majority of Conservatives and Liberals who committed themselves to seek a strong centralized government, but also one which would give a greater say to the regional upper class groups and integrate moderate Liberals into the cabinet.⁴³

This compromise resulted in the establishment of a national(coalition) government which paved the way for some reforms to the 1833 constitution, enfranchising all those who could read and write and introducing further reforms to the banking system and company law. The crisis of 1859 was, in fact, the last violent clash between the three main regional upper class groups born out of the Spanish colonial period,i.e., Concepción, Santiago/Valparaíso, and La Serena. Thereafter, the Santiago/Valparaíso core of merchants and hacendados were able to gradually absorb or co-opt the other two regional groups within a process which eventually led to a nationally integrated class of owners of large capital, and one which was closely linked, as we have seen, with foreign merchant's capital and the British in particular.⁴⁴ It is important to emphasize, however, that this refers chiefly to the wealthiest amongst the upper class of these regions,⁴⁵ rather than to independent or small mine owners in the north, or to the owners of less valuable haciendas in the lower provinces of central Chile who, by the 1860s, apparently remained alien to or at the fringe of, this process of upper class integration, moving to Santiago much later on in the 19th-century and giving rise to the 20th-century upper-middle 'class', as shall be described in section 2.

Following the crisis of 1859, the 1860s were for the most part a period of further and relatively fast expansion of Chile's export economy(see table 4 below), particularly of agricultural products although mining made up the largest part of total exports, and more importantly perhaps, mining provided the Chilean government with a

source of revenue through export duties from which all agricultural exports were exempt. Joint stock companies also developed at a much faster pace than in the past, this time involving wealthy mine owners from La Serena, while coal began to be mined on a large scale in Concepción supplying the growing need for fuel.

Railways were built with joint stock capital to transport minerals to ports within the north, and also to link the agricultural provinces of central Chile with Santiago and the port of Valparaíso, while work started on the lines linking the southern provinces with Concepción. The building of the railways was probably as important a development for produce haulage as it was for human transportation, particularly of labourers. It has been shown that the impact of the railway on long-distance migrations was very considerable indeed.⁴⁶

Table 4 :

Index numbers of the value of agricultural, mining, and total exports: Chile, 1851-55 to 1886-90.
(five year averages; 1851-55 = 100)

	*Agricultural Exports	Mining Exports	Total Exports
1851-55	100	100	100
1856-60	103	175	138
1861-65	137	196	155
1866-70	247	204	187
1871-75	348	214	229
1876-80	223	246	201
1881-85	168	518	353
1886-90	145	551	359

Source: adapted from Carmagnani, M.: 1971, pp. 184-85.

*(includes exports of livestock products).

The economic expansion of the 1860s led to renewed prosperity in Santiago and Valparaíso, many urban developments taking place such as urban railways (known as the Ferrocarril Urbano), and the creation of water and gas companies which began supplying the fashionable areas with running water and gas street lighting. The character of life in these two cities abandoned the last vestiges of the Spanish colonial period and entered into the age of the modern city.⁴⁷

The 1860s expansion, however, was interrupted by a brief slump in 1869 followed by a fast recovery and a period of expansion lasting until the mid-1870s. Then again, as from the mid-1870s, there was acute stagnation and economic depression in Chile, particularly of mining exports which this time were badly hit by a deeper and longer world recession than those which had previously affected the country.⁴⁸ "The economic blight which affected mining spread through its allied industries, many smelters barely managed to survive, while the smaller firms had to quit; the railroads which carried the ore as well as the refined metal also suffered. Unemployment became widespread and many fled the north(...)"⁴⁹ The situation was aggravated by a loss of crops following very heavy rainfalls which led to severe floodings in 1877 and there was a food shortage in many towns, flour having to be imported. The commercial houses became engaged in large scale speculation, while banks increased their liabilities far beyond their assets, issuing higher dividends than ever and extending the volume of their credit to shareholders and members of their boards of directors. In 1878 the government, itself a major debtor, was forced to drop the gold standard to avoid a total collapse of the banking system, inflation rapidly increasing and becoming one of the country's inherent problems thereafter.⁵⁰

The situation came to a head when the Peruvian government expropriated all copper and nitrate mines on its soil, which were chiefly owned by Chileans in

partnership with the British, and Bolivia announced it was intending to follow the steps of Peru. Chile then waged and won a war against Peru and Bolivia, taking possession of the world largest deposits of nitrate which was to provide a new impetus for Chile's export economy. Moreover, it appears that the war effort provided a take-off point for the development of capitalist manufacturing industry in the cities.

In fact, although the Santiago landed aristocracy/Valparaíso merchants' core had been actively involved in setting up enterprises in banking, transport and mining, until the 1879 War they showed little interest in extending their sphere of activities to urban industry, which still remained by and large of an artisan nature; they held capital penned to banking and commerce, investing chiefly in transport and in simple-technology enterprises for the extraction of ores and allied industries in the north.⁵¹ Prior to the 1880s credit was virtually non-available for the few organized factories which emerged, set up mainly by European immigrants displaying entrepreneurial abilities. Only mortgage credit was available in Chile and only real estate was accepted as collateral. Moreover, the economic policies of successive governments under the influence of the Santiago/Valparaíso upper-class core provided almost no tariff protection, let alone financial incentives, for the development of manufacturing industry and this was no accident.⁵²

The joint stock companies of merchants and hacendados developed from the outset with a view to exploiting the mineral resources which were in world demand and which the merchants themselves could market, channelling most of the country's financial resources, which also they themselves controlled, for this end. The involvement of merchant's capital in productive activities proper thus took place first in the extraction of ores within the north, then in the refining and smelting of ores using

very simple technologies which yielded high profits, in areas of investment requiring only a short period of gestation(i.e., a short period of turnover of capital). Workers in the mines were nominally remunerated in money but their wages were often paid partly with tokens, which were exchangeable for goods but only in the store of the particular mine issuing the token.⁵³ In this light one may speak of merchant's capital establishing direct sway over production in mining during this period, although it also continued to exert an indirect hold, tightening its grip over the independent miner through controlling transport, imports of tools, marketing channels, and artificially depressing the domestic prices of metals which merchant's capital exported.⁵⁴ Hence, although on the one hand merchants appeared to perform as capitalists hiring labourers whose wages were at least nominally calculated in money, on the other hand this function was limited to the sphere of interest of merchant's capital itself, i.e., . ores and various refined and semi-refined mining products for exports, and it was accompanied by a strengthening of the typical features of merchant's capital; the exploitation of the direct ('independent') producer in the process of transportation and exchange "leaving him nominally independent and his mode of production unchanged".⁵⁵ This twofold role of merchants in mining unveils the early transitional phase of the emergence of capitalist production there (it actually corresponds to a combination of two of the classical situations described by Marx), and it shows that such a transition was one in which the merchants were slowly beginning to perform the function of capitalists, directly in the extraction of ores (and refining, in cases smelting), but nonetheless retaining their role as merchants.

After the 1879-81 War, however, the Santiago/Valparaíso (merchant/hacendado/mine owner/bank owner) core began to invest more heavily in mining and also, gradually, in urban manufacturing industry. Certainly, as has been shown by Kirsch, the social conditions for the development

of manufacturing industry had already been developing in previous years as migrations from rural areas created a growing population of urban labouring poor, while artisanship had evolved into a relatively sizeable population of skilled manual workers. Also the shortage of foreign currency during the War and the need to keep up military supplies forced the government to tax imports of manufactures, all of which resulted in a rapid increase on the number of urban organized factories.⁵⁶ Although many of these factories created during the 1879-81 War went bankrupt once peace was restored, many more began to emerge in their place as from the 1890s, the first signs of an organized urban proletariat emerging by the first decade of the 20th-century.⁵⁷

The development of industrial capital during this period was closely connected to the commercial houses of Valparaíso which until the War had been chiefly engaged in banking, transport and mining. It seems that the most common process in the creation of enterprises during the early industrial period of 1880s-1900s was when an immigrant (usually European), "Skilled in an industry either in a purely technical capacity or as entrepreneur initiated an operation on a relatively small scale", which was then taken over by the Santiago/Valparaíso core once it had proved successful, and thereafter expanded (apparently most of these foreign immigrants started by working for one of the commercial houses wherein they acquired the social contacts and knowledge of the market, Kirsh maintaining that their success invariably led them into being co-opted and incorporated into the ranks of the Santiago/Valparaíso core).⁵⁸ Ownership of all the leading organized factories was thus concentrated in the hands of the Santiago/Valparaíso core and this was made easy by the manner in which merchant's capital had established supremacy, expanding into banking, and then turning to transport and mining through joint stock companies, but still retaining its role in commerce. As

was stated above, only real estate served as collateral for bank loans, and industry was therefore entirely dependent on landownership and on the commercial houses (which controlled banks) for credit, for imports of machinery and industrial inputs, for access to foreign technology, and for the marketing of produce. More importantly, the Santiago/Valparaíso upper-class core who owned the capital necessary were interested mainly in short period investment yielding very high profits, hence industry developed largely in branches producing light consumer goods, usually relying on imported machinery inputs and technology, under the hold (direct or indirect) of the Santiago/Valparaíso core, not unfrequently in partnership with foreign capital. Almost without exception, however, the heavy investment projects such as electricity were undertaken by foreign industrial firms alone, not in partnership with Chileans.⁵⁹

Thus, many of the features of the so-called under-developed industry appear to have been imprinted during these early formative years, e.g. high concentration of ownership, a weak sector producing means of production, industry developing chiefly in branches of light or semi-durable consumer goods, depending on imports of foreign machinery and technology. The development of capital in industry, under the hold of merchant's capital bound together with interest bearing capital, seems to have been deemed to follow this course, transition to capitalist production being slow and conservative rather than revolutionary, as Marx pointed out for such cases. Capital was born in Chilean industry with the seal of a class which had historically emerged from commerce and the hacienda and which was still, by the first third of the 20th-century, continuing to run their estates on the basis of the inquilinaje relation, the hacienda developing towards capitalist production at a far slower pace than mining or urban industry, although the changes that took place in the hacienda itself were no less significant, as we shall see in the following sections.

Section 2:

The growth of trade, the 19th-century expansion of wheat cultivation and its subsequent stagnation in haciendas of central Chile.

Some of the most important features of the influence of merchant's capital on mining and urban industry were looked at in section 1. This section now sets out to describe the impact commerce had upon the hacienda and the general character encompassed by agricultural development in Chile during the second half of the 19th-century. The most widely held view is that in this period Chile's wheat production grew under the influence of the external market, namely wheat and flour exports, the home market being still too small to provide the necessary incentive for sustained growth. High international wheat prices in Europe and falling transportation costs during the 1860s-70s are said to have provided the stimulus for the expansion of production in central Chile. Further, the subsequent fall of the international price of wheat as from the early 1880s is thought to have led to a sharp decline of wheat exports from central Chile, production stagnating there until the early 20th-century as domestic demand was insufficient to compensate for the loss of foreign markets. It is held that only the provinces of La Frontera and southern Chile were able to continue to export until the turn of the century because they had better natural advantages for growing wheat, thus being able to withstand the effects of the shrinking international price for longer than central Chile. The external market is thus frequently regarded as the driving force behind the expansion of wheat production and its subsequent stagnation in the provinces of central Chile.

Wheat was by far the most important commercial product

of haciendas, no less than two thirds and up to three quarters of the country's cultivated area being planted with wheat.⁶⁰ There is no doubt that wheat was an important export product during some periods of the 19th-century as was flour at points, these exports providing an extremely important stimulus for the development of agricultural production for exchange, particularly in the early stages of commercial wheat production in the various provinces. The effect these exports had upon the haciendas and agriculture in general at different points in time, however, has been to a certain extent misconstrued. In this section, therefore, I shall focus on the influence of commerce and the most important export developments. Further analysis of this continues in section 3 where new evidence will be brought to bear, showing amongst other things that it was the mode of production of haciendas, rather than exports or commerce itself, which determined the character of agricultural development, this being a typical example of merchant's capital dominating the sphere of circulation, stimulating production for exchange and exerting a partially dissolving effect on the subsistence economy of the rural population, but with no capitalist production emerging, the inquilinaje relation consolidating itself in the large estates.

As seen in chapter 1 (section 2), the expansion of commercial wheat cultivation during the 18th-century had profound effects upon the prevailing mode of production in agriculture by transforming the arrendatario relationship, which in turn gave rise by the end of the century to the inquilinaje in its early transitional form of inquilino-arrendatario, and finally as wheat cultivation gained predominance over livestock breeding to the inquilinaje itself throughout the first half of the 19th-century. Prior to the late 1840s this process (commercial wheat cultivation and emergence of the inquilinaje), had developed only gradually, and chiefly in the most central provinces such as Aconcagua, some areas of Santiago, and in the vicinity of towns; the main

traditional markets for wheat and flour had been the cities of Santiago, Valparaíso, army garrisons in the south, and Peru.⁶¹ Towards the late 1840s, however, the commercial importance of wheat and flour in Chile was boosted by an export boom of these products to California, and this contributed to accelerate considerably the spread of wheat cultivation for exchange and the development and consolidation of the inquilinaje relation.

The mid-1840s gold rush attracted thousands of men and women to California and the need for additional food supplies there increased very rapidly indeed. In those days (before the Panama Canal or the USA western railroads were built), transportation between the eastern States of the USA, Europe, and California, was made by sea through Cape Horn and vessels following this route almost invariably had to call at Valparaíso for provisions. The Valparaíso merchants thus faced an outstandingly favourable export juncture as prices of wheat and flour rose to one of their highest levels ever in the 19th-century. More gold discoveries soon followed in Australia and there too food shortages occurred, providing the Valparaíso merchants with a further outlet for exporting wheat and flour. The sudden opening of the California and Australian market, together with a spread of the guano trade and of mining villages in the Atacama desert in Peru, boosted the demand for wheat and flour in the Pacific resulting in what has been described as the first boom of Chilean wheat exports. On average annual exports of wheat and flour more than doubled between 1844-48 and 1851-55 (see table 5 below), and it is held that several merchants made a small fortune from this.⁶²

Most writers of the time described this as the most important development of commerce with agricultural products since the Spanish Crown had allowed wheat exports to Peru in the 17th-century, and as we shall see below it had important social repercussions. Bauer nonetheless maintains that beyond stimulating a modest expansion of

wheat production the effect of this export boom upon the hacienda was fairly negligible, in the sense that the hacendados were able to meet these new export targets by simply bringing more land into cultivation, and by using more labourers who presumably could be easily and cheaply recruited from amongst the inquilino families and the peripheral rural population.⁶³ Bauer takes the view that the relevance of the boom has been largely exaggerated through the writings of Perez Rosales and Vicuña Mackenna, although it should be equally stressed that he holds the export market to be the main driving force of the limited and, according to Bauer, very modest expansion of wheat cultivation which took place in those years. Since exports during the 1850s' boom never exceeded 600,000 quintales in any one year, Bauer maintains that no more than 65,000 hectares of crop-land were needed to produce Chile's exports to the entire Pacific market; he states that today these figures seem small as compared to exports during the 1860s and 1870s when Europe and Britain in particular became the main foreign markets for Chilean wheat and flour.⁶⁴

It could be argued, however, that for the purpose of ascertaining the importance of the export boom in a historical perspective, the amount of crop-land engaged in producing for exports should be viewed in relation to the total area cultivated at that particular time (1850s), rather than in relation to that of later decades. The 65,000 hectares calculated by Bauer amounted probably to as much as a third or more of the total area cultivated with wheat in the country during the 1850s.⁶⁵ Further, it is as important to locate a historical event in relation to the preceding period as it is to place it in relation to that which follows. True, exports to Europe later on during the 1860s more than doubled those during the first boom of 1848-56, but it could be equally argued that the boom of 1848-56 itself was in turn a major development as compared to exports before 1847 when they had been chiefly confined to Peru. I think that it was because of this historical importance (rather than through sheer romanticism in their

approach), that Perez Rosales, Vicuña McKenna and their contemporaries viewed the sudden opening of the California and Australian market as being a very substantial boost to the commercial prospects of agriculture.⁶⁶

Table 5 :

Average annual exports of wheat and flour, and wholesale wheat prices in Santiago: 1844-48 to 1855-60.

(in 000's quintales and dollars per quintal, respectively)

	Wheat Exports	Flour Exports	*Total Exports	**Wheat price in Santiago
1844-48	66	57	137	2.16
1848-50	131	217	402	2.30
1851-55	100	222	378	7.21
1856-60	147	116	292	7.95

Source : Appendix 6, tables A.6.12 and A.6.15.

*Flour exports being expressed in terms of grain content(1 flour = 1.25 wheat).

**For details on the type of dollar used in this and subsequent tables see Appendix 5.

Indeed, the export boom seems to have given a very considerable boost to the wheat and flour trade, and this can be seen not only in the very large increase of the domestic price(which rose by nearly 600% between 1849 and 1852), but also in the growing activity of the merchants themselves who engaged in large scale operations and in mounting speculation, especially the Valparaíso merchants who owned several of the country's largest mills. Gay reports that speculation through the hoarding and sudden release of stocks greatly contributed to fluctuations in the domestic price in Valparaíso and Santiago, these price oscillations during the 1850s being

quite considerable as compared to those of the previous five years(see chart below).⁶⁷



Chart 1: Annual prices of wheat in Santiago, 1845 - 1860.

(In dollars per quintal) - Source, Appendix 6, table A.6.15.

The fast increase in commerce with wheat in the largest cities and ports led to an extension of the activities of merchants into rural Chile itself, despite the extremely precarious transport facilities.⁶⁸ By the 1850s, middlemen connected to the Valparaíso merchants started to operate through offices in provincial towns buying wheat from small-holders. The system known as the

purchase of the crop en verde (unripe) was widely employed, middlemen advancing goods or money to the small producers for their still unripe crop which was rated at only a small fraction of the price fetched by the mature grain (thus, here again we can see merchant's capital developing bound to interest bearing capital in a rather embryonic form, as in the case of the Valparaíso merchants until the mid-1850s). This system led to widespread abuse; in years of bad harvest it contributed to produce sporadic food shortages in areas occupied by independent small-holders who, forced by need, had to sell their entire crop en verde and many found themselves without sufficient grain to sow in the following year.⁶⁹ Thus, the effects of the development of commerce and of wheat production for exchange went well beyond the sphere of circulation alone.

In fact, although the 1850s increase in commerce with wheat did not lead to any immediate change in the hacienda's century old methods of cultivation, the extension of production being achieved as Bauer maintains by using more land and labour-power, the social changes that took place were far from being insignificant. It was precisely by having increased the hacienda's requirements of labour-power that the development of commerce exerted at that stage a profound influence upon agriculture, contributing to consolidate the inquilinaje relation in general and affecting the subsistence economy of the floating rural population in particular. Evidence of this influence can be gleaned by examining the hacienda's methods of wheat cultivation and the effect the expansion of commercial wheat cultivation had on the rural population at large.

The haciendas employed a two-field system of wheat cultivation (i.e., a field was cultivated in one year and then left fallow in the next), fertilizers were very rarely used, and the tools and implements of labour were primitive in design. In Aconcagua and in a typical cycle

of wheat production the sowing began by May (most of the wheat grown in this province belonged to a variety known as Candeal or Berbería which grows best on irrigated land with a dry climate). From Santiago to the south the sowing usually began towards August or September once the worse of the winter had passed (in these provinces most of the wheat grown belonged to a variety of triticum vulgare known as trigo blanco).⁷⁰ The seed was hand sown and skilled resident workers from inquilino families were normally employed for this task. During the winter there was little else to do in the fields besides the up-keep of fences and looking after the livestock, for which at any rate the hacienda's resident labour force more than sufficed. Towards August work in the fields resumed with the clearing of irrigation channels, the sowing (in estates south of Aconcagua), and the weeding, the latter being a task for which women and children were widely employed. The time when the grain was ripe for harvesting varied between northern and southern Chile depending chiefly upon the weather and rainfalls. In central Chile the harvest started between mid-December (Aconcagua) and early January (Talca) in normal years, while in areas of the intermediate region such as Ñuble it usually began some three weeks later and continued throughout February in the provinces south of Concepción..

The plants were reaped with a small sickle (known as echona) and this was followed by the stalking. The stalks were then transported by ox-cart to the era, which was circular corral conveniently built in an open field, where the threshing took place with horses being made to run over the stalks. Then came the winnowing. The husk-free grain was subsequently shovelled against a sieve to clear stones or impurities and was then carried away in ox-carts to the estate's barn in order to be sacked. All this entailed quite a time-consuming labour process with the aggravating factor that the reaping had to be completed in no more than 2-3 weeks, and the entire harvest finished as soon as possible for any delays could result in heavy

losses due to the action of predators and pests caused by dampness and heat after fog, early morning condensation or unexpected rain (this subject will be examined in greater detail in section 3).

The hacienda's seasonal requirements of labour-power during the brief harvest period were therefore very large as compared to the rest of the year, resident workers from the inquilino families being unable to cope with it themselves. Thus, once wheat started to be cultivated on any considerable scale the hacendados had to seek outside peon workmen for the harvest and by the late 1840s these had to be recruited from amongst a floating peripheral population which up to then had been chiefly engaged in subsistence farming and complementary activities (household crafts, fishing). It is in relation to this that the rapid boost to the commercial importance of wheat at this relatively early stage (i.e., late 1840s) had its most significant and longer lasting effect upon rural Chile, by leading the way to a process of partial dissolution of the producing organization of the rural population, which was transformed to serve the haciendas' needs of labour. Until the 1840s in fact, the rural population in areas other than in Aconcagua, the central region of Santiago or the vicinities of provincial towns, was still mainly engaged in subsistence farming and household industry, the population being scattered in small holdings or hamlets, not infrequently upon lands which belonged to an hacienda. Money played a very small part in these people's day-to-day lives.⁷¹ During the early phase of the development of wheat cultivation in these areas, the landowners apparently had difficulties in recruiting peons from amongst these inhabitants, who at any rate were not accustomed to selling their labour-power with any regularity and knew little about 'the value of money'. Descriptions in the hacendados' S.N.A periodicals abound in complaints about the 'irregular habits' of these rural inhabitants and their reluctance to accept discipline in work, and Gay reported that they would

refuse paid employment with the estates for longer than a few consecutive days, unless driven by hunger.⁷² Payment in kind was therefore quite important at that stage and, as seen in chapter 2 (section 2), the mingaco with its daily feast of frolic and drink was often a major inducement in attracting peons to work in the hacienda's harvest, productivity being obviously very low with the mingaco according to documents of the time.⁷³

These difficulties in procuring adequate seasonal labourers were soon overcome, however, and the mingaco was no longer needed, as a process of dissolution of the subsistence economy of the rural population led to the partial (and in cases total) detachment of a mass of people from their objective conditions of labour (land, tools, food), forcing them to seek paid employment. The partial dissolution of the subsistence economy of the rural population apparently went hand in hand with the extension of wheat cultivation in haciendas, within a process which initiated rural migrations leading to the spread of hamlets and villages, the development of local rural commerce, and to the emergence of money as a means of payment of peon labourers. Bauer, placing little importance on the export boom and the general development of commerce of wheat during this period (late 1840s and 1850s), has maintained that this process began only by the 1860s, but recent research by Tscherebillo and Johnson has shown that in many areas of central Chile it was well on its way by the mid-1850s, and earlier than this in Aconcagua where wheat had been produced for exchange since the colonial days.⁷⁴ It is now a well established fact that there was a rapid spread of rural hamlets and villages during the 1840s which at first sprung from migrations caused by the inability of the small-holding areas of Aconcagua to absorb their growing population, and later on during the 1850s from the expulsion or resettlement of the floating population occupying hacienda lands in areas between Santiago and Colchagua. In estates where

wheat cultivation became a priority the hacendados no longer continued to turn a blind eye on the floating population occupying their land, either because they wanted the land itself (mainly in estates closer by to towns and in places which offered a more secure supply of seasonal peon labourers), or because they needed seasonal labourers and therefore had to partially dissolve the traditional subsistence economy of the occupiers, who were then treated as squatters being expelled in places, in others re-settled in marginal hacienda lands, or incorporated into the estates as permanent resident workers through the inquilinaje.⁷⁵

Thus, either by fragmentation of the small-holding, expulsion or resettlement in marginal hacienda lands, the traditional subsistence economy of the floating rural population was curtailed. This forced a mass of the population to seek paid employment or to migrate down to the lower provinces of central Chile in search of a place to settle in rural hamlets or uncleared virgin lands in coastal areas, or otherwise to join the labouring poor in the largest cities of Valparaíso or Santiago. One commentator wrote:

"Open your eyes and you see daily entire families abandoning their homes and setting out -to where? Even they do not know. Their only purpose is to leave a place that does not provide a living...many head towards Santiago. The refrain 'me voi pa' la ciudad' is very common amongst poorer people. Travel our roads and you will see many families moving with their chattels on their backs towards the capital to augment the already present pauperism".⁷⁶

Alternatively, those gradually incorporated by the hacienda through the inquilinaje and who were procured with a more secure position were allotted land but only on condition that they should provide the estate with a certain amount of non-remunerated labour-power. The influence of the late 1840s and 1850s expansion of wheat

trade upon the traditional subsistence economy of the rural population was twofold, in both cases transforming it to serve the purpose of supplying the haciendas with labour-power. On the one hand, through expulsion, resettlement, or through fragmentation of small-holdings the subsistence economy was partially dissolved, a mass of partially or totally dispossessed people serving as a source of seasonal peon labour-power for the hacienda. It thus became a common sight to observe host of peons walking from north to south, working for one hacienda or another as the harvest season progressed. During the rest of the year when the haciendas had virtually no employment at all for outsiders, the peons withdrew to their small holdings or hamlets where they engaged in subsistence activities such as farming, charcoal burning and fishing, others moving further south to unclear virgin lands in search of a place to settle.⁷⁷ On the other hand, however, the subsistence economy of the rural population was also co-opted and incorporated by the hacienda through the inquilinaje in order to provide the estate with permanent, and that stage chiefly non-remunerated labour-power, thereby no longer remaining as a subsistence economy as such since, as seen in chapter 4, its purpose was the supply of surplus-labour to the estate.

Certainly, these transformations which followed the rapid development of commerce in the late 1840s-50s were part of a far reaching process, which was neither lacking in connection with the previous development of the hacienda nor accomplished overnight. As we have seen, the inquilinaje relation began to appear prior to the late 1840s wherever commerce brought about wheat cultivation for exchange (i.e., some features of the inquilinaje emerging by the turn of the 18th-century in Aconcagua and in the vicinities of towns), while migrations and the spread of hamlets and villages continued during the following decades accompanied by a development of local commerce and money as a means of payment of peon workmen. The late 1840s export boom, however, signalled

a turning point for the haciendas of central Chile, as commerce and wheat cultivation gained a noticeable impetus and the above-mentioned transformations accelerated in some places, and were initiated in others.⁷⁸

In short, the effect the development of commerce had at that stage upon the producing organization of the rural population was substantial. Such a producing organization, which in most places of central Chile had been traditionally aimed at production for use, was partially dissolved or incorporated by the estates through the inquilinaje, thereby providing the hacienda with seasonal peon labourers or with permanent inquilino workmen. Commerce, therefore, exerted a certain dissolving effect upon production geared at subsistence, but there was no capitalist production emerging in its place. Rather, it was the feature of the inquilinaje as a supplier of non-remunerated labour-power, already present in some forms in the more central areas of the country, which was consolidated. To some extent, as in the case of the so-called second serfdom of Eastern Europe, the expansion of commerce and of merchant's capital during this period brought about the intensification of the exploitation of labourers through pre-capitalist relations of production which were already present in the old order, but which were nonetheless partially transformed and adapted to suit the new commercial requirements of the estates.⁷⁹ It was probably during this period (late 1840s-50s) when the domestic market was still on its early stage of development, that exports had their most significant influence in the rapid growth of commerce in wheat, notwithstanding the relatively short duration of exports to California and Australia. By the second half of the 1850s it appears that the social transformations brought about by the growth of commerce and wheat production for exchange were well under way, thus providing the basis from which labour-power could be drawn for the much larger expansion of commercial wheat cultivation which was to take place

in the coming decade.

Exports to California declined towards the mid-1850s once the initial gold rush began to die-out. Wheat production in California itself rapidly increased; a milling industry developed in San Francisco which soon was not only able to meet local demand but also began to export. In fact, by 1855 the California market was virtually closed to merchants exporting wheat and flour, and in the face of growing production in Australia itself (and of growing competition from California millers), Chile's exports to Australia fell sharply towards 1858, becoming negligible by the early 1860s.⁸⁰ Although the ending of exports of wheat and flour to California and Australia certainly depressed commerce in these products in Chile, it is the closure of these markets for Chile, rather than the effects of their emergence, which can be easily exaggerated as to its importance. The ending of exports to these countries took place at a time of mounting economic and political difficulties in Chile leading to the crisis of 1859, which as seen in section 1 sprang from factors well beyond the confines of agricultural exports alone. Moreover, the decline of exports of wheat and flour to California and Australia did not have a lasting nor calamitous effect upon the Valparaíso merchants or the hacienda owners, as it was more than compensated for by growing exportation of livestock products to Europe, particularly of pelts and wool which increased by nearly five-fold during 1856-60, preceding the opening of a new foreign market for Chilean wheat in Britain.⁸¹

Commercial wheat cultivation gained renewed impetus by the early 1860s as the largest expansion of production ever to take place in the 19th-century haciendas of central Chile occurred during that decade, the wheat trade in general continuing its fast growth down through the intermediate to the southern provinces, exports booming in 1864(see table 6 below), but again declining, arguably from the 1880s from central Chile and only a decade later from the south(more of this is said below).

The increase of wheat production during this period was achieved through the hacienda's conventional methods of cultivation, as had been the case during the 1850s. The result of this was to extend southwards a process already under way in the most central provinces since the 1850s, whereby the area cultivated rapidly spread southwards carrying with it the partial dissolution of the subsistence economy of the rural population, triggering-off further migrations, the inquilinaje relation consolidating itself in those places where the large estate prevailed. The speed at which this process spread towards the south was remarkable. During the 1860s and early 1870s lands in the provinces of Colchagua, Curicó, Talca, Maule, Ñuble and as far south as Bío-Bío and Malleco were brought under extensive wheat cultivation, production increasing fairly quickly during this period.⁸² The construction of the railway connecting Valparaíso and Santiago with Colchagua (1862), Curicó (1868) and Talca (1875), and further south linking Concepción and the port of Talcahuano with Ñuble and La Frontera (1874), was no doubt a factor which contributed to this expansion, although it should be emphasized that in Curicó, Talca and Maule the biggest increase of production took place before the arrival of the railway.⁸³

Further, by the mid-1870s extensive areas in the region of La Frontera were also brought under extensive wheat cultivation, and a decade later this region together with Bío-Bío and the provinces of the far south are said to have turned into the country's largest grain producing area, growing almost two thirds of Chile's total wheat exports.⁸⁴ Unlike the export boom of the 1850s, Bauer has laid great emphasis on wheat exports during the 1860s-1880s, arguing that the foreign market was not only the chief factor in stimulating wheat cultivation in Chile, but also in bringing about its subsequent stagnation, which in his view was caused by a slump of the international price leading to a sharp decline of exports from central Chile by the mid-1880s, and only a

decade later from the region of La Frontera and the south.⁸⁵ Let us look at some of the evidence which seems to have given rise to this view, as the export market has been the focal point of much of the literature on economic history in connection to the hacienda during the 19th-century.

Table 6 :

Average annual exports of wheat & flour, and wholesale wheat prices in Santiago and Liverpool : 1861-65 to 1895-1900.
(in 000's quintales and dollars per quintal, respectively)

	Wheat Exports	Flour Exports	*Total Exports	Wheat price in Santiago	Wheat Price in Liverpool
1861-65	363	258	686	4.97	8.85
1866-70	863	336	1,283	5.99	10.15
1871-75	1,131	314	1,524	6.30	10.22
1876-80	946	126	1,104	6.23	8.85
1881-85	1,082	114	1,225	5.32	7.47
1886-90	836	37	882	5.29	5.82
1891-95	1,409	37	1,455	3.73	5.19
1896-1900	684	44	739	4.12	5.55

Source: Appendix 6, table A.6.15

*Flour exports being expressed in terms of grain content(1 flour = 1.25 wheat)

Certainly, exports of wheat and flour in the 1860s and 1870s were larger than ever before. Between 1861 and 1865 they rose by a third in relation to their annual average during the second half of the 1850s, booming from some 719 thousand quintales in 1864 to 1.2 million in 1865.⁸⁶ Such an astonishing increase of exports from one year to another was probably achieved through a reduction of domestic consumption as Tscherebilo suggests, and also and perhaps more likely through releasing stocks accumulated in the warehouses of Valparaíso merchants.⁸⁷ At any rate such a situation could only be circumstantial, and as production increased, Chile came to export on average some 1.3 million quintales of wheat and flour

annually during 1866-70, rising to over 1.5 million quintales in 1871-75(see table 6 above), which was four times as much the high average exports of 1848-50. These developments were then seen by the director of the Statistical Office as highly encouraging, "agriculture", he said, "was bound to become the mother of the country's wealth." ⁸⁸ Indeed, for most of the 1860s and 1870s agriculture provided the country with a very important source of foreign earnings, 30% during 1866-70, rising to about 40% in 1871-75, of which nearly three quarters were made up of exports of wheat and flour.⁸⁹

Moreover, the domestic market and commerce in wheat within the country also developed, which is an aspect Bauer overlooks. The extension of wheat cultivation (initially greatly stimulated by foreign demand) itself contributed to expand the domestic market by partially dissolving the traditional subsistence economy of the rural population, triggering-off migrations resulting in the spread of semi-urban conglomerates (hamlets, villages) and in the rapid growth of towns and cities.⁹⁰ The proportion exported as grain or flour between 1860 and 1875 for example, was some 30-40% of the country's wheat production, albeit a very substantial figure, it shows that the domestic market was also very important indeed.⁹¹ There took place an extension of commerce in general, rather than one of exports alone, the effects of which had widespread repercussions by furthering the above-mentioned process of dissolution, previously under way only in the most central provinces.

During the 1860s and 1870s migrations accelerated, the population continuing to grow quite quickly in the largest cities of Santiago and Valparaíso which as seen in section 1, went through urban transformations that brought them into the age of the modern city. Also provincial capitals such as Curicó which by the middle of the century were still little more than rural villages with a single dust street were radically changed, turning

into sizeable towns, while the villages themselves and local trades developed following the growth of commerce and of wheat cultivation for exchange.⁹² The concentration of population in larger urban or semi-urban conglomerates was followed by the development of small to medium size labour-intensive holdings in the surroundings of towns and cities which supplied the population with vegetables, fresh fruits and dairy products (these were known as chacras and quintas).⁹³

The spread of commercial agriculture and of wheat production in particular brought about wealth to many landowners of the lower provinces of central Chile such as Curicó and Talca, who apparently began to move to the capital as they were able to afford the comfort of a Santiago life. It is thought that although they did not grow nearly as rich as the Santiago landed aristocracy and the Valparaíso merchants, the income from their estates was sufficient to afford them a life in the fashionable areas of Santiago, private higher education for their children, and so on. One of the basic components of the Chilean 20th-century upper middle 'class' is said to have originated in this type of provincial hacendado or fundo owner.⁹⁴ Thus, in addition to its effect upon the rural labouring population, the development of commerce also led to a certain further differentiation between landowners (differences already existed by the mid-19th century as described in section 1); a certain differentiation between the Santiago landed aristocracy who owned the most central and valuable haciendas and whose interests had merged with Valparaíso merchants diversifying into banking, commerce and mining, and between the owners of less valuable estates in the lower provinces of central Chile who apparently for the most part continued to depend on their estates for their income.

The rapid expansion of wheat cultivation in the central and intermediate regions, however, soon came to an end. In

central Chile and the intermediate region production is said to have stagnated by the mid-1880s, Bauer maintaining that this was chiefly due to a sharp fall of wheat exports from these places, exports from the south and La Frontera also declining by the turn of the century as the golden years for Chile's wheat exports -as they were known- went for good.⁹⁵

The reasons for this stagnation of production and decline of exports have in fact been a major concern of the literature on the 19th-century hacienda. A widely accepted interpretation (supplied mainly by Bauer), has emphasized the decline of wheat exports as the reason behind the stagnation of production, falling exports being in turn associated with a slump in the international price which took place as from the mid-1880s.⁹⁶ Bauer maintains that exports of wheat from central Chile (including what I term here as intermediate region), were possible only thanks to a very favourable but temporary juncture of high international wheat prices and falling transportation costs between the 1860s and the mid-1880s. He argues that the hacendados were aware of Chile's precarious competitive position in the world market and, since they could increase production by simply using more labour and land, they were unwilling to invest in modernizing their estates. Bauer maintains that the Chilean haciendas were soon unable to compete with more efficient and technically advanced wheat producing countries, and that the hacendados ceased to expand wheat cultivation once the international price experienced a major decline towards the mid-1880s, since exports became no longer profitable and the domestic market was still too small to lure sufficient incentives for growth.⁹⁷ So far the evidence at hand has seemed to support this explanation in that the fall of the international price of wheat, the decline of exports, and the stagnation of production in haciendas of central Chile (and the intermediate region), all appear to have occurred approximately at the same time,

i.e., by the early to mid-1880s.⁹⁸ Bauer's interpretation has thus become almost conventional wisdom in construing the reasons which brought about the 19th-century expansion of wheat cultivation to a halt, and for the lack of investment to improve the hacienda's agricultural methods and instruments of labour.

As we have seen in this section the stimulus which the export market gave to commerce in general, and to the spread of wheat cultivation for exchange in particular, was substantial. Commerce and wheat cultivation for exchange, in turn had a considerable effect upon the traditional subsistence economy of the rural population, by bringing about a partial dissolution of the producing organization wherever it was geared towards production for use. This in effect contributed to enhance Chile's home market for some food products, especially for wheat which was one of the basic constituents in the diet of the poor in villages, towns and cities where many of the dispossessed rural migrants arrived; also, the inhabitants of rural or semi-urban small holdings (the core of the partially dissolved subsistence economy) grew mostly all of their own garden-crops, but not always all of their wheat. The expansion of wheat cultivation for exchange and the development of commerce were thus very closely related, not only because commerce initially stimulated by the export trade, brought about the expansion of wheat production, but also because wheat cultivation for a market in turn gave impetus to commerce in rural villages, towns and cities. Exports of wheat and commerce in wheat in general, however, had little direct connection with the stagnation of production in central and intermediate Chile, and also little connection with the lack of improvement of agricultural methods and tools during this period. The character of the hacienda's development during the 1850s to the 1880s was largely determined by its relations of production and by the nature of its labour process (which was

primitive in technology and greatly dependent on the availability of large numbers of seasonal labourers), rather than by the market price or commerce. In fact, in the haciendas of central Chile wheat production stagnated at least a decade earlier than this is thought to have happened, certainly well before the international price of wheat fell. This, and the reasons behind the stagnation of wheat production in central Chile, are the subject of the following section.

Section 3 :

The hacienda's mode of production and the growth and subsequent stagnation of wheat cultivation in central and intermediate Chile: mid to late 19th-century.

Little introduction is required for this section. The main topic of discussion here is the importance of the hacienda's mode of production in explaining the spread and subsequent stagnation of wheat production that took place in haciendas of central Chile during the second half of the 19th-century. Fresh evidence disproves the hypothesis that the stagnation of wheat production and the decline of exports from central Chile were closely connected to the mid-1880s fall of the international price. The argument that wheat production of central Chile increased until the 1880s, or until the slump of the international price is held to have halted exports from that region, is supported by misleading evidence. Neither the stagnation of production nor the decline of exports from central Chile occurred at that particular time. The

factual misconception of the timing of these events originated from what are seemingly fairly trivial mistakes in calculations. Likewise, a certain theoretical vacuum as regards the inquilinaje and the hacienda's mode of production has laid constraints on our knowledge of the hacienda's history during this period. Let us, therefore, first focus on these empirical errors in calculations.

For the most part of the 1860s, the Chilean Statistical Office (from now on, the Office) reported figures of wheat production using fanegas, which is an old Spanish American measure of capacity for solids. In 1868, however, the Office began reporting these figures both in fanegas and litres, then in litres only between 1882 and 1902, and finally in quintales of 100 kilos as from the latter date. Hurtado, whose work is a classic on Chilean statistical series, produced a table of wheat production by regions using the data of the Office for the following years in the 19th and 20th centuries : 1860, 1870, 1880, 1885, and 1908.⁹⁹ Hurtado's table suggests that a rapid growth of wheat production took place in central Chile between 1860 and 1880, output declining by 1885, however, and continuing gradually to do so until 1908. The table is expressed in quintales (100 kilos), Hurtado reportedly having converted the Office's data for 1860, 1870 and 1880, from fanegas to quintales of 100 kilos at a rate of 42.9 kilos per fanega, which is in fact wrong.

Like most old Spanish American measures the size of the fanega varied widely in different countries. In most places in Spain for example, the fanega equals 55.5 litres, whereas in Mexico it is equivalent to 93.4 litres, and to 141.4 litres in Argentina. The Chilean fanega is equal to 97 litres and this is the official equivalent used by the Statistical Office. The Office further considers that a litre contains 0.73 kilos (of wheat), hence one fanega embodies approximately 71.5 kilos (of wheat).¹⁰⁰ Nevertheless, Hurtado assumed unfortunately that the

Office's fanega was equivalent to only 42.9 kilos, as described above; he took it that the Chilean fanega was equal to 55.7 litres (surprisingly close to the Spanish measure), rather than to 97 litres as stated by the Office. Hurtado then assumed that one litre contained 0.77 kilos of wheat, reaching the misleading result of 42.9 kilos per fanega which is about 40% below the proper equivalence, i.e., 71.5 kilos per fanega.¹⁰¹ Hurtado thus grossly under-estimated the Office's data on wheat production for 1860 and 1870, while only slightly under-estimating the data for 1880 and 1885 (apparently he obtained the data for 1880 -as reportedly that for 1885, from the Office's figures in litres, rather than in fanegas, and since he used an equivalent between litres and kilos similar to that of the Office the error in these particular years was small). The large increase of production between 1870 and 1880 suggested by Hurtado's table was therefore illusory, and the result of an error in transforming fanegas to quintales at the appropriate equivalence.

This seemingly trivial mistake in calculations has turned into a fundamental error by leading scholars to believe that in central Chile there was a sustained growth of wheat production between 1860 and 1880, whereas it had actually stagnated by the early 1870s (and earlier than this in some of the most central provinces, as we shall see in due course). The Office's data converted into quintales at the correct equivalent (see table 7 below) shows that in the provinces of central Chile as a whole (as the intermediate region), wheat production grew rapidly during and until the late 1860s. After this production increased only very slowly up to 1873, and then it declined towards 1875 remaining rather stagnant thereafter until 1884-85. In other words, in terms of trends there was no sustained expansion of wheat production in central Chile for nearly a decade before the mid-1880s slump of the international price took place.

This evidence strongly suggests that the reasons for stagnation of wheat production in central Chile were other than the fall of the international price and the decline of exports.

Table 7 :

Average annual wheat production by regions in chosen years:
1860 to 1884-85 (in 000's quintales).

	Central Chile	Intermediate Region	The South & La Frontera	Others	Total
1860 (a)	1,235	[430]	[378]		2,043
1866-67	1,904	1,038	254	181	3,377
1868-69	2,248	901	237	210	3,596
1870-71	2,356	1,003	230	201	3,790
1872-73	2,456	1,190	401	213	4,260
1875 (a)	1,931	[703]	[1,184]		3,818
1877-78	1,972	756	(b)	(b)	2,876
1884-85	1,960	939	919	207	4,025

Source: Appendix 6, table A.6.2.

(a) Figures in square brackets include provinces in both the Intermediate Region and in the South and La Frontera. One year figure only. Data for 1860 supplied as a general reference only (see Appendix 1.i).

(b) Only incomplete data is available for the South & La Frontera. Thus, no data supplied for this region (or for Others), although it appears added in the national total, i.e., 2,876 thousand quintales includes the incomplete data of the South & La Frontera and that of Others.

To take the argument further, it is necessary to emphasize that the aggregation of the data by Hurtado is misleading as concerns the 19th-century development of wheat cultivation. Hurtado defines central Chile as the region comprising the provinces from Aconcagua in the north down to Concepción in the south. Such a region, however, may to a certain extent describe what today is known as central Chile, but it is inadequate for the 19th-century since it includes what in those days were quite dissimilar and disparate provinces. In fact, the idea that one can speak at all of the region between Aconcagua and Concepción as a relatively homogenous group of provinces during the 1860s and 1870s is a myth, as Johnson maintains, because wheat cultivation was then still in the process of spreading southwards.¹⁰³ Such a wide definition of central Chile as that used by Hurtado conceals the circumstances surrounding the development of wheat cultivation within a process which started in the most central provinces, and then spread southwards; it conceals the differential effect which the export market had upon haciendas in the various provinces at different points in time. The historical features of the expansion of wheat cultivation are revealed to us more fully only by considering geographical areas smaller than the region described by Hurtado as central Chile. For example (as can be seen from table 8 below), whereas in Santiago and O'Higgins, wheat production was already stagnating by the late 1860s remaining relatively unchanged between 1867-68 and 1873, in Curicó output increased by 60% between 1867-68 and 1873 (no complete data is available for Curicó for 1869-72). Further down in Talca, however, there was a temporary fall of production in 1869-70 of 15%, but between 1871 and 1873 it increased again and by nearly 30%. In Ñuble the decline in 1869-70 was much smaller than in Talca, although production also grew very rapidly and by more than 30% towards 1873.

Wheat production of these provinces, therefore,

followed no overall common pattern. In 1869, a temporary depression in the international wheat market led to a fall of Chile's total wheat and flour exports of nearly 50% during 1869-70.¹⁰⁴ The most affected provinces from what we have seen above, were apparently those located further south, away from the largest urban consumption centres, and therefore more dependent on changes of the export market, such as Talca and to a lesser extent Ñuble (which was closer to the city of Concepción). Production in Santiago and O'Higgins which were immediately adjacent to the country's largest cities and urban population centres, remained by contrast, virtually unaffected. Towards 1884-85, in the face of another decline in exports a similar situation occurred. Production in Talca and Ñuble dropped by more than 30% whereas in Santiago and O'Higgins, and this time also in Curicó, production declined by a mere 10% or less. Indeed, production in Santiago and O'Higgins seems to have been altogether unresponsive to changes in the export market as from the late 1860s. Even in the face of rising domestic and international wheat prices,¹⁰⁵ production in these provinces grew at an average of less than 1.8% annually during 1871-73. In contrast to this, in Talca and Ñuble, production increased by 10% annually, i.e., five times faster than in Santiago and O'Higgins. This indicates that by the late 1860s the large expansion of wheat cultivation was tailing-off in Santiago and O'Higgins and that by then these provinces were chiefly producing for the domestic market. It is further important to notice that the same situation was occurring in Curicó by 1884-85, since this province was barely affected by the drop of exports which took place in these years (see table 8 below).

All of this suggests, as we have seen in section 2, that the most important effect of the export market was felt during the initial phase of the expansion of wheat cultivation in the various provinces. As wheat cultivation spread southwards, the growing domestic

market was supplied with produce of haciendas in the more central provinces, while exports continued to provide an outlet for those further south (the growth of the domestic market being stimulated by migrations caused by the spread of wheat cultivation for exchange, as seen in section 2).

Table 8 :

Index of wheat production in chosen provinces : 1867-68 to 1884-85
(1867-68 = 100)

		1867-68	1869-70	1871-72	1873	1884-85
Santiago	R:	100	96	98	103	91
Curico		100	R: -	-	161	151
Talca		100	85	99	129	R: 97
Nuble		100	94	117	133	R: 96

Source: Appendix 6, Table A.6.5.

R : indicates approximately the period in which the railway arrived to the various provinces (information supplied as a general reference).

Moreover, the view that the decline of exports was due to the mid-1880s fall of the international price is based on inadequate export data. Before exports of wheat from central Chile declined, they were already stagnant, the decline itself apparently taking place by the second half of the 1870s, rather than by the mid-1880s. Bauer, who as we have seen maintains that exports from central Chile declined by the mid-1880s, is misled by inadequate and incomplete data quoted from Sepúlveda's broad estimate of exports from the port of Talcahuano only (which is just off the city of Concepción in the south). Bauer subtracted Talcahuano's export data, as estimated by Sepúlveda, from the country's total exports

assuming that the difference should amount to exports of wheat and flour from central Chile.¹⁰⁶ This assumption, however, is misleading since no account is taken of the maritime traffic between Chile's own ports, which included domestic shipments of wheat and flour from the southern ports to Valparaíso, in central Chile, from where the produce was re-embarked to the north or abroad (Valparaíso was also the largest milling centre). Indeed, a large part of the wheat recorded as having been exported from central Chile (i.e. from Valparaíso) was not grown in central Chile itself, but in the southern provinces, e.g. about 40% in 1871-75 as shown by the data in appendix 4 table A.4.3.

Research by Oppenheimer supplies data not only on exports but also on domestic shipments of wheat and flour to and from Valparaíso.¹⁰⁷ With this data, the net domestic shipments and exports from Valparaíso can be calculated. This information provides a reliable indication of trends as regards the wheat and flour produced in central Chile and sent to external markets (foreign, or domestic in the north). The importance of Valparaíso for agricultural exports increased enormously with the construction of the railway in central Chile during the 1860s. By the late 1860s this port was serving almost the entire region of central Chile (except Talca's coastal departments which continued to be served by Constitucion); the fast increase of exports and net domestic shipments from Valparaíso during the 1860s (shown in table 9 below) may be partly attributed to the growing number of provinces which were sending produce to Valparaíso directly by rail, rather than by sea. As by the end of the decade, figures on exports and net domestic shipments from Valparaíso provide a fair reading of the amount of wheat and flour produced in central Chile and sent to external markets. This information (summarized in table 9 below) shows that these exports and net domestic shipments were increasing during the 1860s, and declined thereafter by the first half of the 1870s. This decline was not reversed in the second half of the decade. Exports from Valparaíso

fell by 25% in 1876-80, and although there is a dearth of data on domestic wheat shipments during these particular years, the long term trend suggests that these shipments were too small to have compensated for any significant decline of exports (see appendix 4).

Valparaíso's exports and net domestic shipments of flour also grew quite rapidly during the 1860s and, in contrast to wheat, there was a significant increase during 1871-75 (see table 9 below). No data is available on domestic shipments of flour to and from Valparaíso during 1876-80, but there was a very large fall in exports of nearly 60% in this period, which strongly suggests that in the later years of the 1870s central Chile sent less flour to the external market than during the first half of that decade (see also appendix 4 table A.4.4).

Table 9:

Average annual exports and net domestic shipments of wheat and flour from Valparaíso : 1856-60 to 1881-85. (in 000's quintales)

	<u>Wheat</u>	<u>*Flour</u>	<u>Total</u>
1856-60	58	9	67
1861-65	81	133	214
1866-70	334	274	608
1871-75	287	347	634
1876-80	n.d	n.d	n.d
1881-85	245	202	447

Source: Appendix 4, tables A.4.3 and A.4.4.

(*) Flour exports being expressed in terms of grain content (1 flour = 1.25 wheat).

Thus, as wheat production stagnated in central Chile by the early 1870s, as we have seen, exports and domestic shipments of produce from this region began to decline (wheat at first, and flour a few years later during the

second half of the decade); these events were taking place before the mid-1880s slump of the international price of wheat, which is said to have caused them. Hypotheses on the hacienda's development during this period, laying great emphasis on foreign demand and the international wheat prices, cannot provide a satisfactory explanation for these events, as the roots of the problem were to be found in the hacienda's mode of production, rather than in the sphere of commerce, the export market or in the international price of wheat itself.

It has been maintained in section 2 that the development of commerce (both exports and domestic trade) had a profound effect upon rural Chile by stimulating agricultural production for exchange, especially wheat, which spread from the more central provinces towards the south carrying with it the partial dissolution of the subsistence economy of the population, migrations, and the consolidation of the inquilinaje. Commerce, however, did not bring about a noticeable change in the hacienda's traditional methods of cultivation, and it was this, together with the hacienda's mode of obtaining labour-power and its social relations of production, which were at the root of the stagnation of wheat production. The rapid development of wheat cultivation began in the most central provinces and it was there that it first came to an end. By the early 1870s the haciendas of central Chile had apparently expanded as much as their agricultural practices and their mode of producing wheat could allow. There were certainly some factors of force majeure, not directly connected to the hacienda's mode of production, such as very heavy rainfalls which caused widespread damage to the fields especially after a dry year, when excessive rain led to floodings as in 1877-78 for example (a large part of the crops of the intermediate region were lost during these years).¹⁰⁸ Disasters such as that caused by the very heavy rains of 1877-78 were not altogether unfamiliar (they happened again in 1888, 1891, 1899, 1900, and other years of the 20th-century), but neither were they a regular

occurrence and this was precisely part of the problem. While in the south and La Frontera heavy rains were normal and landowners were not only prepared for them but had been forced by circumstances to take precautions and develop systems to safe-guard their fields and crops (wheat being grown on hillsides, rather than on valleys), in central and intermediate Chile the haciendas' methods of cultivation and the lack of adequate preventive measures placed them almost at the complete mercy of the bad weather. Moreover, there were periodical losses of crops and bad harvests due to plant disease, predators, and poor yields, which were for the most part connected to the haciendas' precarious technology and farming practices, this being in turn also associated to the existing relations of production through which labour-power was obtained. As I have already maintained, in order to understand the end of the 1850s-1860s expansion of wheat cultivation in central Chile, it is crucial to look at the farming practices and the relations of production through which the estates obtained their labour-power. Let us first focus on the haciendas' methods of cultivation, which resulted in periodical losses of crops and poor harvests.

One of the most common causes of losses of the crop was the polvillo. This was a fungus that spread rapidly attacking the spike and chaff of the wheat when damp (it could also develop from the roots if these were exposed to excessive dampness, and it could also easily spread once the wheat was reaped and stalked). In addition to the problem of the polvillo there were periodical waves of predators such as birds, mice and locusts, which in some years caused extensive damage.¹⁰⁹ Nonetheless, very little was done to avert these pests in the vast majority of the estates. The best well-known method of combating the polivillo for example, although one not always used, was for two workers to pass an extended rope through the field shaking the water off

the spikes after rainfalls, fog or early morning dew. Lime and copper sulphate were very rarely employed despite their enormous advantage over the 'rope method', which was used mainly by small producers rather than by the large estates; Gay reports that this was due to ignorance since lime at least, was cheap and easy to obtain.¹¹⁰ Furthermore, it appears that the scale of the damage was exacerbated by negligence in the methods of haciendas. The polvillo and other diseases frequently developed as the stalks were piled up directly on the ground and left uncovered on the open air, exposed to moisture in the early morning and to heat at midday (other pests frequently spread as the threshed grain was stored in barns without adequate ventilation). Gay advocated the use of several simple methods of avoiding plant disease and pests, such as to pile-up the stalks on a platform made of wood or branches, rather than on the bare ground, thus allowing ventilation.¹¹¹ Despite this and many other simple and fairly cheap methods available in the 1860s to combat and prevent pests, none or very few were ever employed in the vast majority of the estates. The hacendados were apparently unaware of some of the causes of plant disease and waves of predators (some of which seem to have turned into plagues due to ecological imbalances following the large scale burning of bush to clear land for cultivation), and they made little effort to take adequate precautions.¹¹² The hacienda was, at that stage, unable to develop an adequate technology to counter-act the pests and problems arising out of the sudden growth of extensive cereal cultivation.

Another major cause which harnessed the 1860s wheat expansion was the fall of yields due to poor use of the soil. The most common method of annexing virgin lands for wheat cultivation started with the clearing of woods, bush and wild grass by fire, the ashes acting initially as fertilizer, thus providing fairly high yields. After a few years of cultivation, however, and as the soil and the initial benefits of the ash fertilization wore out,

yields fell, after which time the land had to be left for a period of fallow.¹¹³ A system of one year wheat cultivation and the next one fallow (hereon two-field system) was usually employed, but apparently this was insufficient to prevent yields from remaining low. It can be estimated that yields fell on average from some 14 quintales per hectare in the late 1840s to about 11-12 quintales in the late 1860s and early 1870s, this decline counter-balancing part of the effect of extending the area cultivated.¹¹⁴ The Chilean hacienda used no systematic method of fertilization other than burning the straw after the harvest and leaving cattle to graze on the fields in fallow years. Crop rotation, such as the three-field system used in Europe since the 18th-century (i.e., one year wheat or barley cultivation, one year turnips, and the next one fallow), was not practiced in Chile during the 19th-century. With the system used by the hacienda only half the arable land could be used at any one time, which meant that no more than half the land cleared for agricultural purposes could be sown in any one year.

The type of plough used at the time has also been connected to poor yields. It was a wooden plough very similar in construction to the primitive, 2,000 BC, Cretan design, and it sunk a mere two to four inches into the soil.¹¹⁵ Gay vehemently advocated the advantages of deep ploughing and criticized the apparent lack of awareness of its benefits, praising the haciendas which were gradually turning to the modern steel designs. Gay writes that nonetheless many hacendados "insist on using the traditional ploughs, and even prefer them after having tried the modern deep-ploughing designs".¹¹⁶ Gay mentions that the traditional plough could be used with advantage on certain types of terrains (he does not state which kinds of terrain).¹¹⁷ The answer to this apparently puzzling resistance to adopting the modern plough is supplied by Encina, when he maintains that the imported iron ploughs were design for deep-ploughing and were

initially a failure because they continuously stuck against rocks and roots close under the surface of the newly cultivated soils.¹¹⁸ It thus seems that the use of the scratch plough was not wholly unwise, although the use of the precarious traditional design seems to have had no explanation other than the hacienda's general technological backwardness.¹¹⁹ Indeed, the type of plough used was not the only implement to be related to the hacienda's primitive methods of cultivation, and this relationship may be seen even more clearly in the tool used for the reaping, the sickle.

The reaping was the most critical and time-consuming of all tasks. The hacendados were frequently unable to secure sufficient labourers to complete the harvest in time and lost part of their crops. Wages paid for the reaping were often higher than those paid for other tasks of the harvest and the landowners resorted to an early system of piece work known as tarea in an attempt to speed up work (by the mid-19th century the tarea in estates of Santiago was equivalent to the reaping of 1/10th of a cuadra, i.e., 0.16 hectares).¹²⁰ Productivity, however, remained low and this was largely due to the type of tool used, the sickle, which of all tools is the one that probably provides the best clue as to the early stage of technological development of the 1860s hacienda.

The reaping was done entirely with a metallic sickle known as echona. The scythe was not used in Chile then. With the scythe the reaping could have been completed in a third of the time required by working with the sickle, and with far less physical effort being demanded from the labourer.¹²¹ One may wonder why the hacendados were not quick to introduce the scythe since it was a simple hand tool which required a fairly small investment as compared with its enormous saving of labour-power (and wages) during the critical harvest time. But such a reluctance to change, however, was founded on yet

another obstacle which greatly contributed to halting the expansion of wheat cultivation, the type of wheat grown.

By the 1860s almost all the wheat cultivated in the country consisted of local varieties of common wheat (triticum vulgare) brought in by the Spaniards in the 16th-century. The stems of the most common variety (known as trigo blanco), were short as compared to more sophisticated types of domesticated wheat grown in Europe or the USA, such as the Oregon variety for example. The shorter stemmed Chilean plants were therefore more exposed to moisture and pests. The most important characteristic of the Chilean wheat grown in those days (important for the purpose of the argument), however, was that the spikes easily shattered as soon as they were ripe, the spikelets containing the husks and grains breaking apart and falling to the ground. This feature which is typical of wild wheat (and certainly more pronounced in the case of wild emmer), can be also found in early varieties of domesticated wheat, or in wheat which has degenerated, and according to Gay this was the case in the Chilean varieties, due largely to careless selection of seed. This characteristic meant that the reaping had to be performed very carefully, for which purpose the sickle was the only appropriate tool, as the cutting had to be made as close as possible to the spike so as to prevent it from shattering (and thus minimize losses).¹²² This is why the hacendados could not introduce the scythe and why the reaping had to be completed in such a narrow space of time. If cut when unripe the husks were still too hard and then the threshing and the winnowing were ineffective, and if cut when over-ripe the losses from shattering of the spikes were very big. The wastage from spillage of kernels was at any rate considerable and was taken for granted ; known as rastrojo it was picked up by impoverished women and children, and much of it remained in the fields sprouting widely with the early rains in the autumn.¹²³

The introduction of new agricultural technology, even of such simple hand tools as the scythe used in other parts of the world since the 17-18th centuries required a major transformation of the haciendas methods involving almost everything from the system of crop rotation and land use to the seed itself. It entailed quite a considerable change indeed. Such a transformation, however, did not generally occur during the 1850s-1870s, the hacienda's methods changing very little during the years of the large 19th-century expansion of wheat cultivation. The primitive methods employed made in turn the expansion dependent on the availability of labour-power, and it was this, together with the precariousness of the hacienda's farming methods, as I have already maintained, which eventually curbed the expansion of wheat cultivation and brought it to a halt. Let us, therefore, now focus on the influence of the relations of production through which the hacienda obtained its labour-power.

Thus far we have seen that following the mid-19th century development of commerce in wheat, the hacendados expanded production for exchange according to the traditional methods known to them, extending the area cultivated by clearing virgin lands and employing more labourers for which they turned to the inquilinaje relation and to a peripheral population of small-holders, or migrants, from amongst whom outside seasonal peon labourers could be recruited. During this period, the inquilinos were required to supply additional non-remunerated, or only partially remunerated labour-power to the hacendados, their labour obligations being increased two to threefold between the middle of the century and the 1870s, as described in chapter 4. The inquilinos in turn discharged their labour obligations by sending more members of their households to work for the hacendados and for a longer period of time, not only their own sons but also relatives and lodgers who had often first arrived at the haciendas as migrant labourers

recommended by a distant relation or a compadre, and had eventually stayed there sharing the inquilinos' dwellings and family life. The absorption of resident workers by haciendas was thus mediated by the inquilinaje relation. Those in-comers who were incorporated by the estates were absorbed at first as lodgers of the inquilinos' households. These lodgers, as well as every other member of the inquilinos' households fit enough to work, had to labour for the hacendado whenever called upon to do so and at a fraction of the wage paid to outside peons, and often received no remuneration at all apart from their food rations. This was the price of being allowed to remain on the estate. Their sustenance as well as that of the inquilinos' own families, therefore, depended to a large extent on the inquilino-enterprise which was thus forced to use its resources more intensively in order to supply additional labour-power to the hacendado. Some of the features of the inquilinaje discussed in previous chapters illuminate these obstacles for the supply of such additional labour-power which eventually contributed to curb the expansion of wheat cultivation.

As seen in chapter 4 the expansion of cultivation through increasing the inquilinos' obligations (whilst little changing the farming methods and tools used), presupposed an intensification of the labour process of the inquilino-enterprise. In section 2 (chapter 4) it was shown that, in order to supply additional surplus-labour to the hacendado, the inquilinos themselves had to use more and more labour in their own small land allotments, this process rapidly leading to a fall of labour productivity in the inquilino-enterprise which became, therefore, increasingly unable to cope with further demands of labour-power as required by the enterprise of the hacendado to continue to expand cultivation.

Certainly the hacendados did to some extent obtain additional surplus-labour by settling new inquilinos, as Bauer suggests, but this was nonetheless a slow process

involving far more than the mere allotting of land.¹²⁴ The inquilinos did not live from hand to mouth and they therefore required the means to enable them to subsist until such time as they were able to live off their own produce(at least a year), as seen in chapter 4. They also needed to acquire tools and a little livestock (or at least to be able to borrow somebody else's oxen), as well as sufficient spare time to build their own dwellings. In addition to all this one must bear in mind that the number of members of a newly-settled inquilino-household, i.e., its potential of labour supply, could not grow overnight. It was thus some time before a newly settled inquilino and his household could be expected to supply any substantial amount of labour-power to the enterprise of the hacendado. In short, a certain development of the inquilino-enterprise is required before it can start supplying unpaid labour-power to the hacendado, as seen in chapter 4. Furthermore, the inquilinaje involved personal relations with differentiated rights and obligations sanctioned by custom, and the settling of new inquilinos had to be made with due regard for the hacienda's hierarchy and pattern of authority(e.g., an outsider would never be settled as inquilino unless he had first spent long years as a member of an inquilino household). Hence, the hacendados could not easily or rapidly obtain a substantial amount of labour-power through settling new inquilinos, and neither could they obtain additional surplus-labour from existing inquilinos once their burdens had already been considerably increased.

Further, as has been described before, the hacienda had highly unbalanced requirements of labour-power during the various seasons, a feature which was greatly accentuated by the hacienda's primitive technology, and it meant that by the harvest time the hacendado needed all the workers he could possibly recruit. The hacendado, however, could not draw nearly all the workers needed for the harvest from amongst members of the inquilino

households, not even if they were fully remunerated for their seasonal work; there was little employment for them from the autumn to spring, their sustenance still depending on the inquilino-enterprise during a large part of the year meant that the inquilino's household could only support a limited number of potential seasonal labourers. The hacienda was thus ultimately dependent on very large numbers of outside peon labourers for the successful completion of the harvest. This dependence was aggravated due to the primitive and time-consuming methods and tools employed for the reaping and threshing, and eventually turned into an obstacle curtailing the expansion of wheat cultivation, as we shall see below.¹²⁵

That the demographic movements and inter-rural migrations during this period were closely connected to the hacienda's expansion of production for exchange is a feature which has been now clearly established by Tscherebilo.¹²⁶ Rural migrations prior to and during the 1850s and early 1860s, which initially were mainly short distance migrations within the provinces of upper central Chile, resulted in the spread of hamlets and of small holdings in uncleared or marginal lands. This created the source from which increasing numbers of outside peon labourers could be recruited, thus providing one of the bases for the expansion of wheat cultivation in the haciendas of upper central Chile. Johnson shows that towards the mid-1860s, however, the small holdings and villages in the upper provinces of central Chile were becoming increasingly unable to absorb incomers, and in cases to even retain their growing population, which by then had begun moving southwards in search of land and a place on which to settle, while some emigrated to the cities in search of work.¹²⁷

The origins of these migrations and their connection

with the development of commercial wheat cultivation were discussed in section 2 (fragmentation of the small proprietorship and partial dissolution of the subsistence economy of the population occupying hacienda lands, which was either absorbed through the inquilinaje relation, re-settled in marginal lands, or in cases expelled altogether). What remains to be described now is the periods throughout which this process spread south, through the various provinces, as this may contribute to a better understanding of one of the causes which seems to have hampered the expansion of wheat cultivation in central Chile, namely, the supply of seasonal peon labourers.

Johnson supplies evidence indicating that population pressure and migrations started first in upper central Chile, chiefly in Aconcagua, a more mature agricultural province where wheat cultivation for exchange had for long been a well established activity, and where large districts of fragmented small-holdings existed; migrants were absorbed in marginal areas of Aconcagua itself, and in the provinces of Santiago and O'Higgins, which by the 1850s were still absorbing rural population.¹²⁸ Those migrants who were better-off and had managed to raise some money, acquired small parcels of land in the surroundings of the city of Santiago, while the poorest emigrated south, to places more out of the way, some being absorbed by the haciendas as lodgers of the inquilinos' households, others settling in villages or clearing virgin lands in the less fertile coastal areas (apparently the majority followed this path according to Johnson).¹²⁹ These migrations made possible the expansion of wheat production in the provinces of upper central Chile during the 1850s and early 1860s.

The rapid absorption of incomers to the heartland of central Chile seems to have reached an end fairly quickly, as stated above, as by the early 1860s

out-migrations from Santiago, O'Higgins and even Colchagua were beginning to take place; the expansion of wheat production in these provinces tailed off after the mid-1860s (as shown in table 8 further above). These migrations posed problems of recruiting additional seasonal labourers to the haciendas in these provinces, while at the same time provided the source of seasonal labour-power for the expansion of wheat cultivation on those estates further to the south. In fact, it was the provinces of Curicó, Talca and Ñuble that continued to expand production thereafter (as shown in table 8), drawing seasonal labourers from the trail of migrants who now came, through the lower provinces of central Chile, down to what were then the thinly populated areas of Maule and Linares, where many settled in small holdings of their own, large pockets of small proprietorship developing there.¹³⁰ By the mid-1870s, however, the rapid absorption of incomers was reaching an end in the provinces of Maule and Linares and, migrations partly proceeded further south, through Ñuble, to the virgin lands of La Frontera and beyond, or turned north, through Valparaíso, up to the mining regions of northern Chile and Peru. The expansion of wheat cultivation then continued in La Frontera and the provinces of the far south following a similar pattern to that described for the provinces of lower central Chile, drawing seasonal labourers from migrants and pockets of small-holders who had settled spontaneously on unclaimed lands. Although many of these migrants who had settled on unclaimed land were, later on, dispossessed, there were also a considerable number who were able to retain their land; the medium-size holding became a much more common form of land tenure than in central Chile.¹³¹

Back in central Chile, however, wheat cultivation in the provinces of Santiago and O'Higgins had stagnated since the late 1860s (table 8 further above), at a time when haciendas were apparently facing growing difficulties

in recruiting the large numbers of seasonal labourers needed to continue their expansion. This situation had been foreseen by Gay in the early 1860s when he insisted the haciendas should improve their methods and adopt more efficient tools to increase productivity and reduce the estates' dependence on seasonal labourers.¹³² The difficulties in procuring the growing number of seasonal labourers needed, apparently came to a head in 1871, migrations from rural areas becoming one of the major issues in the press and in the hacendados' periodicals. The Bishop of Santiago instructed priests in rural parishes to preach on the evils of emigrating, and a group of Conservative senators went as far as proposing legislation to restrict the right of rural people to emigrate.¹³³ The hacendados' complaints about migrations to the mining districts of northern Chile and Peru were particularly bitter, but it seems that there was little the government or the majority of Congress could, or were prepared to do in the way of laws. The hacendados' SNA periodicals Boletín and El Agricultor opened their columns to what soon became a fairly lengthy debate on the causes of migrations. Landowners were advised to adopt machinery and to extend and improve the system of inquilinaje so as to obtain a more reliable and stable labour force.¹³⁴

The irony in all this situation was, that despite a vast reserve of cultivable land and the existence of a larger rural population than the hacienda or the small holding could absorb as permanent workers (people were in fact emigrating), the 1850s-60s expansion of wheat cultivation was beginning to tail-off in the estates of upper central Chile. The estates could not secure enough additional harvest labourers due to the limitations of the inquilinaje and the fact that most of the labour-power was required for a very short period only. Since a growing number of rural inhabitants could not be absorbed by the small-holding and could find employment only for a very short period of time as harvest labourers

in the estates, many who found no alternative work in road and railway building or in nearby villages had no choice but to emigrate;¹³⁵ the growing population in small holdings -the main source of peon labour- could not be retained. The hacienda, therefore, seems to have been trapped between the limitations of the inquilinaje, its poor agricultural methods and tools, and its greatly unbalanced requirements of labour-power during the different seasons.

The introduction by the 1870s of a new category of hacienda worker known as inquilino-peon may be seen as an attempt to overcome some of the problems encountered in recruiting seasonal workers, by blending a few modified features of the inquilinaje with others of the peon in a rather hybrid combination, as the name of inquilino-peon itself suggests. The inquilinos-peones were recruited from amongst the members of the inquilinos' households (sons, lodgers). As we have seen in chapter 2 (section 2), they had no pasture rights, received a very small allotment of about 1/4th of a hectare, and a dwelling, on condition that they should work in whatever task and whenever called upon to do so receiving a wage which at times (e.g. harvest) amounted to the full wage as paid to outside peons. Towards the 1870s this type of worker appeared in haciendas of central Chile figuring in the hacendado's handbook as the lowest category of resident hacienda worker. Although one does not know how widespread this type of worker became, they seem, however, to have completely disappeared by the turn of the century. It is possible that this new 'type' of worker proved non-viable because there was not enough work in the estates throughout the year to employ the inquilinos-peones with regularity, except during the harvest and perhaps also in the planting season, and since their land allotments were very small indeed they depended largely on wages and therefore on regular paid employment for their sustenance, hence the disappearance of this category of hacienda worker.

Apparently the inquilino-peon did not solve the

problems encountered by the haciendas of central Chile, which by the 1870s seem to have developed as much as their agricultural methods, tools, and their mode of obtaining labour-power would allow. The evidence we have seen so far suggests that to continue to expand production would have meant introducing changes in farming practices and tools to save labour-power during the critical harvest time, as well as increasing yields and reducing losses, all of which, as we have seen, entailed quite a major change. It was still some time, however, before the first signs of such a change taking place on a noticeable scale would appear, as we shall see in due course. The inquilinaje provided the hacendados with surplus-labour which they used to expand wheat cultivation in their estates according to traditional farming methods, and without having to advance large sums of money-capital. In this sense, the inquilinaje contributed to the development of the productive forces in the hacienda, particularly during the 1850s and early 1860s when money-capital was scarce and Chile's banking system just beginning to develop. Yet, the very existence of the inquilinaje did not compel the hacendados to invest in their estates and improve the inefficient farming practices and tools, the hacienda's expansion of wheat cultivation thus soon coming to a halt. In this sense, the inquilinaje was an element which hampered the rapid transformation of the hacienda, thus contributing to slow down the development of the productive forces in the estates.

There were factors others than those I have described so far which also contributed to the stagnation of production, the effects of which may nonetheless appear contradictory unless they are seen in the light of the inquilinaje. The hacendados enjoyed very favourable credit terms and tax concessions to which they resorted once production in their estates began to stagnate. The inquilinaje made it possible for them to spend a large part of these credits and tax concessions in keeping up

an extravagant life-style, or in shares of companies set up by Valparaiso merchants, rather than in investing in their estates, the changes necessary to further the expansion of production in the haciendas being thus delayed.¹³⁶ When the price of wheat fell sharply later on in the late 1880s, these credits -financed partly by the government through export taxes on mining- enabled the landowners to maintain their life-style without having to introduce radical changes in their haciendas' overall farming methods.

In fact, the hacendados showed little interest in modernizing the agricultural methods and farming instruments employed, even during the late 1860s in the face of growing problems which led to the stagnation of production in their estates, they assumed a very passive role in what was to be after all a major exhibition, in Chile, of the world latest farming methods and agricultural machines. In 1869 some ministers of the Liberal government concerned with the need of introducing machines and new technology to the haciendas, organized an international farming exhibition in Santiago. Foreign firms exhibited more than 500 items ranging from simple hand tools to improved types of seed and livestock breeds, agricultural machinery and dairy equipment(three small Chilean foundries exhibited steel ploughs and a cultivator). The hacendados were asked to participate in the organization of the event and to display any product of their estates, plant or animal, or regional crafts, they may have considered of interest to exhibit, prizes being offered to the winners.¹³⁷ The government instructed the governors of provincial departments to form local committees of hacendados to make the necessary arrangements, but the response of the landowners was extremely disappointing; the vast majority of governors reported back to the government that their task had been made impossible through the absenteeism and almost total indifference of the landowners. Except for the governor

of Talca, all the rest reported in a way which may be typified by the letter of the governor of Melipilla, who wrote :

"Having distributed the programmes for the Exhibition, a committee of landowners was proposed according to instructions of the Intendencia and the circular of the Ministerio de Hacienda of the 4th of November last, the following landowners being asked to take part : don Joaquín Prieto, don Ramón Cobarrubias, don Aníbal Correa, don Nicolás Toro, don Manuel Tomás Tocornal, don Agustín Alcalde, don Ruperto Lecaros [...etc..] Of the aforementioned don Joaquín Prieto, don Aníbal Correa, don Ruperto Lecaros and don Agustín Alcalde declined to take part. Don Nicasio Toro is ill and don Manuel Tomás Tocornal visits his estate very seldom indeed. The rest of the abovenamed [...etc] have not even replied. This governor has therefore been unable to carry through the instructions of the Ministry." 138

The hacendados general lack of urgency in adopting machinery and new agricultural methods, however, was accompanied by a remarkable ability to contract debts by pledging their estates as security. In 1855 and following the creation of the formal banking system, the government urged by landowners created a bank especially for the purpose of providing them with credit. It was known as the Caja de Crédito Hipotecario (hereafter, the Caja), and it operated through a system of bonds which the landowner received by pledging his estate. These bonds, which paid dividends of about 5% annually, could be then sold by the landowner in the stock market (of Santiago or Valparaíso) at their face value, and through this process he received the cash, being allowed to amortize his debt over a period of up to ten years or more. 139

Since its creation in 1855 and throughout the 1860s the Caja's outstanding loans remained at a fairly steady level of seven to eight million dollars, but towards the

early 1870s, precisely as the wheat expansion came to a halt in the central provinces of Chile, the loans of the Caja boomed. The outstanding debt of the hacendados doubled by 1875, thereafter continuing to rise fairly quickly.¹⁴⁰ Moreover, inflation developed in Chile as from the mid-1870s, as seen in section 1 of this chapter. This did not affect the bonds of the Caja, however, since the government under the hacendado's pressure stepped in to guarantee their face value by offering to buy them on demand, while at the same time freezing the interest paid by the landowners. The government's purchase of the Caja's bonds enabled the landowners to continue to borrow while amortizing their debt with depreciated money, this situation continuing for the rest of the 19th and the early 20th century. By 1880 for example, and only 5 years after this process had begun, the total accumulated debt of the hacendados as acknowledged by the Caja, the debt being calculated in depreciated pesos, was nominally of 18.8 million pesos which amounted to 19.5 million dollars at the exchange rate of 1880. But if the debt had been calculated in dollars on an annual basis, thus in a hard (non-devaluated) currency, the real debt actually reached to 26.0 million dollars. The hacendados had thus evaded repayment of 6.5 million dollars between 1875 and 1880 alone (inflation had done away with 25% of their debt).¹⁴¹

In addition to their borrowing at negative real rates of interests, landowners were favoured by government's taxation policies. As from 1840 all agricultural products were exempted from export duties, and between 1855 and 1870 a series of reforms were introduced to change the existing agricultural taxes, the aim being arguably to replace the old colonial taxes paid in kind (the tithe) and to simplify the tax system.¹⁴² Until the mid-1850s three different taxes on agriculture had existed, the land tax (known as Catastro), the tax on roads and bridges (Impuesto de Puentes y Caminos), and the tithe. In addition to these taxes there were the ecclesiastical

Censos y Capellanías which consisted of perpetual liens placed voluntarily by the landowner on his property, not unfrequently at "his death-bed urged by a cleric", which yielded the Church annuities of about 5% on the value of the lien.¹⁴³

The tithe was abolished in 1855, and it was replaced by a 9% government tax on all agricultural income above 100 pesos, while the Treasury took upon itself the obligation of financing the Church. Then in 1860 the government's land tax was abolished (the Catastro). Further, in 1865 the government established a mechanism to enable landowners to free themselves from the ecclesiastical Censos y Capellanías through paying the Treasury some 40% of the value of the liens, the government thereafter assumed the obligation of continuing payments of annuities due to the Church.¹⁴⁴ Finally, in 1870 the tax on roads and bridges was eliminated.

Although the sum total of taxes paid by landowners neither increased nor decreased in any major way as the immediate result of these reforms, the proportional contribution of agricultural taxes towards the government's ordinary revenue declined. Whereas in 1851-55 some 13% of the government's ordinary revenue was composed of agricultural taxes, towards 1890 this figure had dropped to less than 1%. After 1892, following the overthrow of Balmaceda's government, the sum total of taxes paid by landowners was drastically reduced (see table 10 below). By 1900 it amounted to the figure of 50 dollars (equivalent to some 29 current USA dollars of that time, or to £6 sterling).¹⁴⁵ Nitrate had provided the government with the source of income which made possible these tax reductions and the extension of the extremely favourable credit terms of the Caja.

As has been already stated the inquilinaje did not compel the hacendados to invest in their estates, and the fact that the landowners enjoyed extraordinary credit facilities and paid little taxes made it possible for

them to maintain or improve their living standard without having to introduce changes to increase the efficiency of their haciendas. Eventually, however, these changes came, although slowly and almost imperceptibly in some cases, as we shall see in the following section.

Table 10

Total taxes on agriculture and government's ordinary revenue:

Annual average from 1851-55 to 1896-1900 (in 000's dollars)

	Total Taxes on Agriculture 1	Government's Ord. revenue 2	1 as % of 2
1851-55	1,136.8	8,611.8	13%
1856-60	1,064.6	9,952.1	11%
1861-65	1,040.1	9,932.3	11%
1866-70	1,077.2	15,501.6	7%
1871-75	1,106.2	21,888.9	5%
1876-80	1,316.9	21,332.4	6%
1881-85	1,166.5	42,642.0	3%
1886-90	973.0	41,121.2	2%
1892-95*	226.7	35,970.8	0.6%
1896-1900	1.3	34,500.4	0.003%

Source: Appendix 6, table A.6.27

*Two government's budgets exist in 1891 due to civil war.

Section 4:

Change :on the road towards capitalist production

By the turn of the 19th-century, some limited, simple, yet very important technological changes were taking place on the haciendas. Their importance may seem elusive to the eye of a contemporary who is not familiar with the very primitive tools and farming methods which had been traditionally employed by the estates. Apparently greater care in the selection of seed leading to an improvement in the type of wheat grown initiated the change. There is little evidence that bears directly upon this, but the fact that there was such an improvement appears to be the only explanation of events that were taking place at that time.

The wider use not only of the scythe (which was within reach of a wide spectrum of holdings), but also of reaping machines in some estates,¹⁴⁶ reveals that there was nothing short of a marked strengthening of the spikes and spikelets of the wheat, i.e., the kernel no longer easily shattered free from the spike, falling to the ground when the wheat was being reaped. The fact that kernels now held fast to the spike when ripe, also meant that a longer and more flexible reaping time was allowed. The extension of the time-limit for the reaping, even by only a few days, is meaningful as one is talking here of a time-span which previously had consisted of no more than a couple of weeks. This may have contributed to reduce the daily number of workers needed for the reaping, since each worker could now work for a longer period of time. Further, the total number of man/days' labour needed for the reaping seems to have been greatly reduced, probably through the introduction of such hand tools as the scythe, and of machines. The substantial increase of labour productivity in the reaping is shown by the extension of the tarea, which as we have seen was a system of piece

work that reflected the daily amount of wheat which an average skilled reaper could cut. By the mid-19th century the tarea was considered to be the reaping of 0.16 hectares of wheat, and by the early 20th-century the tarea was of 0.26 hectares, thus reflecting an increase of labour productivity of over 60%.¹⁴⁷

Moreover, in central Chile wheat yields per hectare appear to have increased by some 50% between the 1880s and the early 20th-century.¹⁴⁸ Since by the early 20th-century there was still little change in the two-field system of cultivation and fertilizers were rarely employed for extensive wheat cultivation, the increase in yields per hectare may be partly attributed to the improvement of the type of wheat, and to a reduction of losses from plant disease or wastage during the harvest. Also, the area under irrigation doubled from some 440,000 hectares in the mid-1870s, to 880,000 by the early 1900s, and no doubt this was also directly conducive to the increase in yields.¹⁴⁹ Livestock production also grew and although in general there was little change in the system of extensive breeding, the indigenous breeds were bettered through cross-breeding with Hereford cattle.¹⁵⁰

Apparently these changes began gradually to take place between the late 1880s and the early 20th-century. As has been maintained in previous chapters (chapter 3 section 5, chapter 4 section 2), these changes preceded the development of the productive forces in the hacienda, and gave rise to what may be seen as a higher transitional stage of the pre-capitalist mode of production. As is probably the case with most historical processes of this kind, there is some 'institution' which seems to contribute to the technical change. In Chile it was the Quinta Normal, which was an experimental farm in Santiago. Created by the government, sponsored initially by some enthusiastic landowners like Vicuña Mackenna, it was soon converted into an agricultural college run by professional staff. The Quinta Normal experimented with new seeds,

plants and animal breeds with the purpose of developing crops and animal features suited to the climatic and soil conditions of the country.¹⁵¹

Due to the very nature of these transformations (simple, gradual) it is extremely difficult to adventure a more precise date as to when they began to take place than has already been stated above, i.e., between the late 1880s and the early 20th-century. Certainly on some estates the changes seem to have started much earlier than on others. There is an extraordinary description of the early 1870s Hacienda San Nicolás, which was the property of Mr. Nicolas Schuth, a Valparaíso merchant. His hacienda had not only undergone these simple changes by the early 1870s, but had also mechanized.¹⁵² Yet examples such as this seem to be more indicative of the pioneering spirit of some of the Valparaíso businessmen than of any general trend, for by the 1870s few machines existed in Chile. The fact that no improvements in yields occurred prior to the mid-1880s suggests that generally speaking the changes mentioned began to take place after that date, probably towards the turn of the 19th-century.

There is another factor that weighs against a more precise dating of these changes; that is the fact that the data supplied by the Statistical Office between the late 1880s and the first decade of the 20th-century (which could reflect such changes), is virtually worthless for it is extremely incomplete, as the Office itself warns.¹⁵³ In 1906 the Statistical Office was re-organized leading to an improvement in the system of data collection and as from 1913 one can consider the information supplied to be reliable (with the qualification that this term deserves, as explained in Appendix 1.i of this thesis). Moreover, this re-organization led to a more comprehensive and efficient data collection than existed from the 1860s to the mid-1880s, and this which on the one hand is an advantage, on the other hand is a problem, as the data for the latter period is not directly comparable with

that of 1913 onwards. Nonetheless, if one bears in mind that prior to the late 1880s there is a larger percentage of unaccounted product than as from 1913, and due allowances are therefore made for this fact, then the Office's data can be examined in order to establish trends.

Table 11 :

Average annual wheat production by regions, in chosen years:
1913-14 to 1930. (In 000's quintales)

	Central Chile	Intermediate Region	South & La Frontera	Others	Total
(1884-85) *	(1,960)	(939)	(919)	(207)	(4,025)
1913-14	1,783	1,150	2,336	171	5,440
1916-17	1,870	1,225	2,540	173	5,808
1918-19	1,891	1,184	2,691	140	5,906
1920-21	1,629	1,206	2,891	141	5,867
1924-25	1,973	1,239	3,806	135	7,153
1926-27	1,969	1,199	3,503	129	6,800
1930 **	2,571	2,187	4,083	284	9,125

Source: Appendix 6, table A.6.2 .

*Data for 1884-85 supplied here as a reference only; it is not strictly comparable with the data for 1913 onwards, as explained in the text above, and in Appendix 1.i of this thesis.

**Data for 1930 only.

Table 11 (above) suggests that in central Chile wheat production declined between the mid-1880s and the first decade of the 20th-century, though the actual decline was very likely greater than that shown by the table's figures (perhaps as much as a 20% fall). It is possible that the simple technical changes described above were not sufficient, or as yet widespread enough, to allow for expansion to take place after the stagnation of the 1870s-80s. A greater diversification of produce was also probably another reason, for by now the 20th-century hacienda of central Chile had begun to cultivate a wider range of products for exchange, as we shall see below. As regards the intermediate region, there appears to have been an increase of wheat production between 1884-85 and 1913-14, but no firm conclusion can be drawn from these figures since a part of the growth suggested may be no more than the result of the better system of data collection in 1913-14.

In the case of the south and La Frontera, however, the conclusions one can draw are much more solid, the figures revealing a very substantial increase in production. Undoubtedly in this case there was no stagnation or decline of wheat production as had affected central Chile. It seems that the south and La Frontera were not affected to nearly the same extent by some of the obstacles which had previously hampered the expansion of production in the more central provinces during the 1870s. The south could absorb large numbers of incomers as independent small settlers until the late 19th-century and as inquilinos, until the first decades of the 20th-century. The expansion in the south and La Frontera was similar to that which had already taken place in central Chile in the 1850s-60s, in that, the development of wheat cultivation followed a wave of incoming migrants, which provided the labour-power to expand the cultivated area, as seen in section 3. The south was still absorbing incomers when the technical changes described above began to take place

and this enabled the estates in this region to continue to expand production, almost uninterruptedly. Further, although the wheat grown in the south yielded less and also worse quality flour than that grown in central Chile, few other crops could be grown on the southern hillsides where most of the wheat was cultivated in that region; relentless rain made it extremely difficult to grow wheat on the southern valleys due to poor soil drainage. This was probably yet another reason which contributed to the continuing expansion of wheat production in the south and La Frontera, whereas in central Chile (where a greater variety of products could be grown), wheat production had become rather stagnant.

Let us now examine the developments which followed during the first third of the 20th-century. During this time wheat production in central Chile grew only very moderately, and quite slowly, as did that of the intermediate region, although a faster growth during the latter part of the 1920s seems to have occurred. In the south and La Frontera, however, production increased quite rapidly throughout (see table 11 above). Although wheat production increased the most in the south and La Frontera, yields per hectare were highest in central Chile, and seemingly lowest in the intermediate region which contained relatively large areas of independent small-holders, such as in Maule and places of Linares and Nuble.¹⁵⁴

The area cultivated with wheat, however, increased everywhere (this reveals a trend towards expansion) as did the area sown with other products.¹⁵⁵ Central Chile cultivated most of the country's barley, as well as beans, maize, lentils, grapes and fruits typical to its moderate mediterranean climate such as olives, peaches, nuts, and the like, whereas the south and La Frontera concentrated on producing peas, oats, potatoes, and fruits typical to cool climates (apples, quinces).¹⁵⁶ As for the

intermediate region the area cultivated with vines was the largest in the country, although crop differentiation as compared to the other two regions was far less marked since most products were grown there. Yet one should not go too far in emphasizing the regional diversification and differentiation of produce. This seems to have been only the beginning of a process which was as yet in its formative years. In 1921 for example, central Chile had some 54% of its crop-land sown with wheat, while the intermediate region had 78% and the south and La Frontera 80%. If barley, however, is also considered (which was cultivated in a fairly similar way to wheat), it becomes apparent that extensive cereal production was by far the most prominent activity in all three regions occupying no less than three quarters of the cultivated area.¹⁵⁷

Following the late 19th-century slump in the price of wheat, prices of wheat and of other agricultural products rose steeply as from the early 1900s. Between 1904 and 1905 the price of wheat in dollars went up by over 70% in Chile, and the upward trend continued until 1920.¹⁵⁸ Indeed, this was also a time of a rising international wheat price but in Chile the price increased more and faster than in the international market until 1915, and thereafter until 1920, the Chilean price rose almost as much as the British which was pushed high by War-time inflation (this also applies to barley and potatoes).¹⁵⁹ From 1913 to 1920 (1913 being the first year for which index prices of Chilean manufactures were supplied by the Statistical Office), the annual index of wheat prices in Chile rose on average 14% more than that of Chilean textiles, one of the most important industries at the time.¹⁶⁰ In the light of all this evidence one could be inclined to regard these favourable price conditions for agriculture as one of the main factors behind the expansion of wheat production in the south and La Frontera. True, rising prices may have provided added incentive, but prices were not at all at the core of the forces leading

now to expansion, otherwise the remarkable increase of production which took place during the late 1920s at a time of declining prices would remain inexplicable. In fact, for most of the 1920s the absolute price of wheat fell in Chile (almost as much as the international price), and the price-index of wheat remained on average some 10% below that of Chilean textiles from 1922 to 1930.¹⁶¹ Yet, in this very period of declining wheat prices production increased. This shows that the forces behind the expansion went beyond the market price itself. Also, the area cultivated with nearly all the main crops, other than wheat, increased in all three regions, continuing to increase during the first half of the 1930s when prices of agricultural products slumped to an all time low, and this makes it abundantly clear that there was a desire for expansion.¹⁶² All in all this suggests that the forces of production were responding to a more powerful influence than can be attributed to the market or commerce alone.

The situation now arising seems quite distinct from that which had existed in the 19th-century. Besides the simple technical changes previously examined, machinery also began to become more widespread. Certainly the simple changes, such as the improvement of the type of wheat, were of paramount importance for this provided the grounds from which other more sophisticated transformations developed. As in most situations typical of transitional periods, however, these two types of changes often merge and intersect and there is evidence of fairly early mechanized estates (e.g. the Hacienda San Nicolás in the early 1870s). Still some features of these two types of change do stand-out and one can say that in most estates the use of machinery came some time after the most simple changes occurred. The use of machinery started to become more widespread in the early 20th-century, and the change between 1921 and 1930 was meaningful.¹⁶³

To perceive the importance of machinery during this early phase of mechanization, one cannot rely only on

national figures. In the topic under discussion, the actual average can be of little meaning, for the initial impulse towards innovation is seldom general, but usually has one or more places of birth, where its importance is greater and would be clouded by a national average. In 1921 for example, Santiago had 5.8 threshing machines per every 1,000 hectares of land cultivated with wheat and barley, while Colchagua had 5.2 machines, Talca 5.1, Maule (a region of predominantly small-holders) had only 2.1, Malleco had 4.5, and Llanquihue had as many as 23.8 machines.¹⁶⁴ There were fewer reaping machines than threshers everywhere, but here again the most mechanized province was Llanquihue, which also had one of the largest ratios of sowing machines per 1,000 hectares of land cultivated with wheat and barley. There were some provinces such as Malleco for example, which had a comparatively large ratio of reaping machines per hectare but few sowing machines in relation to other provinces (Talca instead had a relatively large number of threshers but few reaping machines), a picture which reveals the unequal development of change. Almost without exception, however, there was a correspondence between yields per hectare, and the number of harvesting machines per hectare in the various provinces (within the same region).¹⁶⁵ Llanquihue, which was more mechanized than Malleco had much higher yields per hectare, and the same can be said if one compares Talca with Maule for example. The more mechanized provinces had higher yields, probably not only because of the use of machinery alone, but also because mechanized estates were likely to have utilized more efficient farming methods generally (notwithstanding the influence on yields waged by other factors such as soil conditions and irrigation).

The use of machinery was part of an overall and far reaching process consisting of simple and also sophisticated changes which responded to forces which were to bring more changes still. Industrial capital

began to gain impetus by the turn of the 19th-century, as we have seen in section 1, and its development accelerated considerably as from the time of World War 1. Although the changes that took place in the hacienda were by no means as radical as those which occurred in industry or mining, the hacienda was not immune to the forces of capitalism. A market of means of production for agriculture developed. Towards the 1920s the hacendados' SNA review El Agricultor was inundated with commercial advertising of a wide range of imported and national products such as tools, fencing wire, pumps, veterinary vaccines, chemical fertilizers, certified seed, different types of ploughs, machinery, as well as a fairly extensive range of services and technical advice. Through the development of a market of means of production, a feature typical to the emergence of industrial capitalism, the process of change of the hacienda's technology accelerated. It was through this development of a market of means of production (rather than purely of a market for agricultural products), that industrial capital probably exerted its most significant influence upon the hacienda at that stage.

The change in the hacienda's technology now beginning to take place, in due course was to shake the very foundations of its mode of production, by further increasing the labour productivity of the hacendado-enterprise which eventually brought about the disintegration of the inquilinaje, as seen in previous chapters. Although an advanced phase of dissolution of the inquilinaje took many more years to occur, signs of the process leading in that direction can be observed in the first third of this century. It is apparent that a larger part of the labour-power supplied by the inquilinos' households began to be remunerated during the first decades of the 20th-century, as we have seen in chapter 2 (section 2). Certainly some movements in this direction had already taken place in the 19th-century, as in the case of the inquilino-peon for example, whom the

hacendados had attempted to settle when short of seasonal labourers. Also in similar circumstances some of the workers recruited from amongst the inquilinos' households were partially or, in exceptional cases, fully remunerated by the estates. The tools and farming methods then employed by the hacendado-enterprise, however, were not very different from those of the enterprise of the inquilino; both enterprises relied chiefly on labour-power and on primitive implements of work. Wage relations appeared then as a complement to the inquilinaje (as seen in chapter 4 section 2); once the hacendados had stepped up their inquilinos' labour obligations as much as they could afford, any additional labour-power required from their households had to be remunerated. A growing gap between the quality of the implements of work and the technology of the two enterprises was now beginning to develop in the 20th-century; hence, a new force leading to the emergence of wage relations was now in action.

Thus, some of the workers recruited from amongst the inquilino-households often began to be fully remunerated, while a small partial wage was paid to the peon obligado, or to the inquilino, if he himself decided to discharge his labour obligation with the estate. Whereas during the 1870s-80s most inquilinos were required to supply between two to three workers to labour for the estate, who usually received only their food rations and a very small cash payment (rarely receiving any money at times others than the harvest), by the first third of the 20th-century the inquilinos generally had to provide only one workman who received the customary food rations plus a partial wage of up to 10% of the on-going rate for peon workers. Other members of the inquilinos households were recruited by the estate when necessary, not infrequently receiving almost a full wage for their work. There is also evidence that some of the customary rights of the inquilinos were being curtailed, especially their pasture rights. The complex hierarchy of first, second, third..., class of

inquilinos was also being simplified.¹⁶⁶

The inquilinaje relation, nonetheless, still retained its basic features and remained in a relatively early phase of transformation by the 1930s. The technological changes in the majority of the estates were probably insufficient to carry through a further dissolution of the inquilinaje and to offset the factors favouring its perpetuation. As previously seen the inquilinaje had in its favour the fact that it required little capital advancements from the hacendado. Moreover, the inquilinaje was accompanied by a series of personal relations, and by rights and obligations sanctioned by custom which were not easily done away with, making it the corner-stone of the hacienda.

Thus, although the fundamental characteristics of the inquilinaje were generally retained during the first third of the 20th-century, the amount of non-remunerated labour-power the inquilinos supplied was smaller than before. Some members of their households were now being paid almost the full wage of peons, while the inquilinos' customary rights were to some extent curtailed. In addition to this, during the first third of the 20th-century the haciendas of central and intermediate Chile settled few new inquilinos.¹⁶⁷ A growing number of the inquilinos' offspring had to emigrate (as did the sons and daughters of independent small-holders) to the largest cities of central Chile or to the mining districts of the north. By the first third of the 20th-century the inquilinaje may have been very much alive but the forces leading to its disappearance were beginning to gather momentum.

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The rapid growth of a mass of urban labouring poor thus became one of the most distinctive features of early

20th-century Chile. As we have seen, it was the result of a process which had started much earlier, stemming back to the growth of commerce and the expansion of wheat cultivation in haciendas which separated part of the rural population from the land. Migrants from the households of independent small-holders or inquilinos arrived at Santiago and Valparaíso where many could find neither regular employment nor housing, ending up in the over-crowded city slums (conventillos) living in appalling conditions.

The organized urban proletariat was first born in the mining north (and in the coal mines of Lota in the south) by the late 19th-century, and it emerged in the largest cities of Santiago, Valparaíso and Concepción by the beginning of the 20th-century. As the number of factories increased, workers began to share a common experience and identity, and they began to unionize. Wages were indeed very low and the average worker spent about two thirds of his pay on food alone.¹⁶⁸ A wave of strikes and social unrest spread following the steep rise in food prices during the early 1900s. In places the protest was ruthlessly repressed, as in Valparaíso in 1903, and again in Iquique in 1907, when the army opened fire on a crowd of 20,000 marchers. In Santiago there was a week of almost direct class warfare in 1905 when the mass of urban poor took over the city while the local army garrison was absent. The younger members of the conservative Club de la Unión were issued with firearms to restore order, and the shooting which followed yielded hundreds of dead and wounded.¹⁶⁹

The traditional upper class (i.e., the Santiago/Valparaíso landed/merchant/financial core) seemed to have entered into the 20th-century increasingly alienated from the social changes which were taking place around them, and it was held they indulged more than ever in extravagances and ostentation.¹⁷⁰ They, and the wealthy hacendados of central Chile in general, increased their

borrowing at negative interest rates from the Caja to a remarkable extent,¹⁷¹ and it is maintained that a large proportion of this money was squandered although it is possible that also a significant part may have ended up in industry or commerce through the stock market.

The turn of the century also saw the development of a growing 'middle-class' ; an upper 'middle-class' composed of high rank employees and professionals who came largely from families of provincial fundo owners (or small hacienda owners), and a lower 'middle-class' composed of small shop-keepers, well-off artisans and low rank employees. This 'middle-class', seeking a share of the wealth and power,¹⁷² became increasingly critical of the traditional upper class. This, together with the growing number of urban poor, and the emergence of an organized proletariat with its own political organizations, provided the basis for an unprecedented social and political change in the country, the effects of which the hacienda managed to survive several decades yet.

A relentlessly rising cost of living, which for the poor and lower 'middle-class' manifested itself in high food prices, made the hacendados an easy target for criticism and political attack. By the first decade of the 20th-century social issues began to be widely discussed by intellectuals and the press (the cuestión social, as it was known then); literature highly critical of the hacendados being produced.¹⁷³ Landowners were blamed for the rising food prices and for inflation, which they were alleged to foster in order to continue their borrowing from the Caja at negative interest rates, for dilapidating the country's resources and for keeping their inquilinos in bad conditions. The hacendados were also seen to use their customary authority to exert pressure upon their inquilinos to make them vote for specific candidates.¹⁷⁴ Perhaps more importantly, for the 'middle-class' they personified the image of an authoritarian

Santiago based landed aristocracy (the oligarquía terrateniente) seemingly locked in the past, addressing their fellow citizens as if they were their inquilinos, governing the country as if it were a large hacienda.

A wave of protest and demands for greater democracy spread towards 1920. The end of the World War and the invention of synthetic nitrate had led to cuts in production, the closure of some nitrate fields and redundancies amongst workers. Large numbers of workers and their families fled the north to central Chile where the nitrate crisis had already hit industry creating unemployment. The remoteness of the northern mining towns had apparently allowed the miners to develop a politicized class culture, free from the ideological influences of the upper or the middle-class.¹⁷⁵ On arrival to central Chile the unemployed miners were quick to rebel against the type of authoritarian/paternalistic society they now encountered, contributing to heighten the awareness of the mass of industrial workers and urban poor with their experience.

Major political re-alignments in the traditional parties had taken place by the time the 1920 presidential election approached. The Liberals had split and the faction known as Alianza Liberal, led mainly by young intellectuals and professionals, decided to support a populist/nationalistic reformer who was pledged to effecting changes in favour of the middle-class and the poor and had rallied support through his challenging oratory and political style. He was Arturo Alessandri, the grandson of an Italian circus actor who had settled in Chile as a grocer, an entirely unprecedented background for a candidate to the Presidency.¹⁷⁶ More unprecedented still, Alessandri won the election, amidst a wave of discontent amongst the workers and the first signs of overt complaints amongst inquilinos on some estates. In some haciendas of central Chile the

inquilinos were called upon to join urban workers in trade unions.¹⁷⁷ The scene was set for even more unpleasantness for the hacendados.

The conflict between the Alessandri government, and the Santiago/Valparaíso upper-class core and the hacendados in general, followed almost immediately. The government proposed the separation of State and Church, a presidential instead of a parliamentary form of government, the creation of a labour ministry, of industrial tribunals and of a national system of social security; a constitutional reform to the concept of property rights to allow the government to expropriate land in certain cases of public interest; the creation of a central bank with power to control the exchange rate of the peso and to issue regulations on private banks. The Alessandri government, moreover, proposed that inquilinos and all rural workers should be paid a higher wage in cash; that they should be included in the national social security system and that they should be allowed to unionize.

The hacendados' association, the SNA, was more than alarmed. In May 1921 in an apparently stormy meeting the SNA discussed the creation of ad-hoc vigilantes to protect their workers from the influence of "outside agitators", and discussed steps to oppose the idea of their inquilinos joining urban workers in unions.¹⁷⁸ They also sent a strongly-worded letter to the President stating that "the interest of the entire country commands that those who labour the land should not unionize in solidarity with industrial workers or miners, or with transport or city workers in general, for this may threaten the source of food of the population at large and lead to famine amongst the poor".¹⁷⁹ Alessandri replied agreeing entirely that inquilinos should not join urban workers in the same unions, but that they should nonetheless be encouraged form their own unions. Further, he insisted landowners should pay them higher wages and provide them with better

conditions of living altogether, adding that "I want also that, once and for all, an end be put to the common practice of the patrones of putting pressure upon their inquilinos and workmen to make them vote for specified candidates",¹⁸⁰ After two years of opposition from the Conservative majority in Congress, and having achieved few if any of his objectives, Alessandri was forced to resign and seek refuge in Italy.

A traditional right wing military junta succeeded him but the leaders were in turn soon deposed by another coup led by younger nationalistic officers from the army who supported some of the changes proposed by Alessandri, as far as they were carried out in an 'orderly manner'. After months of political turmoil a new constitution was enacted and General Ibanez, himself one of the leading nationalistic army officers, was elected to the presidency in 1927. He cracked down on the political organizations of left and right, but a social legislation more advanced than in any other Latin American country was also enacted under his government including many of the proposals outlined in Alessandri's programme.¹⁸¹ Although at first the Santiago/Valparaíso upper-class core bitterly opposed these changes, they eventually had little choice but to adapt and come to terms with measures which seemed increasingly necessary to re-structure the Chilean state in alignment with the needs of the time. Hence, they finally fostered the idea of having a government with a greater say in the economy through a central bank, and through subsidies and direct investment in key industries, and through tariffs protecting industry (and agriculture) from foreign competition.¹⁸² Once Ibanez was deposed and formal democracy restored, they even went as far as coming to terms with the idea of minimum wages and a national system of social security, but not, however, for rural workers. The very idea that inquilinos should be paid statutory wages in cash or allowed to unionize remained totally unacceptable,¹⁸³ for this threatened the

very foundations of the hacienda's mode of production which although by then was changing, as we have seen, it was still very much dependent on the inquilinaje not only as a source of non-remunerated labour-power, but also as the pillar upon which the social and political stability of rural Chile rested.

In fact, the hacienda seems to have remained free from conflict as compared to urban Chile during the turmoils of the 1920s. There were growing disputes (and even strikes in a few estates) and numerous complaints came to light when inspectors of the Labour Ministry visited the estates as Loveman shows,¹⁸⁴ but there was less unrest than amongst city workers. Generally the inquilinos' discontent was about the curtailment of their customary rights, and only secondarily about low wages, the main source of dispute being one in which the inquilinos resisted losing the little they had, which at that stage did not depend as much on wages as on their possession of a land allotment and pasture rights, and on being able to remain in the land where they and their forefathers had lived for generations. The roots which the inquilino had with the estate and the land remained very strong. The hacendados in turn depended on the inquilinos for the day-to-day running of their estates, and in order to maintain their status the inquilinos generally were diligent, obedient, and seldom failed in deference to the upper class, as McBride stated.¹⁸⁵

Perhaps the Santiago/Valparaíso landed upper-class core, whose interests had for long been diversified in commerce, banking or industry itself, could have been more easily accommodated to reforms than than the hacendados or the fundo owners in general who depended chiefly on their estates for income and status. But the Santiago/Valparaíso core did not give up their privileges in the countryside, nor did they desert their class-related hacendados and the fundo owners under the pressure of the new 'urban politicians'. It was still too early for such a thing to

have happened. The attitudes of the upper class as a whole still owed much to the 19th-century Santiago landed aristocracy, who in turn owed much of its spirit and views to the hacienda.¹⁸⁶ This is probably why in 1929 McBride thought he saw the hacendados occupying most of the high positions in Congress, the Government and society. As he witnessed one of the most crucial turning points in Chilean politics he asked himself : "Is the hacendado still in the saddle?"¹⁸⁷ This is not an easy question to answer today half a century later, and far less so then, when history had not yet proved the final course of events.

Today it seems that the hacendados McBride saw in such high positions were no longer mere landowners; many of the wealthiest hacendados of central Chile had moved long ago into other spheres of interests. Whilst remaining as landowners they had acquired directorships in joint stock banks, commercial concerns, mining, and finally in industry. When in the early 1930s McBride was writing about the flurry of the landowners' reaction against reforms, the most conspicuous 'hacendados' of central Chile had a hand in industry, in partnership with foreign capital. Many others, however, (amongst whom one may count those who owned less valuable estates, such as the fundo owners) continued to depend on agriculture as their main source of income and wealth. The latter kept all in all, a much more cautious approach to the events that followed in the 1940s-60s. Through their organization, the SNA, they often had to lobby the politicians and fight for their interests not to be affected by government policies, dictated chiefly by the needs of industrial capitalism and the Santiago/Valparaíso core allied to foreign capital.¹⁸⁸ As from the 1940s the governments fixed agricultural prices keeping them down in order to direct resources towards industry, and avoid wage pressures upon the industrial and service sectors.¹⁸⁹ It seems that during this period (1940s-60s)

the inquilinaje was again called upon to play an important role, enabling the hacendados to bear with low relative agricultural prices, and to continue to produce with reduced sums of capital.

NOTES : CHAPTER 5

- (1) See Edwards, A.:1966, chapter 4; Galdames, L.:1945, pp.299-303; McBride, G.:1936, pp.187-90.
- (2) See Vitale, L.:1969, vol. 3, pp.96-98; Pregger Roman, C.: 1975, pp.26-30; Leon Echaíz, R.:1971, chapter 2. For a study on colonial trade and the economic basis of Santiago, Concepción and La Serena, see Carmagnani, M.:1973, part 3.
- (3) See Donoso, R.:1967, chapter 4; and Pregger Roman, C.:1975 chapter 2.
- (4) McBride, G.:1936, pp.187-89; Galdames, L.:1945, p.217. On the drafting of soldiers see also Tscherebilo, S.:1976 pp.21-24.
- (5) See Perez Rosales, V.:1972, chapter 9 (tells how he armed the workers of his estate to fight the bandits in Teno).
- (6) See Pregger Roman, C.:1975, chapters 2-3.
- (7) On Portales, his government and the 1833 constitution see Donoso, R.:1967, chapters 4-5; Jobet, J.C.:1955, pp.32-34; Edwards, A.:1966, chapters 7-8. Only citizens with property and a minimum level of income were enfranchised by the 1833 constitution.
- (8) See Pregger Roman, C.:1975 chapters 2-3. On agricultural exports prior to the mid-19th century see Sepúlveda, S.:1959, chapter 1 (the late 1840s boom of exports of Chilean wheat and flour are discussed in section 2).
- (9) See Pregger Roman, C.:1975, pp.34-39, 54-55.
- (10) For references to urban industry in Chile prior to the 1870s see Kirsch, H.W.:1973, chapter 1; Palma, G.:1979, chapters 1-2; Fernandez, M.:1978, pp.176-77. On pre-1870s mining in the north of Chile see Bermudez, O.:1967 chapters 2-3; Donald, M.B.:1936, Passim; and Fernandez, M.:1978, pp.79-81. For a general description of Santiago, its people and their businesses by the mid-19th century see amongst others Bauer, A.:1975, chapter 2, and Perez Rosales, V.:1972, chapter 8.
- (11) On the conditions for the establishment of an average rate of profit see Marx, K.:1959, vol. 3, chapter 10 (see also chapter 36 on usurer capital and interest in pre-capitalist societies).

- (12) See Bauer, A.: 1970, pp. 177-89; Pregger Roman, C.: 1975, p. 39; and Mayo, J.: 1979, p. 289.
- (13) On the various occupations, habits and class distinctions, presence of the Church and general characteristics of life in Chile during this period see Galdames, L.: 1945, chapter 13. For population data see Hurtado, C.: 1966, pp. 165-71, and Johnson, A. L.: 1978, pp. 373, 451-53, 620.
- (14) On migrations see Tscherebilo, S.: 1976, chapters 1, 5; and Johnson, A. L.: 1978, chapter 3. For a narrative of life in Santiago and Valparaíso during the 1820s see Graham, M.: 1824 Passim. Perez Rosales, V.: 1972 chapters 1-2 describes changes that took place in Valparaíso and Santiago between the 1820s and the 1850s.
- (15) See Johnson, A. L.: 1978 chapter 4. Aspects related to agriculture production during this period are examined in further detail in sections 2 and 3 of this chapter.
- (16) See Palma, G.: 1979, chapter 2.
- (17) For a critique of Frank's approach to the subjects of capital, merchant's capital, and capitalism (as related to Chile and Brazil), see Romano, R.: 1971 Passim.
- (18) If commerce resulted in capitalism, argues Marx, "then ancient Rome, Byzantium, etc., would have concluded their history with free labour and capital, or rather would have entered upon a new history" (Marx, K.: 1964, pp. 509-10; also Marx, K.: 1973, p. 506).
- (19) "The development of commerce and merchant's capital gives rise everywhere to the tendency towards production of exchange value, increases its volume, multiplies it, makes it cosmopolitan, and develops money into world money. Commerce, therefore, has a more or less dissolving influence everywhere in the producing organization, which it finds at hand and whose different forms are mainly carried on with a view to use value. To what extent it brings about a dissolution of the old mode of production depends on its solidity and internal structure. And whither this process of dissolution will lead, in other words, what new mode of production will replace the old, does not depend on commerce, but on the character of the old mode of production itself. In the ancient world the effect of commerce and the development of merchant's capital always resulted in a slave economy; depending upon the point of departure, only in the transformation of a patriarchal slave system devoted to the production of immediate means of subsistence into one

devoted to the production of surplus-value. However, in the modern world it results in the capitalist mode of production. It follows therefrom that these results spring in themselves from circumstances others than the development of merchant's capital". (Marx,K.:1959, vol. 3, pp.326-27). See also Marx,K.:1973, pp.508-12.

(20)Marx,K.:1959, vol. 3, p.322.

(21)Ibid. pp.320-21. On the effects of merchant's capital on under-development see Kay,G.:1975, chapter 5.

(22)See Marx,K.:1959, vol. 3, chapter 20; and Kay,G.:1975 chapter 5.

(23)See Marx,K.:1959, vol. 3, pp.326-27.

(24)Ibid. pp.328-30. See also Dobb,M.:1978,pp.124-39.

(25)Marx,K.:1959, vol. 3, p.329.

(26)Ibidem. Marx also refers to this as a three course process of transition, distinguishing two variants in the way merchants can establish sway over production. "First, the merchant becomes directly an industrial capitalist. This is true of crafts based on trade, especially crafts producing luxuries and imported by merchants together with raw materials and labourers from foreign lands, as in Italy from Constantinople in the 15th-century. Second, the merchant turns the small masters into his middlemen, or buys directly from the independent producer, leaving him nominally independent and his mode of production unchanged. Third, the industrialist becomes merchant and produces directly for the wholesale market".(Marx,K.:1959, vol. 3, p.330). See also Marx,K.:1973,pp.505-06.

(27)Although merchant's capital existed and developed in Chile during the Spanish colonial period it was then restricted, and its expansion limited by, trading laws which allowed commerce only in some products and only with Spain(trade within the colonies was also restricted to some products). In this light,the post-1830s mercantile expansion following the abolition of the colonial trade restrictions and the arrival of the British commercial houses, can be seen as a higher phase in the development of merchant's capital in Chile, merchant's capital now emerging as a free state of capital in Chile. For a study on the post-1830s expansion of Chile's foreign trade and the role of merchants see Pregger Roman,C.:1975, chapters 2-3.

(28)See Kay,G.:1975, pp.99-100. See also Pregger Roman, C.:1975, pp.34-39.

- (29) See Edwards, A.:1966 pp.22-25; Bauer, A.:1975, pp.42-43 and Pinto, A.:1962, pp.38-40.
- (30) Neither was there in Chile a separation between free burghers and a landed nobility, which in Europe was one of the factors that contributed to the emergence of a common class-identity between the burghers (See for example Marx, K. and Engels, F.:1964, part B, p.68, and Merrington, J.:1978 Passim).
- (31) On the spending habits of the Santiago landed aristocracy see Encina, F.:1955 Passim; Pinto, A.:1962 pp.74-75. Also Perez Rosales, V.:1972, pp.183-85 gives a vivid account of the upper class's consumption of 'imported goods only' as a show of status. See also Bauer, A.:1975 chapters 2, 7 and 8. (contains descriptions and evidence on income and expenditure of some hacendado families).
- (32) See Bauer, A.:1970, pp.177-78.
- (33) Ibidem. See also Pregger Roman, C.:1975, p.39, and Mayo, J.:1979, p.289.
- (34) As Marx noted in the case of pre-capitalist societies, merchant's capital establishes its dominance and appropriates the lion's share of the surplus-product, "partly because under those earlier modes of production the principal owners of the surplus-product with whom the merchant dealt, namely the slave owner, the feudal lord, and the state (for instance the oriental despot) represent the consuming wealth and luxury which the merchant seeks to trap" (...) Marx, K.:1959, vol. 3, p.325.
- (35) It is apparent that by the mid-19th century there were considerable differences in wealth amongst the hacendados in general and the Santiago landed aristocracy in particular. Whereas some families of the Santiago landed aristocracy owning rich and well located estates (in cases more than one property), began investing in shares of joint stock companies set up by Valparaíso merchants without prejudicing their lavish consumption, others were barely able to keep up with the expenses of their upper-class life style. Owners of haciendas or fundos of the lower provinces of central Chile (Curicó, Talca) were not even able to afford a Santiago life-style until the late 19th century. See Bauer, A.:1975, p.49, and Gay, C.:1973, vol. 1, pp.102-10.
- (36) See Pregger Roman, C.:1975 chapters 2-3; Bauer, A.:1975 pp.36-39; and Tornero, R.:1872, pp.463-67.
- (37) See Pregger Roman, C.:1975, chapter 3 (p.105); O'Brien, T.F.:1980 Passim; and Fernandez, M.:1978, pp.79-81.

- (38) See Pregger Roman, C.:1975, pp.110-14,142.
- (39) Data on Chile's commercial balance during this period in Appendix 6 table A.6.28. See also Pinto, A.:1962, p.29 and Pregger Roman, C.:1975 pp.45-51.
- (40) See Pregger Roman, C.:1975, chapter 4.
- (41) Ibidem.
- (42) On the 1859 crisis see Vitale, L.:1969 vol. 4, pp.245-50; and Galdames, L.:1945, pp.424-36.
- (43) See Pregger Roman, C.:1975, p.88. The crisis of 1859 gave way to the so-called República Liberal (1860-91).
- (44) On the integrated Chilean economic 'elite' (as it is often described) see Pregger Roman, C.:1975 chapters 4 and 5; Kirsch, H.W.:1973, pp.113-38. See also Bauer, A.:1975 chapters 7-8.
- (45) Most of the shareholders of the main companies were apparently the same people. See for example Pregger Roman, C.:1975 appendix 6.
- (46) On Chile's export economy during the 1860s see Pregger Roman, C.:1975 chapter 5. On the impact of the railway on migrations see Oppenheimer, R.B.:1976 pp.298-99, 340; and Johnson, A.L.:1978 pp.175-83. On the government's sources of revenue see Fernandez, M.:1981, pp.17-21 (taxes on agriculture are examined in section 3).
- (47) On the growth of cities (chiefly Santiago, Valparaíso and Concepción) see Johnson, A.L.:1978 pp.446-47, and Tornero, R.:1872 Passim. On stockholders of the Ferrocarril Urbano, several of whom were landowners, see Pregger Roman, C.:1975 appendix 6.
- (48) See Pregger Roman, C.:1975 chapters 5-6, and Sater, W.F.:1979 Passim.
- (49) Sater, W.F.:1979 p.71.
- (50) Ibid. pp. 78-84. See also Fetter, F.W.:1931 chapter 1. The devaluation of the peso is apparent in the data contained in Appendix 4 table A.4.1 of this thesis.
- (51) See Pregger Roman, C.:1975 pp.169-70. On the simple technology employed for mining prior to the 1880s see Fernandez, M.:1978 pp.177-90.
- (52) See Pregger Roman, C.:1975 pp.163-67. On the characteristics of credit in Chile (until the 1920s) see also Kirsch, H.W.:1973 pp.10-13, 101-09.

- (53) On the systems of payment and the general condition of mining workers in the north see Reyes, E.: 1973, pp. 83-96. See also Ramirez Necochea, H.: 1970, pp. 116-18.
- (54) Merchant's capital tightened its grip over the small producers especially in times of economic crisis, such as in the mid-1870s for example (see Sater, W.F.: 1979, p. 71).
- (55) Marx, K.: 1959, vol. 3, p. 330.
- (56) See Kirsch, H.W.: 1973 chapter 1. See also Carmagnani, M.: 1971, pp. 1-20. On migrations to the cities, artisanship and casual labour during this period see Johnson, A.L.: 1978, pp. 443-79.
- (57) On the development of industry and of the organized industrial proletariat during this period see Kirsch, H.W.: 1973, pp. 73-74, 80-81. On the emergence of the workers political organizations see amongst others Jobet, J.C.: 1955, pp. 135-49, and de Schazo, P.: 1977 Passim.
- (58) See Kirsch, H.W.: 1973, pp. 116-17, 134-72.
- (59) See Kirsch, H.W.: 1973, pp. 97-100, 139-48. See also Muñoz, O.: 1968, chapter 1.
- (60) This interpretation can be largely attributed to Bauer who has written one of the few comprehensive works on the pre-1940s Chilean hacienda (see Bauer, A.: 1970 Passim, and 1975 chapters 3-5). Also Hurtado, C.: 1966 chapter 4, takes a similar view to Bauer's on the role of wheat exports, influencing some of the conclusions of Kay, C.: 1971, pp. 109-12.
- (61) On wheat exports prior to the 1840s see Carmagnani, M.: 1973 chapter 1; Sepúlveda, S.: 1959 chapters 1-2.
- (62) The number of ships calling at Valparaíso doubled with the California gold rush (see Veliz, C.: 1961, p. 94). On the California gold rush and its general impact on Chile see Monaghan, J.: 1973 chapter 4 and pp. 258-59; Vitale, L.: 1969 vol. 3, pp. 143-44; Galdames, L.: 1945 p. 104 and Perez Rosales, V.: 1972 chapters 13-18. See also Pregger Roman, C.: 1975, pp. 38-39 who argues that it was the Valparaíso merchants (rather than the hacendados) who took the lion's share of the profits made during the boom of wheat and flour exports, especially the British commercial houses such as Meyers, Bland & Co.
- (63) See Bauer, A.: 1975 p. 64 (also Bauer A.: 1971 pp. 1069-74).
- (64) See Bauer, A.: 1975, p. 64. See also Pinto, A.: 1962 pp. 28-29.

- (65) Encina, F.: 1945 vol. 13 p. 534, calculates that the total area cultivated with wheat in Chile during the early 1850s reached some 155,000 hectares. According to this the 65,000 hectares presumably used to produce exports (suggested by Bauer), would have represented more than a third of the country's crop-land sown with wheat. The total number of hectares needed for producing exports during 1851-55 was probably smaller than Bauer suggests, perhaps some 35,000 hectares (seed included) since on average 378,000 quintales of wheat and flour were exported annually during that period, and yields per hectare at the time reached some 12-15 quintales. There were years when exports were larger than the average stated, thus all in all the proportion of the area cultivated with wheat engaged in producing exports varied between some 20-35%. It is impossible to produce a more accurate estimate for no statistical data on agriculture production exist for this period. The first year in which the Statistical Office supplies useful data on the area cultivated is 1866. In this year the total number of hectares sown with wheat reached over 400,000, (Appendix 6 table A.6.1) which suggests that a very rapid growth of wheat cultivation took place during the 1850s and early 1860s. Johnson, A.L.: 1978 pp. 83-84 provides further evidence of the growth of wheat production prior to the 1860s.
- (66) Gay, C.: 1973 vol 1, p. 276 refers to export to California and Australia as being a very important development which showered some hacendados with a small fortune (see also p. 282 of the same volume). Perez Rosales, V.: 1972 pp. 364-66 comments on the sudden wealth of those who possessed livestock or grain which, prior to the export boom, were worth little in Chile. He also describes the air of excitement in Santiago following the news that gold had been discovered in California (Rosales himself went to California in search of gold, as several thousands of Chileans did).
- (67) See Gay, C.: 1973 vol. 1 pp. 34-35, and vol. 2 pp. 79-80.
- (68) The state of the single track road between Santiago and Valparaíso was appalling. The 100 mile route (by far the busiest in the country) was covered in about a week by the ox-carts transporting produce, and freightage charges were very high. In other routes conditions were worse and often there was no way of transporting produce other than on mule-back. See Gay, C.: 1973 vol. 1 pp. 313-14, and vol. 2 pp. 245-46, and chapters 6-8.
- (69) On the system of compra en verde see : Gay, C.: 1973 vol. 1 pp. 185-88; and (in connection to middlemen and food shortages in Aconcagua) see Tscherebilo, S.: 1976 pp. 110-11, 127; and see also

Bauer, A.: 1970 pp. 188, 204-08 (refers to compras en verde in Talca, and to middlemen being connected to the Valparaíso merchants).

- (70) The following description of the labour process in connection to wheat production is a summary of Gay's detailed writings on this subject (Gay, C.: 1973 vol. 1 chapter 13 and pp. 272-79, and vol. 2 pp. 17-51). Also Encina F.: 1945 vol. 13, pp. 530-36 provides information on some aspects of the labour process.
- (71) See Gay, C.: 1973 vol. 1 p. 198-203.
- (72) See Gay, C.: 1973 vol. 1 p. 152.
- (73) See Bauer, A.: 1971, p. 1072.
- (74) See Tscherebilo, S.: 1976 p. 96. See also Johnson, A.L.: 1978 chapters 5, 13.
- (75) See Tscherebilo, S.: 1976, pp. 83-84; Johnson, A.L.: 1978 pp. 106-11, 125-28, 157-58.
- (76) Quoted from Bauer, A.: 1975 pp. 147-48.
- (77) The building of roads, bridges and railroads was also a source of employment for peon labourers. See Tscherebilo, S.: 1976 pp. 117-21; Oppenheimer, R.B.: 1976 pp. 214-18; and Whaley, J.H.: 1974 pp. 74-82.
- (78) Kay, C.: 1971 p. 109, considers the mid-19th century as a turning point in the historical development of the hacienda.
- (79) See Kay, C.: 1971 pp. 58-59, 206. (Commercial wheat production, stimulated by foreign demand had a similar effect upon the Polish manor; see Kula, W.: 1970 Passim).
- (80) See Bauer, A.: 1975 pp. 64-65; Kay, C.: 1971 pp. 109-10; and Sepúlveda, S.: 1959, pp. 43-48.
- (81) Table 12 : Average annual exports of various agricultural products: 1844-48 to 1861-65.
See overleaf

(note 81 continued)/

Table 12

Average annual exports of various agricultural products:

1844-48 to 1861-65 (in 000's dollars)

	Livestock (a)	Leather & Wool	Wheat & Flour	Barley	All Others	Total (b)
1844-48	111	322	881	59	236	1,609
1849-50	148	352	2,587	227	455	3,769
1851-55	177	388	3,808	877	612	5,862
1856-60	298	1,562	2,936	612	617	6,025
1861-65	433	1,503	4,687	771	629	8,023

Source : Appendix 6, table A.6.14

(a)Includes livestock, lard, salted meat, butter.

(b)Chile's total agricultural exports.

(82)The data on wheat production supplied by the Statistical Office suggests an increase of about 100% between the early 1860s and the mid-1870s (see Appendix 6 table A.6.1). No doubt a substantial increase of wheat production did take place in this period, but it was probably not as large as 100% since the Office's data for the first half of the 1860s is less reliable than that for the following years; a larger proportion of wheat production remained unaccounted for during the first half of the 1860s, and part of the increase of production suggested by the Office's figures may be only a reflection of the more efficient collection of data as from the mid-1860s. (On the system of data collection used by the Statistical Office during this period see Appendix 1.i.)

(83)See Johnson,A.L.:1978 pp.214-15. For a study on the importance of the railway in central Chile see Oppenheimer,R.B.:1976, pp.327-34.

- (84) See Bauer, A.:1970 p.160 (see also Bauer, A.:1975 p.68). For a study on the construction of the railway and its effect on agriculture in the south and La Frontera see Whaley, J.H.:1974 chapters 4-5.
- (85) See Bauer, A.:1970 pp.141-44 (also Bauer, A.:1975 chapter 3).
- (86) Source of data on wheat and flour exports in 1864 and 1865 : Appendix 6, table A.6.12.
- (87) See Tscherebilo, S.:1976 p.126.
- (88) Anuario Estadístico 1968 : (Estadística Agrícola, No. 9) p.301.
- (89) Percentage figures on agricultural exports as a source of foreign earnings: calculated from data in Appendix 6, table A.6.29. The data on the relative importance of wheat and flour within Chile's total agricultural exports: calculated from Appendix 6 table A.6.14.
- (90) See Tscherebilo, S.:1976 p.129, and Johnson, A.L.:1978 p.84, 407.
- (91) Percentage of produce exported : calculated from data in Appendix 6 tables A.6.1 and A.6.12.
- (92) On the growth of towns and cities see Johnson, A.L.:1978 chapters 14-15, and Tscherebilo, S.:1976 chapter 5. Tornero, R.:1872 Passim describes many of the changes taking place in Santiago and Valparaíso during the early 1870s, amongst which were the creation of the Empresa de Agua Potable and the Compañía de Gas, the Ferrocarril Urbano, the building of the Opera House, the development of the new residencial area of República in Santiago; there was a general boost to the building industry.
- (93) These chacras and quintas served also as a stepping stone, and as a source of casual employment for, migrants arriving from rural areas into the cities. See Johnson, A.L.:1978 pp.459-66.
- (94) See Donoso, R.:1963 chapter 19 (and Donoso, R.:1967 vol. 1 chapter 20); Correa Vergara, L.:1970 p.9, Lamour, C.:1972 pp.98-99, and McBride, G.:1936 pp.203-04.
- (95) See Bauer, A.:1975 pp.70-71.
- (96) Ibidem
- (97) Bauer, A.:1975, pp.68-74.
- (98) Hurtado, C.:1966 p.71.

(99)The following is a reproduction of Hurtado's erroneous table on Chile's wheat production by regions (in 000's quintales).

	1860	1870	1880	1885	1908
Norte Chico *	74	81	150	144	
Nucleo Central **	997	1,682	3,218	2,615	2,414
Concepcion y La Frontera ***	102	216	70	897	1,807
Los Lagos ***	29	32	124	193	396
Los Canales *	19	27	78	144	44
TOTAL	1,221	2,037	3,639	3,993	4,736

(Source : Hurtado,C.:1966, p.161).

* In the regional aggregation used in this thesis these areas fall under the heading "Others".

**Corresponds approximately to the central plus the intermediate regions as defined in this thesis (Appendix 2).

***These two areas together correspond approximately to the region defined in this thesis as the "south and La Frontera".

(100)See Pesos y Medidas Oficiales, in any Anuario Estadístico(also in the Sinopsis Estadística as from 1902).

(101)See Hurtado,C.:1966, p.161. The data for 1908 reported by Hurtado is also misleading . See Appendix 1.i.

(102)I have been unable to obtain the data for the years missing in table 7. Nonetheless, there is evidence that, in terms of individual years, the output of 1873 was never exceeded in central Chile during the period considered(i.e. 1860-1885). In fact in at least 12 out of the 25 years comprised between 1860 and 1885, the output of 1873 was not exceeded in central Chile(see Appendix 6 table A.6.2). The data aggregated for the whole country for the remaining 13 years (Appendix 6 table A.6.1) shows that only in 1882 was production higher than in 1873, and table 7 (in the text above) suggests that any increase of Chile's total wheat production was the result of the rising output of the south and La Frontera.

- (103) See Johnson, A.L.:1978, p.206. (Also Whaley, J.H.:1974 maintains that the specific regional analysis has little attention from scholars). See Appendix 2 of this thesis.
- (104) Percentage figure on the decline of wheat and flour exports, calculated from data in Appendix 6 table A.6.12. The fall in the international price of wheat is shown in Appendix 6, table A.6.15.
- (105) Prices of wheat in Appendix 6 table A.6.15.
- (106) See Bauer, A.:1970, pp.159-60.
- (107) Oppenheimer, R.B.:1976 pp.48-51, 506.
- (108) On the effects of the floodings of 1877-78 see Sater, W.F.:1979, pp.72-79. For data on annual rainfall see Appendix 6 table A.6.31.
- (109) See Gay, C.:1973, vol. 1, pp.279, and vol. 2 pp.28-34, 41-43.
- (110) See Gay, C.:1973 vol. 2 pp. 28,31.
- (111) Gay, C. Ibid. pp. 35, 41-42 (recommends a simple method to keep the stalks dry, and one which was used in Chiloe). Some of the simple precautions recommended by Gay were : treat the seed with a solution of copper sulphate or use lime, to combat the polvillo; cover the stalks with a water-proof material; keep the barns clean, and clean them thoroughly before storing the wheat in order to avoid insects; treat the walls of barns with chemical substances to drive the insects away (the only precaution taken by haciendas was to occasionally spread chilli peppers on the ground, Gay maintaining that this was ineffective to keep insects and rats away).
- (112) Perez Rosales, V.:1972 p.288 writes that "From time to time one can note that the various parts of the country are invaded by different creatures which come and go without anyone so far being able to explain the cause. There are years of birds, years of rats, ants, locusts, flees, etc".
- (113) See Gay, C.:1973 vol. 1 pp.280-81, and vol. 2 pp.22-23. See also Bauer, A.:1970 pp.216-17.
- (114) Yields per hectare in the late 1840s according to data in Gay, C.:1973 vol. 2, p.44 (30 fanegas per cuadra). For data on yields per hectare, in chosen years, as from 1866 see Appendix 6 table A.6.4.
- (115) Compare the features of the Chilean plough as described in Gay, C.:1973 vol. 1 plate facing p.71

with that used in Crete 2,000 years B.C as featured in Leonard, J.N.:1974 p.141. A detailed description of the traditional Chilean plough is supplied by Gay, C.:1973 vol. 1 pp.217-19, 274, and vol. 2 pp.20 pp.20-21.

(116) Gay, C.:1973 vol. 2 p.20 (footnote).

(117) Ibidem.

(118) Encina, F.:1945 vol. 13, p.530. Probably another reason for the widespread use of the scratch-plough, was that the haciendas did not employ any systematic form of fertilization of the soil. Deep ploughing does release nitrogen by exposing the organic matter in the soil to contact with oxygen, but it also upsets the biological life in the soil and in some types of terrain this may have unfavourable results unless a substantial amount of fertilizer is used. At present some methods of organic farming are based on more shallow-ploughing than is practiced by the modern systems of cultivation, the wheat straw being also burned after the harvest as in the case of the hacienda.

(119) More advanced designs of scratch-ploughs than the Chilean one were known to the 600 B.C Mesopotamian farmers for example. (See Leonard, J.N.:1974 p.141).

(120) See Gay, C.:1973 vol. 2 pp.32-35.

(121) See Gay, C. Ibid. p.33. Bauer focuses on the lack of mechanization in the 19th-century hacienda, which he attributes to the difficulties in obtaining spare parts for the imported equipment, and to the availability of cheap labour, but supplies no explanation for the absence of far more simple innovations, such as the landowners' reluctance to introduce the scythe. See Bauer, A.:1975 pp.103, 151.

(122) For a description of Chilean varieties of triticum vulgare grown in the mid-19th century see Gay, C.:1973 vol. 2 pp.11-17. The most common type was known as trigo blanco. Other varieties were brought in from Holland, France and other countries, but due to a bad selection of seed they soon degenerated. Gay, C.:1973 vol. 2 pp.27-28, advises the landowners that it is no good bringing foreign seeds, which anyway are often ill-suited to the conditions of Chile; Gay goes into lengthy explanations as to why landowners should carefully choose the seed and develop local varieties through a process of selection of the best features of the species which already existed in the country. On the ease with which Chilean wheat shattered, this being the reason why the hacendados were reluctant to introduce the scythe, see Gay, C.:Ibid p.33. For

a comparison between wild, semi-domesticated and domesticated types of wheat see Leonard, J.N.:1974 pp.38-41, 128.

(123) See Gay, C.:1973, vol. 2, p.32.

(124) See Bauer, A.:1975, p.161, who speaks of an extension of the inquilinaje in a modified form, referring in particular to the inquilino-peon of the 1870s-80s. The emergence of the inquilino-peon is discussed further below.

(125) Gay, C.:1973, vol. 2, pp.32-35, maintains that the haciendas' dependence on harvest labourers was further accentuated by the fact the reaping had to be completed in a very short time-span (usually 2 weeks). He reports that the hacendados were always anxious as the harvest time approached, because they were often short of sufficient peons to complete the reaping and threshing in time, which caused them to lose part of their crop. It was a common practice amongst the hacendados to hire the services of special agents for the recruitment of seasonal peons. These agents were known as enganchadores, and Gay maintains that people from villages, towns, and even from the large cities were recruited to work on the estates during the harvest; that sometimes the city craftsmen, who had little skills in agricultural labours, went to the estates to work in the reaping attracted by the higher wages paid at this time of the year. See also Tscherebilo, S.:1976, pp.116-20.

(126) See Tscherebilo, S.:1976, pp.92-96, 146-48.

(127) See Johnson, A.L.:1978, p.169. Upper central Chile includes the provinces from Aconcagua to O'Higgins, and lower central Chile those from Colchagua to Talca.

(128) Ibid. chapter 5.a, and p.129. Also, by the mid-19th century the remnants of the wandering population of herdsmen and vagrant horsemen who in colonial times slept in the fields and "inhabited the backcountry, could not survive as population grew and land became less plentiful. During the first half of the century, a new wanderer, the seasonal migrant, appeared in the northern central valley". (Ibid. p.143).

(129) Ibid. pp.122-23.

(130) Ibid. pp.157-58, 206-24. The evidence supplied by Johnson indicates that few migrants were absorbed in Colchagua and Curicó since in these provinces land was more fully controlled (there were few opportunities for settling on unclaimed land). The main flow of

inter-rural migrants went to Maule, Linares, and to the department of Parral (in Ñuble), proceeding thereafter to the newly opened regions of Araucanía and the south: (Ibid. pp.215-16).

(131) On the colonization of La Frontera see Johnson, A.L.:1978, pp.313-15. See also McBride, G.:1936, pp.285-306. The greater importance of medium size holdings in the south and La Frontera; as compared to central Chile, can be still appreciated in the 1930s (see Appendix 6, table A.6.26).

(132) See Gay, C.:1973, vol. 2, pp. 33 and 77.

(133) See Whaley, J.H.:1974, pp.78-79, and Hernandez, S.:1966 pp.17-18. On the general debate on migrations and seasonal labour shortages during this period, as presented by the hacendados' SNA periodicals see Izquierdo, G.:1968 pp.133-58. Kay, C.:1971, p.115, and Bauer, A.:1975, pp.149-50, also touch upon this topic; the latter takes the view that "it is against the background of rapidly increasing need for field hands, combined with the reluctance of the floating mass of men to give up their accustomed leisure for a tiny wage, that the constant complaints about labour scarcity must be read. Compared with other regions just then also responding to the European demand for grain, Chile had an abundance of potential workers" (Bauer, A. Ibid. p.150). Bauer maintains that the hacendados looked upon any temporary bottleneck that restricted their supply of labour forcing them to pay slightly higher wages, as a labour-shortage (escasez de brazos). He maintains that in fact there was a surplus of men and lays great emphasis on what he calls the 'sloth' and 'apathy' of the Chilean peons, who were slow to respond to the needs of the landowners. In my view Bauer tends to over-look the fact that the bulk of the haciendas' labour requirements were seasonal and for a very brief period (2-3 weeks). Seasonal labour shortages can occur together with vast unemployment during the rest of the year if income from subsistence plots, plus wages earned during the harvest time, are not sufficient for the peons' subsistence in which case some of them are forced to emigrate. This argument is expounded below. (As to the peons' alleged lack of discipline, drunkenness, and lack of 'enthusiasm' for work, these seem to have been quite common characteristics of the labourers everywhere in the period of formation of the modern proletariat.)

(134) See Izquierdo, G.:1968, pp.147-54.

(135) See Johnson, A.L.:1978, pp 264-68 (see also Kay, C.:1971, p.115, and Tscherebilo, S.:1976, p.119).

- (136) For references to some cases of mortgage loans being spent by landowners see Bauer, A.: 1975, pp. 108-11. On the hacendados' general attitude towards spending. the loans obtained from the Caja in personal consumption and enjoyment, see Fetter, F.W.: 1931 chapter 1.
- (137) See: Comisión Directiva de la Exposición Nacional de Agricultura (Chile): 1869, Passim.
- (138) Ibid. pp. 90-91 (letter from the Gobernador de Melipilla to the Intendente de Santiago, of the 21st January, 1869; my translation). The governor of Rancagua reported to the organizers of the exhibition that "various letters have been sent to the sub-delegados of this department(...) instructing them to forward the programme of the Agricultural Exhibition to the landowners, (...) but I regret to inform you that so far this governor has received no reply whatsoever from either the sub-delegados or the landowners" (Ibidem). The less unresponsive attitude came from landowners in Talca, but even there the Intendente wrote that : "This Intendencia has taken little encouragement from the landowners' response to your appeal to take part in the Agricultural Exhibition(...). Of all the neighbours who were kind enough to reply, only three of them have actually indicated their intention of contributing with exhibits" (Ibidem).
- (139) See Bauer, A.: 1970, pp. 191-96 (also Bauer, A.: 1975 pp. 89-92).
- (140) See Appendix 6 table A.6.24 of this thesis.
- (141) Ibidem. It has been maintained that the hacendados actually fostered inflation in order to diminish their debt in pesos (see Fetter, F.W.: 1931 chapter 1, and Jobet, J.: 1955, pp. 118-20, amongst other works). Although this may be an over-simplistic view to take, as Bauer, A.: 1975 p. 107 maintains, landowners did benefit from inflation in that it made wages cheaper, income from agricultural exports greater, and their debt with the Caja (in pesos) easier to pay. A British banker who visited Chile during the early 20th-century wrote that: "The question is frequently asked, Why cannot the Chilians, the soi-disant British of South America, do what Brazil, Peru, and Argentina have done? Surely, if little Uruguay has been able to maintain specie payments since 1876, Chili, with firmness and at the cost of a few bank smashes, could have kept on its legs its own Wee McGregor of a dollar. The answer is, that the hacendados will not let her. They form the strong party in Chilean politics, and low exchange suits them. It is clear that if the farmer has borrowed

when the exchange is comparatively high it is good business to force it down; (...) It has become his religion [the hacendado's] to mortgage his farm up to the hilt, hoping that some day the paper peso will go down to nothing, when his debts will be automatically wiped out, and he, honest fellow, like the village blacksmith, will 'owe not any man'." (Young, W.H.:1916, p.273). In another respect, however, inflation did not favour the landowners, namely, it made imports of luxury goods and the cost of living abroad more expensive. Whether or not the hacendados were ultimately favoured by inflation (which seems very probable that they indeed were), they were seen, by their contemporaries, to foster it or at least to do nothing to bring it down; this brought about a flurry of criticism from the middle-class during the early 20th-century.

(142) See Galdames, L.:1945, p.420; Hamud, C.:1974, p.75; and Bauer, A.:1975 p.118.

(143) Bauer, A.:1975, p.119.

(144) Ibidem.

(145) See Appendix 6 table A.6.27 of this thesis. For a study on the government's growing dependence on export taxes on mining as a source of revenue, see Fernandez, M.:1981 Passim.

(146) It could be estimated that some 1,000-1,500 cereal-cutting reaping machines existed in Chile by the first decade of the 20th-century. In 1921 there were over 2,000 of these machines in the whole country, and more than 3,000 in 1930. Only 2,350 machines for cereal cutting were reported in 1936 but this was probably the result of the introduction of the combine harvester and of better designs of reaping machines operated with tractors. (See Appendix 6 table A.6.19).

(147) For the size of the tarea by the mid-19th century see Gay, C.:1973, vol. 2 p.34, who also maintains that Chilean reapers were generally very skillful and hard working, and that so were their wives, "particularly those of the coastal areas who will not hesitate to pick up a sickle and work alongside their husbands. Both will spend days on end under the quasi-tropical heat of the sun, without showing any sign of experiencing its terrible effects". For the size of the tarea in the early 20th-century see Kaerger, K.:1901, p.130.

(148) Percentage according to data on yields in Appendix 6 table A.6.4.

- (149) The Statistical Office does not supply data on the irrigated area prior to the first decade of the 20th-century. Keller, C.: 1956, pp. 111-12, estimates that the irrigated area increased from some 440,000 hectares in 1875, to 880,000 in 1900. In 1921 there were some 1,129,000 hectares of land under irrigation (Anuario Estadístico 1921, p. 125), and by 1936 the irrigated area reached 1,213,000 hectares (Censo Agropecuario 1936, p. 10).
- (150) See Galdames, L.: 1911, p. 169. See also Appendix 6 table A.6.30 which contains data on the country's total number of cattle. Anthrax and Foot and Mouth disease caused great losses in some years of the 19th-century, and a greater disease control may have also contributed to the rapid growth in the number of cattle towards the 20th-century. It is also possible that the late 19th-century slump in wheat prices caused a certain shift from cereal cultivation to livestock breeding. By the second decade of the 20th-century the regional distribution of the country's cattle was as following. Central Chile accounted for some 40% of the country's stock, the intermediate region for 16%, the south and La Frontera for 37%, and others for 7% (sources: Sinopsis Estadística 1914 p. 195, and Sinopsis Estadística 1916 p. 185).
- (151) The first experimental farm was created in 1842 and for a time it was run by the SNA. This farm soon came to be known as the Quinta Normal, although its main development took place once it became a part of the agricultural college of the University in the late 19th-century. (Keller, C.: 1956, pp. 106-07, emphasizes the role of the Quinta Normal as an agent which contributed to the technical revolution in Chile's agriculture.)
- (152) See Tornero, R.: 1872, p. 444.
- (153) See Appendix 1.i of this thesis.
- (154) See Appendix 6 table A.6.4, which contains data on yields per hectare in the different regions. The fact that part of the wheat grown in central Chile was cultivated on irrigated land of the central valley, was no doubt one of the important factors which contributed to the higher yields per hectare in that region; within the intermediate region, wheat cultivation on less fertile hillsides (cultivo de secano) was relatively more dominant than in central Chile, especially in areas of Maule and Linares; in the south and La Frontera no irrigation was needed, here the problem was too much water and wheat had to be cultivated on hillsides because of poor soil drainage in the valleys.

- (155) Between the first decade of the 20th-century (1913) and 1930, the area cultivated with wheat increased approximately by over 25% in central Chile, by 50% in the intermediate region, and by some 60% in the south and La Frontera (source: Appendix 6, table A.6.3; see also in the same appendix table A.6.10 which contains data showing the increase in the country's total area cultivated with the most important crops).
- (156) See Appendix 6, tables A.6.6 - A.6.9.
- (157) Percentages according to data in Appendix 6 table A.6.11.
- (158) The annual prices of wheat in Chile are shown in Appendix 6 table A.6.15 (5 year average wheat prices -showing trend- are contained in table A.6.17 of the same appendix). The very large increase of wheat prices between 1904 and 1905 was due to shortages caused by severe rainfalls which damaged the crops, though the trend towards rising wheat prices continued generally until 1920.
- (159) See Appendix 6 table A.6.17 containing comparative wholesale prices of wheat, barley and potatoes in Santiago and in Liverpool (5 year average figures); For annual prices of these products in Santiago and in Liverpool see tables A.6.15 and A.6.16.
- (160) This percentage (14%) corresponds to the average relative price-index of wheat and textiles for the period 1914-20 inclusively, calculated from data in Appendix 6 table A.6.18.
- (161) This percentage (10%), corresponds to the average relative price-index of wheat and textiles for the period 1922-30 inclusively, calculated from data in Appendix 6 table A.6.18 (i.e. average relative price-index of wheat for the period 1922-30 = 0.899, hence 0.101 -or 10.1%- lower than the price of textiles). This figure is exclusive of the years 1926-27, for which there is no data. The drop in the price of wheat during the 1920s (and its slump during the first half of the 1930s) is recorded in Appendix 6 table A.6.17.
- (162) See Appendix 6 tables A.6.6 - A.6.10 showing the increase of the area cultivated with the most important crops. Oats seem to have been the only crop for which the area cultivated fell noticeably between 1930 and 1936, and in the case of potatoes the area cultivated remained rather stagnant in this period. Both potatoes and oats were produced chiefly in the south and La Frontera (reflected in table A.6.9). In the case of most other crops the trend

was for an expansion of the cultivated area. (See also Ballesteros, M. and Davis, T.: 1963 Passim).

- (163) From 1921 to 1930 there was an increase in the country's stock of most machines to the order of 40-50% (the number of tractors rose from 40 to 1,160 during the same period; see Appendix 6 table A.6.19). This increase, however, was at least partially off-set by the growth of the cultivated area, which meant that overall, the ratio of machines per hectare of cultivated land did not increase substantially, and even fell in some cases (see Appendix 6 tables A, 6, 21.a & b).
- (164) Source of these and of all other figures supplied in this paragraph : Appendix 6 tables A.6.21.a & b. The province of Llanquihue mentioned here includes Osorno (which today has a separate provincial status but was then only a department of Llanquihue).
- (165) McBride, G.: 1936 chapter 9, supplies evidence of some haciendas being sub-divided and sold as parcels (hijuelas) during the 1920s, which may have contributed to accentuate differentials in concentration of machinery between estates. The statistical evidence available, however, suggests that the sub-division trend was limited. In 1921 there were 214 estates of over 5,000 hectares, and by 1930 there were 46 fewer. By contrast those estates of 1,001 to 5,000 hectares had increased by 36 in number during the same period. Similarly the number of estates of 201 to 1,000 hectares had increased by 129, which means that the above 46 estates may have been sub-divided into fairly sizeable properties. (All data refers to central Chile, source: Appendix 6 tables A.6.25.a & b). It is equally possible that an estate of 3,000 hectares for example, which would have been accounted for within the size group of 1,001 - 5,000 hectares, was subdivided into two properties of 1,500 hectares each, both these new properties still falling under the same size group, hence the increase in the number of large holdings between 1921 and 1930. If we assume that the larger number of properties in each size group in 1930, actually corresponded to the number of properties sub-divided, then from the figures in Appendix 6 tables A.6.25.a & b it can be estimated that some 7% of all haciendas of 1,001-5,000 hectares were subdivided, and so were 11% of all those of 201-1,000 hectares. The fragmentation of the smaller properties, however, was far greater. With the same assumption it can be estimated that 30% of all small/medium size holdings of 51-200 hectares, 47% of the small 5-50 hectare holdings, and 53% of all tiny properties of less than 5 hectares, were subdivided between 1921 and 1930. The fragmentation of the smaller

properties appears to have had a far greater importance as regards relative land concentration, although the sub-division of the haciendas -limited as it may have been- was probably not altogether unrelated to the higher concentration of machinery and installations in some estates, some proprietors selling part of their land in order to buy new equipment.

- (166) As discussed in chapter 2 section 2, and in chapter 4 section 3. (On the complex hierarchy of inquilinos being to some extent simplified during the first third of this century, see Loveman, B.: 1973, vol. 1 p. 65.)
- (167) See Johnson, A. L.: 1978, pp. 249-50, 267-90.
- (168) On the conditions of the working class during this period see : de Schazo, P.: 1977 chapter 3. On industrialization and rise of urban proletariat see amongst others Kirsch, H. W.: 1973, pp. 73-74, 80-81. The number of organized workers increased from 30,000 in 1900 to 65,000 in 1910, and to 200,000 in 1920. The 19th-century Sociedades de Socorros Mutuos gave way to the Gran Federación Obrera in 1909, and workers began to organize by branches of industry. In 1912 the Socialist Party was created. Then in 1916 the nationwide Federación Obrera de Chile was founded.
- (169) On the waves of unrest and class struggle during the late 19th and early 20th centuries see : de Schazo, P. de Schazo, P.: 1977 chapter 4 (see also amongst others Jobet, J.: 1955 pp. 131-46 and Breslin, P. E.: 1980 Passim).
- (170) See Bauer, A.: 1975 pp. 218-19.
- (171) Table 13 :
Nominal and real accumulated debt of the landowners with the Caja de Crédito Hipotecario: 1900 - 1925.

See Overleaf

(171)Table 13 :

Nominal and real accumulated debt of the landowners with the Caja de Crédito Hipotecario: 1900-1925 (in 000,000's dollars)

	Nominal Accumulated debt * - 1 -	Real Accumulated debt ** - 2 -	Difference *** (2 less 1)
1900	53.9	71.9	18.0
1905	61.1	83.2	22.1
1910	73.8	117.1	43.3
1915	87.6	150.8	63.2
1920	128.6	196.0	67.4
1925	119.8	228.8	109.0

Source: Appendix 6 table A.6.24

* Here the accumulated debt (loans issued, less loans & interests paid) has been calculated in pesos on an annual basis; the 5 year accumulated totals have been then transformed into dollars at the relevant exchange rate of 1900, 1905, 1910...etc., to make the figures in this column comparable with those in column 2.

**Here the accumulated debt has been calculated in dollars on an annual basis.

***The difference corresponds to the debt which has been wiped out by Chile's inflation. Some 82% of all credit issued by the Caja went to the landowners of central Chile(Anuario Estadístico 1927 p.87).

(172)On the growing importance and political weight of the middle class see Donoso, R.:1952, vol 1, chapter 10. (See also Edwards, A.:1966 chapters 32-36).

(173)On the cuestión social see Donoso, R.:1952, vol. 1 chapter 7. Within the profuse literature critical of the hacendados see Pinochet Le-Brun, T.:1916. For a study on the Chilean novel of social protest see Ramirez, A.:1956. For a narrative of habits and life style of the upper class see Orrego Luco, L.:1934. Perhaps one of the most illuminating statements of the middle-class' feelings was made by Carlos Dávila

when he wrote : "The chief accusation that could be made against the landowners and political bosses is not that they succeeded in perpetuating a system in which all the advantages were on their side, but that they made such poor use of it". (Foreword by Carlos Dávila in McBride, G.:1936, p.xviii.)

- (174) This was a widespread practice amongst landowners. See for example Galdames, L.:1945, pp.529-30, McBride, G.:1936, pp.112-13, and Bauer, A.:1975, p.223.
- (175) See Breslin, P.E.:1980, pp.84-89 and chapter 8.
- (176) On Alessandri's background see Donoso, R.:1952, vol. 1 chapter 1.
- (177) On the conflicts in rural Chile during that period see Loveman, B.:1973 vol. 1, pp.268-79.
- (178) See El Agricultor, July 1921 "Sesión de la SNA del 25 de abril".
- (179) "Carta de la SNA a su Exelencia el Presidente de la República", in El Agricultor, May 1921 (my translation). The letter contains a list of ten demands requesting, amongst other things, cheaper rail charges for agriculture and greater credit facilities. Also, falling nitrate exports were forcing the government to look for alternative sources of revenue, in view of which Alessandri proposed to raise the 0.2% tax on agricultural income to 0.9% ; the 0.2% tax had been imposed in 1916 and prior to this there had been no tax on agricultural income after the virtual elimination of the Impuesto Agrícola in the mid-1890s. (See McBride, G.:1936, p.176, and Appendix 6 table A.6.27 of this thesis). Certainly the landowners were bitterly opposed to any increase in their taxes, and this is one of the points they made in their letter to the President. Nevertheless, their main fear seems to have been political; they complained about outside agitators calling upon their inquilinos to unionize, "promising them to distribute the land amongst the workers, and to install a soviet regime" (Carta de la SNA... Ibidem).
- (180) "Carta de respuesta del Presidente Alessandri a la SNA", in El Agricultor, May 1921 (my translation). In the same letter, however, Alessandri condemned the use of violence by political agitators, and stated that the agitators were in fact enemies of the republic. He also requested rural workers not to strike unless exceptional circumstances arose; he asked them to defer their claims until his new labour legislation would be passed by Congress.

- (181) De Schazo, P.; 1977, pp. 462-67, supplies clear evidence that the new labour legislation was aimed at co-opting and dividing the militant struggle put up by the workers' unions, and that it partly succeeded in doing this (at least temporarily). Some ideological elements of the military in power bore a fascist characteristic, not altogether dissimilar to the early Spanish Falange.
- (182) As from 1924 the SNA started a loud campaign to publicize the need for protecting Chile's agriculture against the falling international prices. In October 1924 for example, the Editorial page of El Agricultor stated that "Chile should now adopt a protectionist policy as most other countries have been doing". The tune of the subsequent editorials grew stronger. In February 1925, the SNA joined efforts with the SOFOFA (the association of industrialists), stating that the Chilean state should actively engage itself in protecting, and subsidizing industry, not only through tariffs and subsidies, but also through direct government investment in the creation of new industries. (see Editorial, El Agricultor, febrero, 1925)
- (183) See Loveman, B.: 1973 chapter 3. (El Agricultor, September 1927, maintains in its editorial page that "the law of social security for rural workers may be inspired by good motives but it is totally impractical". My translation.)
- (184) See Loveman, B.: 1973, vol. 1 pp. 283-91.
- (185) McBride, G.: 1936, p. 151.
- (186) See Heise, J.: 1974, vol. 1, pp. 160-78.
- (187) McBride, G.: 1936, p. 226.
- (188) On the SNA see Carriere, J.: 1975 Passim (also Carriere, J.: 1977.a Passim). On the social background of Chilean industrialists and their connection with foreign capital as from the 1920s, see Burbach, R.J.: 1975 chapters 3-4.
- (189) See Carriere, J.: 1977.b Passim; Mamalakis, M.: 1976 pp. 143-43; and Echeverría, R.: 1969, chapters 2-3.

APPENDIX 1

COMMENTS ON THE SOURCES

i. Statistical Data

This section aims at making some qualifying remarks on the reliability, uses and limitations of the main source of statistical data consulted for this thesis, and to comment on the forms in which it can be interpreted or used as a tool for analysis.

The most important source of statistical information used in this thesis is the Chilean Statistical Office. This is an official body founded in 1843 to collect and supply information on virtually all aspects of the economy, trade, government, demography and education. Its main publication has been the Anuario Estadístico (a statistical yearbook) that included data on agriculture as from 1860. By the turn of the 19th-century the Statistical Office also began publishing the Sinopsis Estadística (a synopsis of the Anuario Estadístico) containing resumes and statistical series. The Office also carried out several population censuses in the 19th-century, and agricultural censuses were carried out in 1920 (a partial census), 1930, 1936, 1946, 1955 and 1965 of which more will be said below.

Bauer takes the view that the data on agricultural production reported by the Office prior to the 1936 agricultural census have little or no value. Bauer maintains that to compile the Office's information on wheat production for the various years in a table would be an easy, but also a futile exercise, since the data is notoriously unreliable. As evidence of this he maintains that the "prefaces to several Anuarios Estadísticos in

the 1860s and 1870s contain apologies for the lack or unreliability of agricultural data".¹ * Bauer states that the data on wheat exports is more reliable, however, since it is easier to count wheat being shipped at the port than to assess production in the farms. The reader is referred to appendix 4 for comments on the export data, (which is compiled by the port authority, the Statistical Office only processing and publishing the information). The main concern here is to discuss the Office's data itself, and the actual reliability of its data.

To state that compiling the Office's data on wheat production is a futile work, is to pass a somewhat superficial judgement of the Office's work. Certainly an inspection of the data on wheat production reported by the Office on an annual basis, seems to show at points, some extraordinary oscillations. Obviously the Anuarios contain errors. I shall report a few of these in due course, and one can be sure that many are still undetected (and will probably remain so for as long as scholars take the view that the data is not worth the bother). Knowledge that the Office's data does contain errors should be an advantage if one knows where to look for them, and therein lies the real problem when dealing with any source of statistical information. To make sense of the Office's data on wheat production a knowledge of the system of data collection is required. This commands careful reading of the introduction to each yearbook, which will reveal (amongst other things) that the Office has gone through good and bad periods in the performance of its task, that it has used different procedures to collect the data and, not least, the reader will find comments which the Office's director himself has to make on the reliability of the data. In fact, the apologies for

*Notes of appendices at the end of each appendix

missing or incomplete data, and the critical remarks by the Office's director on the quality and completeness of the information supplied, are one of the most valuable aspects of the Anuario Estadístico. In this sense, the Chilean Statistical Office is a reliable and serious source since whenever a province or a provincial department has incomplete information this is immediately recorded. This and the Office's director critical remarks, which in Bauer's view are reasons for discarding the information altogether, are in fact a precious piece of information for the historian, without which the data would indeed be worthless.

Further, to evaluate the data it is necessary to consider it in conjunction with historical facts which have affected agricultural production in the various years, such as the weather, technology, supply of labour-power, and so on. Moreover, the data needs to be examined not only aggregated as a national total, but also regionally, and sometimes on a provincial level. If all the factors mentioned hitherto are taken into account, then the data of the Office begins to make sense as Johnson maintains.² Take for example one simple factor, the weather. Since Chile's 19th-century agriculture was based on very simple technology, yields in central and intermediate Chile were greatly dependent on the weather. Disasters were caused not so much by droughts (the snow reserves of the Andes on which irrigation depended were rarely depleted by one year of drought), but by heavy rainfalls especially after a dry season when this led to floodings which damaged the fields, fences, roads, etc. Sometimes the damage was large enough to hamper production for a few years. In appendix 6 (table A.6.1) the reader can see that nearly all the very large annual slumps in wheat production coincided with very heavy rainfalls (recorded in appendix 6, table A.6.31). The data on yields supplied by the Statistical Office oscillated considerably, but after all this seems to have been only a reflection of reality.

Yet, although there are grounds to believe that the Office's data reflected actual large annual variations of production, this does not mean that the figures were entirely accurate. As stated above, the means by which the data itself was obtained by the Office have to be considered before any comparison between figures for different years or periods can be attempted. There were periods in which the information supplied was more trustworthy than in others, and I shall therefore give a brief account of the Office's historical development and its various periods of relatively good and bad performance.

Prior to this it is necessary to explain the way in which the agricultural year is referred to by the Office. Since Chile is in the southern hemisphere the agricultural season includes usually two calendar years, the sowing taking place normally between August and September, and the harvest between late December and March (depending on the region and irrigation facilities). If, for example, the Office records the agricultural year as 1881/82, 1881 means the sowing and 1882 the harvest. This system of notation may sometimes create confusion. Scholars often refer to the Office's data by one calendar year alone, e.g., 1881, but without indicating whether this means 1880/81 or 1881/82. To avoid sources of confusion I have recorded the agricultural year according to the year of the harvest. Hence, figures entered in this thesis for 1921 for example, correspond to the Office's data for 1920/21, not 1921/22. We can now proceed with the analysis of the Statistical Office during the various periods.

First half of the 1860s

During the first years of reporting agricultural information the Statistical Office collected the data by sending forms to the landowners, through the rural local

authority. The results, according to the Office's director, were unsatisfactory. In 1862 the Office's director stated that despite the efforts made their task had not yet met with success. He stated that one of the obstacles was an ill-founded apprehension amongst landowners who feared the information they supplied in the forms might be used to tax them, and the other was the still weak organization of the Statistical Office itself.³ Many of the large hacienda owners of central Chile seldom visited their estates and probably some lacked sufficient knowledge to fill in the forms accurately. Although the Statistical Office made brave attempts to estimate the missing information, the figures supplied by the Office prior to the mid-1860s should be seen only as an informed reckoning.

Mid-1860s to mid-1880s

A new system of data collection was used as from the mid-1860s, however, and the local authorities were made responsible for reporting on agricultural production of their areas. This led to a considerable improvement of the data supplied by the Office. Commenting on the results of 1866 and 1867 for example, the Office's director wrote that without being wholly accurate, the data on agricultural production were good enough to enable calculations to be made on a fairly sound basis and, that they did reflect, all in all, the actual situation of agriculture. He further suggested that the causes of error in the collection of data were the same throughout the country, and that although the figures on production (and cultivated area) might have been smaller than the real output, the provincial figures as a proportion of the national total were still quite accurate.⁴

Between the mid-1860s and the late 1880s the data on agricultural production reported by the Statistical Office was fairly complete, except during 1877-78 when the

information of many departments of the south and La Frontera was missing (the Office's data for these years was also published with delays apparently due to disruptions caused by the 1877-78 floodings which caused great damage especially to the crops of the intermediate region). Also, during 1871-72 the Office was unable to obtain the information on production for some departments of the province of Curicó, but these departments represented only a very small fraction of central Chile and were of almost negligible significance in terms of national totals.⁵ Moreover, since the years and the number of departments for which information was missing were few (and seldom for the same department throughout a protracted period of time), the data of the Office can be adjusted by estimating the figure of the missing department. The Office's adjusted data can be extremely valuable to judge trends and changes over a period of time, and also to compare the relative regional or provincial changes. The absolute figures, however, are likely to under-rate the actual volume of output throughout, as the Office's director himself states. There can be no doubt that part of the wheat which was produced by small holdings remained unaccounted for, as well as that which was consumed in the estates as food rations (all in all, probably as much as 20% of the national output). Thus, the information supplied by the Office is useful for establishing trends and comparative regional or provincial analysis of wheat production, rather than as an absolute indication of the exact output in a single year. In the case of products other than wheat the proportion which may have remained unaccounted was probably much higher since beans, peas, and garden crops in general were a more important item of production in small holdings. The reliability of the Office's data on products other than wheat (or barley) is much more opened to question, and I have therefore not used it.

Further, the introductions to the agricultural section of the Anuarios by the Office's director during the 1860s

and 1870s are a useful piece of historical information for these often contained comments on the successes or failures of the harvest, revealing also the general outlook for agriculture. The remarks of the Office's director and the quality and presentation of the agricultural yearbook itself, are revealing of the historical development of agriculture (especially in central Chile), and of the importance then attributed to agriculture. Throughout the 1860s and early 1870s for example, the data of the Anuarios was accompanied by a rather lengthy analysis of the figures, with the Office's director often commenting on the 'promising future' of agriculture, which was then described as the country's main and most secure source of wealth.⁶ By the early 1880s, however, (after the War of the Pacific rendered Chile the rich nitrate fields) the agricultural section of the Anuarios had become quite brief in presentation, and there was no more talk about a promising future for agriculture.

Late 1880s to first decade of the 20th-century

During this period there were several years when the Anuario was published with no agricultural section at all, and then, when the data on agriculture was eventually released in subsequent Anuarios, there were very many sub-delegaciones, departments, and even entire provinces for which the data was incomplete or missing altogether; the Office made no attempt to supply estimates on what was after all extremely incomplete field data. This remarkable deterioration of the agricultural data supplied by the Office is notable already by the late 1880s, when the country was entering into a period of political crisis which culminated with the overthrow of president Balmaceda in 1891. Throughout the 1890s and until 1907 the Director of the Office systematically complained about a lack of resources and government

support for the Office to adequately carry out its task of compiling agricultural data. In 1902 for example, out of a national total of 691 sub-delegaciones, only 349 had reported any agricultural information.⁷ Interestingly, this deterioration of the agricultural section of the Anuario coincided with the almost total abolition of agricultural taxes (after Balmaceda's downfall), all of which reveals a shift of government's interests more and more towards mining and nitrate in particular, on which relatively abundant and reliable information is available in the Anuarios. During the 1890s and until 1907, the introductions to the agricultural section of the Anuarios consisted only of a short paragraph stating that until such time as the government would be prepared to support the Office in its task of compiling agricultural data, the statistics supplied would be completely unreliable.

1908 to the 1930s

In 1907 a major re-organization of the Office's agricultural section took place and a special ministerial department was created for the purpose of compiling agricultural data. The system of data collection was improved and field officers were employed to monitor and supervise the local authority in its task of gathering agricultural data. A long overdue survey of the number of agricultural machines took place only a year after this re-organization (1908), although the data reported by the Office was still incomplete and contained errors; for example the 1908 figure on Chile's total wheat production carried a mistake in the adding of provincial sub-totals, some of which were in turn clearly erroneous and, admittedly, incomplete (the 1908 erroneous figure on wheat production was corrected in retrospective statistical series in later Anuarios, e.g., 1913).⁸ It took a few years for the above re-organization to yield positive results and, since measures taken to improve the

system of data collection probably took some time to become fully operational, it is advisable to allow for a period of at least 3-4 years during which time one should assume that annual variations suggested by the Office's figures were partly the result of these changes in the system of data collection. I have thus discarded the Office's figures for the period 1907-12 in order to eliminate possible unwanted influences arising from the improvement of data collection following the 1907 re-organization.

Moreover, the fact that an improved method of data collection was now being employed means that no direct or straight forward comparison between the data prior to the late 1880s, and that of 1913 onwards, can be attempted. Any comparison between the data for these two periods needs to be carefully qualified since the data prior to the late 1880s is likely to under-rate production (in absolute figures) more than that of 1913 onwards.⁹

The first attempt to carry out a partial agricultural census took place in 1920, the results of which were published in the Anuario of 1921(i.e., in the Anuario of 1920/21 according to the Statistical Office's notation). This Anuario contains valuable information such as the number of inquilinos and their dwellings(discussed in appendix 3 of this thesis), the number of peon labourers, wages paid during the harvest time to outside peons, the first table of distribution of land ownership ever produced, and what may be considered as the most exhaustive account to that date of the number of agricultural machines. Also, for the first time a distinction between reaping machines for pasture-cutting and those for cereal-cutting was made (previously the Office had reported the total number of reaping machines irrespective of their use, adding together cereal-reaping and pasture cutting machines, neither of which could be used in lieu of the other). The 1921 data on cereal-reaping machines in the province of Curicó, however, was grossly over-stated and clearly

erroneous, since Curicó appeared with 473 machines, more than the whole of central Chile put together, and certainly more machines than Curicó itself appeared as having 10 years later in the census of 1930 (when only 83 cereal-reaping machines were reported in the province). It is not unlikely that the newly introduced distinction between reaping machines for cereal -and pasture-cutting created some confusion amongst the farmers or the officials, and that a substantial number of pasture-cutting machines were wrongly accounted for as cereal-reaping machines in Curicó (I found no indication that this happened in other provinces, however, and the error mentioned may have been due to other reasons).

The first agricultural census proper took place in 1930 (1929/30 according to the Office's notation). It was carried out according to norms laid down by the International Institute of Agriculture in Rome, and some 70% of all agricultural properties were surveyed (the remaining 30% were very small urban or semi-urban holdings engaged in growing garden vegetables, fruit trees, and bee and chicken farming).¹⁰ Data on the number of inquilinos and other types of rural workers, however, was not published. The following census was carried out in 1936 (1935/36 according to the Office's notation) with all agricultural properties being surveyed. Unfortunately, the information compiled in this census was processed and published aggregated in 4 regions (Norte, Chile Central, Sur, and Zona Austral), rather than by provinces or provincial departments as had been customary. Thus, the 1936 census data can only be used aggregated nationally, or according to the regional division of the country established by the census. The census considered central Chile as comprising the region from Santiago to Concepcion, while Valparaiso and Aconcagua -provinces which according to the census itself admittedly belong to central Chile- were aggregated together with Coquimbo, Atacama and the provinces of the far north, in a region described as Norte (north). This regional aggregation of central Chile

used by the 1936 census is wholly unsuited for the purpose of this thesis (as is explained in appendix 2). Hence, I have been able to use the 1936 census data only aggregated nationally, with the exception of the data on vineyards which was reported by provinces. Further agricultural censuses were subsequently carried out in 1946 (results unpublished), 1955, and 1965.

ii. Written Historical Sources

Three of the main written sources consulted for this thesis deserve to be examined and commented on separately, and this is the subject of this section. Two of these historical sources are treatises on Chilean agriculture. One is Gay's Agricultura Chilena (volume 1 first published in 1862 and volume 2 in 1865), and the other is McBride's Chile: Land and Society (first published in 1936). These treatises were the result of the authors' protracted periods of residence and research in Chile, and both were written during crucial times of historical change.

The preparatory work for Gay's Agricultura Chilena stretched from the 1830s to the early 1860s. Most of the material refers to the 1830s-40s, but there are also extensive passages and sections which deal with conditions in the 1850s and early 1860s. During this time-span crucial developments occurred. The remnants of the old arrendatario system disappeared as the inquilinaje was consolidated; wheat production for exchange spread in the central provinces of the country, and there was a considerable development of trade, including the first boom of wheat and flour exports.

The uniqueness of Gay's work stems from the erudition

displayed by the author, especially concerning the practical aspects of farming. Born in France in 1800 his main field of interest lay in the natural sciences, particularly in botany and zoology. In 1831 he went to Chile in pursuit of scientific exploration and he was commissioned by the Chilean government to carry out reasearch. Between 1831 and 1842 he made several trips throughout the country collecting a large amount of scientific material (including more than 1,000 unknown species of plants and animals), as well as a valuable collection of historical records since Gay also had an interest in history. During this time most of his notes for Agricultura Chilena were made. Gay returned to Paris in 1842 to begin the task of writing his work in a series of 30 volumes entitled Historia Física i Política de Chile, of which his two volumes on agriculture form part.

The first volume of Agricultura Chilena covers topics such as agricultural geography and the various Chilean climates, soils, crops, livestock, the farm tools used, the history and origin of the hacienda and the inquilinos, and the habits of the hacendados and the rural population. Although the sections on tools contain references to the situation in the 1850s, most of volume 1 and especially the chapters on the inquilinos and the habits of the rural population at large, are based on conditions prevailing during the 1830s and early 1840s.

The type of inquilinaje described by Gay is that still in an immature form, and it appears combined with features of the arrendatario system. For example, Gay describes that "in the north" (referring to Aconcagua in upper central Chile), "where the agricultural lands are becoming scarcer and more valuable every day, all inquilinos, even those who possess only a few cuadras of land, are obliged to pay a rent of from 12 to 500 pesos or more depending on the size of the land. They, like all inquilinos, must also perform labour services for the estates, and while doing so they receive daily three small

portions of bread, a pound of jerked meat, and perhaps a few cents and some paper for rolling cigarettes".¹¹ In this description (referring to the year 1838) both the payment of a rent -which according to Gay is calculated in money although not always paid in cash- and the performance of labour services, appear as the combine features of what Gay calls an 'inquilino'.

In the provinces of central and lower central Chile, moreover; (Santiago, Colchagua, Curico), the intermingling between the remnants of the arrendatario and immature forms of inquilinaje, and the social differentiation between the 'inquilinos' described by Gay is even more striking. Custom is amongst the most important factors of differentiation; in the provinces of lower central Chile where wheat production for exchange was a far more recent development than in Aconcagua, the remnants of the arrendatario type of relationship were still, on the whole, better preserved than in Aconcagua. Thus, some 'inquilinos' have to perform few labour services and consequently receive small pieces of land, writes Gay, while "others, on the contrary, are required to supply the hacienda with a worker all year round who receives only his food from the estate. In the latter case the inquilinos possess many sheep, cows, mules, horses, and a fairly large piece of land, large enough for some of them to have in turn their own inquilinos [sub-inquilinos], who are the ones who actually provide the worker to the estate".¹² Gay further states that amongst the high rank 'inquilinos' there are quite well-off people. The income of 'inquilinos' calculated by Gay, varies enormously, from 100 to 200,000 pesos annually, which is another indication of the fact that the term 'inquilino' is applied to a very heterogeneous social-spectrum of retainers and tenants, wherein features of the arrendatario and the inquilinaje combine in different degrees and gradations. Furthermore, according to Gay some 'inquilinos' even own land outside the haciendas "which they cultivate to good advantage, that is,

of course, whenever they do not come to see themselves as gentlemen and above such manual works".¹³

The latter well-off inquilinos described by Gay were undoubtedly remnants of the arrendatarios, who were themselves wealthy enough to have their own (sub)inquilinos, and in cases, even to acquire land. The differences amongst those who are referred to by Gay as 'inquilinos' are extraordinary, for this was in fact a time of transition when the old social order was mixed with features of a kind still unclear to the eye of those who -like Gay- witnessed the change. The old categories and terms which had once described different kinds of men were no longer suited to the changing circumstances of the 1830s-40s. Apparently local custom and tradition varied considerably, as did the extent to which they were then being upheld. Gay's remarks on the resistance offered to this process of change by those affected by it are elusive, yet they suggest that the inquilinos-arrendatarios were being required to pay fairly high rents if they wished to retain their status while the impoverished inquilinos proper (and presumably those inquilinos-arrendatarios unable to comply with the rising rents), were being burdened with growing labour obligations. Gay writes that "there are inquilinos who are so poor that they are unable to buy all the necessary instruments of labour. Although they receive very small pieces of land, their labour obligations with the estates are no smaller than those of the inquilinos who obtain larger allotments of land and who are undoubtedly more numerous, all of which causes frequent complaints; there are some inquilinos [inquilinos-arrendatarios] who have to pay quite a high rent to the landowner in order to retain their status of inquilinos" [inquilinos-arrendatarios].¹⁴

Volume 2 of Gay's Agricultura Chilena contains extensive passages (and sections) which refer to the situation in the 1850s and early 1860s; the information

on this period was obtained by Gay in his second trip to Chile in 1863 and through regular contact with his Chilean collaborators. The emphasis of this volume, however, is on matters of technology and it contains no follow-up chapter or section on the situation of inquilinos and other rural workers as they were seen by Gay in the 1830s-40s. Volume 2, nonetheless, contains most of Gay's valuable descriptions and comments on the methods of wheat cultivation and the factors hampering the expansion of production by the late 1850s and early 1860s. It is in this volume that Gay discusses the careless selection of seed, resulting in unwanted or degenerated features of the Chilean-grown wheat, the disadvantages of the types of plough used, the landowners' reluctance to introduce the scythe, the lack of precautions to avoid losses by plant disease, and, not least, the anxiety of the hacendados to procure enough hands for the harvest since seasonal labour shortages often caused delays and the loss of part of the crop.¹⁵ Gay advocated an overall change of the haciendas' traditional methods of cultivation, maintaining that without it production would inevitably stagnate;¹⁶ he urged landowners to take elementary precautions against plant disease with the same emphasis as he advocated the need for using fertilizer, better ploughs, and farm machinery. By the time of his death (1873), Gay's Historia Física y Política de Chile included 8 volumes on history, 8 on botany, 8 on zoology, 2 volumes on agriculture, and 2 geographical atlases of the country.

McBride's treatise focuses on an entirely different period in the historical development of the hacienda than Gay's, i.e., on the second and third decades of the 20th-century. In contrast to Gay, whose initial formation was that of a natural scientist, McBride's interest lay much more squarely in the social sciences and his work contains only general references to the practical aspects of farming. The preparatory period

for McBride's Chile: Land and Society began with his first period of residence in the country (1903-09). Twenty years later McBride returned to Chile for a further year, gathering "detailed data by interviews, visiting different kinds of rural properties, and carrying on investigations in libraries, archives, and government offices".¹⁷ During this second trip McBride had ample opportunity to note the rapid socio-political transformation which Chile was under-going (a change recorded especially in chapter 26, where he advocates the need for agrarian reform). McBride was critical of the hacendados for their unwillingness to allow change; he maintained that the hacienda had outlived its purpose and that in the 20th-century it was retarding "the social and political development of the Chilean people".¹⁸

Further, McBride was critical of the hacienda for the relation of subordination (of Master and Man) to which it contributed, and which in turn made 'democracy' impossible. His image of don Fulano and Zutano which, as McBride maintains, brings to mind some resemblance with Tolstoy's Master and Man, reflected what was then a real element of Chilean society; a society which, by the time McBride wrote, still held to many of the old privileges, habits and values inherited from a predominantly agrarian 19th-century Chile. Yet one must not go too far in this image of 'Master and Man' which, as McBride himself insisted, was already fast disappearing by the first third of this century.¹⁹ McBride took the view that the hacienda was originally a semi-feudal organization which had sprung from the encomienda and the Spanish conquest.²⁰ He was, nevertheless, quite emphatic in his view that the inquilinaje had its own characteristics. "The inquilino in present day Chile is neither slave nor serf, and no bondage to the land or the landowner has legal status",²¹ writes McBride, drawing a sharp distinction not only of the specific character of the inquilinaje, but also -in so far as he establishes a comparison with the serf or

slave- of the type of bond which is neither with the land as in the case of the Roman colonus, nor with the person of the landowner as in the case of the feudal manorial dependant. McBride then proceeds maintaining that the inquilino is also completely different from the Mexican peon, "since the essential feature of peonage -debt peonage- is not recognized or practiced in the republic. (....) But he is [the inquilino], nevertheless, in most cases quite firmly attached to the estate on which he lives".²²

McBride viewed the inquilinaje as being typically Chilean in the nature of its bonds and its social manifestations. Of course he had the opportunity -which Gay did not have- of observing the inquilinaje in a completely mature form. Yet Gay, even at the early stage of the 1830s-40s, was clear in distinguishing the emerging forms of the inquilinaje which he encountered as being quite distinct from the European serf or the Roman colonus as regards the nature of the ties.²³ The origins of the hacienda and the inquilinaje were sought, both by Gay and McBride, in the conquest of the Indian population by the Spanish and their up-rooting and subsequent organization into groups of encomiendas. McBride writes that "once the land had been taken up by the invading race, the native had little choice but to attach himself to the haciendas on whatever conditions existed. Thus, out of mutual needs -the Indian's for protection and a place to live, the Spaniard's for workmen on his stock ranch or agricultural estate- evolved this Chilean system of Master and Man".²⁴ Gay, however, did establish some parallel between the inquilino and the freed serf in certain European countries maintaining that in both cases the peasant paid his rent in labour (Gay found nothing unfair in paying one's rent in labour, provided the peasant was not abused).²⁵ Such a parallel between the inquilinaje and the European remnants of serfdom is absent in McBride, however, and this is in itself quite

revealing.

Whereas, for Gay, the inquilinaje (or rather the hybrid forms of inquilinaje he saw in the 1830s-40s) would develop and flourish only if the peasant could be safe-guarded against abuse, and be given sufficient security of tenure to strengthen his bonds and desire to make improvements in the land and remain on the estate, for McBride this security is seen in a completely different light. By the time McBride was writing there had emerged a mass of people -the peons- which was far worse-off than the inquilinos. The existence of this mass of peons, composed of semi-proletarians and migrant labouring poor deprived of the little security the inquilinos enjoyed, is a crucial element in McBride's explanation of the inquilino's ties and his clinging to the hacienda. If the inquilino left the estate his chances of faring any better elsewhere were meagre, as he knew well from the experience of those of his off-spring who emigrated when a position in the estate was denied them. Thus, there was no need for the hacendado to offer the inquilino any more security of tenure than the little he already had, for this was more than adequate for the inquilino to wish to remain on the estate. The inquilino had a place in society, while the landless peon was a nobody, a roto, who easily caught the eye of the police and rarely found stable employment. The peons thus acted as a constant reminder of the fate which awaited the inquilino if he lost the favour of the patron. The inquilino, therefore, "knew his place and kept it, and discharged well the obligations of that position", writes McBride, being "respectful, diligent, honest, submissive. Sometimes quarrelsome with his equals and quick to let quarrels grow into fights, he seldom forgets himself, even when drunk, so far as to fail in deference to the upper class".²⁶

Thus, fear of losing his position, a fear of

ultimately becoming a proletarian, and consequently respect for the hacendado on whose favour the inquilino's status depends, are extremely important constituents of the inquilino's bonds and behaviour. Another very important element in the nature of the inquilino's bonds with the estate is tradition, as well as a certain fear of the unknown world beyond the hacienda, and this is also remarkably well established by McBride. The inquilino, his father, and all his ancestors as far back as memory would recall, had lived on the estate. He himself had rarely been "away from his home place and never for more than two days at a time".²⁷

The third written source to be commented on here, as stated at the beginning of this section, is Balmaceda's Manual del Hacendado Chileno. Balmaceda was himself an hacendado and his book was published in 1875. It consists of a systematic model of hacienda organization, of suggestions on the day-to-day running of an estate, and it gives advice on agricultural methods. In fact, it is more a practical handbook than anything else, the underlying theme being the need to improve and adapt the hacienda to the needs of the time (1870s); it is worth noting that Balmaceda's book was published only a few years after the landowners' association, the SNA, had been discussing the problems hampering the expansion of agriculture, particularly the seasonal labour shortages and the issue of migrations, advising landowners to settle workers in their estates as inquilinos-peones and to introduce harvesting machinery.²⁸ Balmaceda's chapter on organization is extremely interesting for it sets out standards of duties and obligations of the different categories of inquilinos, thus providing an insight into what was then considered an acceptable norm. It also portrays what was then considered as an 'improvement' of the organization and running of the estates.

NOTES : APPENDIX 1

- (1) Bauer, A.: 1975, p.85 (footnote 30), and pp. 75, 123.
- (2) See Johnson, A.L.: 1978, pp. 204-06.
- (3) See Anuario Estadístico 1862, p.431 (under Estadística Agrícola).
- (4) See Anuario Estadístico 1868, (Entrega No. 9) p.301.
- (5) I have also detected an error in the amount of trigo amarillo (a variety of wheat) reportedly produced in Chiloé in 1885; the figure supplied by the 1885 Anuario Estadístico clearly over-estimates production of this variety of wheat in Chiloé, showing more production of trigo amarillo there than in the province of Santiago itself, second only to Aconcagua. The figures of wheat production in 1885 which appear in this thesis, have been adjusted assuming that Chiloé produced in 1885 the same amount of trigo amarillo as it did in 1884. This amounts to a fairly slight adjustment of the national, and regionally aggregated data.
- (6) In 1866 for example, the Office's director writes that "if we bear in mind that progress will be made in agriculture as in all other branches of industry, then we would have to agree upon the fact that agriculture, today still in its infancy, is our principal source of wealth and, above all, the most reliable one". (Anuario Estadístico 1866, p.462)
- (7) See Sinopsis Estadística 1902, pp.357-58.
- (8) A special ministerial department was created for the purpose of compiling and reporting agricultural statistics (in the Ministerio de Obras Públicas). For references to the 1907 re-organization of the Statistical Office see the introductions to the Anuario Estadísticos and the Sinopsis Estadísticas of 1907-08.

One of the errors in the 1908 data of the Anuario Estadístico, is the adding of the provincial figures of trigo amarillo produced. The reported total is 378,876 quintales, but it should be 370,076 quintales (a copying or a typographic mistake, the zero being wrongly taken for an eight?). There are further errors or omissions since, amongst other things, the

provinces of Valparaiso and Colchagua show yields of over 60 quintales per hectare, which are obviously totally unrealistic figures (high yields are of the order of 20-25 quintales per hectare). The erroneous and incomplete data on wheat production supplied by the 1908 Anuario Estadístico were subsequently corrected, and revised figures on Chile's total wheat production were supplied in retrospective statistical series appearing in the Anuarios of the following years. Hurtado, C.:1966, p.161, is apparently unaware of this since he uses the misleading data reported by the 1908 Anuario Estadístico.

- (9) Hurtado, C.:1966, p.161, uses the Office's figures on wheat production to establish trends, but he compares the data for 1860, 1870, 1880, 1885, and 1908, without any qualifications whatsoever as to the reliability of the data or the methods by which it was obtained by the Office itself. He makes no mention of the fact that the data for 1885 and 1908 is not directly comparable. He moreover transforms the Office's figures for 1860-1880 from fanegas to quintales at the wrong rate (as explained in chapter 5, section 3), and he also unfortunately chooses to work with the misleading data supplied by the Anuario Estadístico of 1908.
- 10) See Censo Agropecuario 1936, p.1.
- 11) Gay, C.:1973, vol.1, p.185.
- 12) Ibid. p.184.
- 13) Ibidem.
- 14) Ibidem.
- 15) See for example Gay, C.:1973 vol. 2, pp.27-29, 32-35, 41-42, 47-48, 77, and 82.
- 16) See Gay, C.:1973 vol. 1, pp.278-79, and vol. 2, pp.17-18 32-33, 47-48.
- 17) McBride, G.:1936, p. xxi (Preface). McBride's work includes (amongst others) Land Systems of Mexico(1923) and Agrarian Communities of Highland Bolivia(1921).
- 18) McBride, G.:1936, p.376.
- 19) Ibid. p.383.
- 20) Ibid. p.375.
- 21) Ibid. p.148-49

(22)McBride,G.:1936, p.149.

(23)See Gay,C.:1973 vol. 1, pp.179-80.

(24)McBride,G.:1936, p.147.

(25)See Gay,C.:1973, vol. 1, pp.179-80 (also p.185).

(26)McBride,G.:1936, p.151 (emphasis supplied).

(27)Ibid. pp.8-9.

(28)As discussed in chapter 5 section 3 of this thesis.

APPENDIX 2

THREE AGRICULTURAL REGIONS :

CENTRAL, INTERMEDIATE AND SOUTHERN CHILE

Many of the contemporary works on Chile's agriculture aggregate the data by regions, which in turn comprise several provinces, a distinction being usually made between central Chile, defined as the area from Aconcagua in the north down to Concepcion in the south, La Frontera and the provinces of the far south.¹ Specialised works such as the 1966 CIDA report for example, introduce further distinctions within the south dividing it in turn into three regions (i.e., La Frontera, Los Lagos y Chiloe, and Los Canales). Central Chile, however, is almost invariably defined as the area comprised approximately between Aconcagua and Concepcion (inclusively).² The data is aggregated and analysed according to this definition of central Chile. Certainly, as Gay noted in the 1830s, the latter region has to a certain extent, some geographic and climatic features in common. Mediterranean type of flora prevails and crops or fruit trees typical to a mediterranean climate can be easily grown there (e.g., vineyards, almond trees, some citrics, cheakpeas, etc.), whereas in the more southern places they cannot.³ As one moves from Concepción down to the south a different type of climate and vegetation prevails, similar to that of cold rain forests of northern Europe. Beyond this (Llanquihue), opens an accidented geography of fiords, glaciers, and finally the steppe of the Tierra del Fuego suited only for extensive sheep breeding. Thus, from the standpoint of the climate and certain geographical features it may be appropriate to define central Chile as the area comprised between Aconcagua and Concepción.

From a historical point of view, however, such a definition of central Chile is inadequate, particularly as regards the 19th and early 20th centuries. For a start, the region such as is defined as central Chile is very large and no thorough analysis should rely solely on such a broad aggregation of the data. In fact, even in recent times the provinces between Aconcagua and Concepción, and quite often the various departments within these provinces, show considerable differences in that there are areas of predominantly small holdings and areas of chiefly large estates; population density, wages, the quality of the soil, water supply, and what is considered to be sufficient land to sustain a family, also vary. All the more so when one deals with Chile's agriculture a century ago, when wheat cultivation was still on the process of extending southwards, the differences between some of these provinces now considered as central Chile were much more pronounced than today.⁴ Travelling through the country in 1831 Gay noted the state of idleness and wilderness of estates in Colchagua, very little land being cultivated and chiefly for domestic consumption in the area for there was no commercial outlet for produce. The landowners lived on their estates, very modestly and in none of the comfort enjoyed by the hacendados of Santiago. Gay noted that south of Colchagua similar if not deeper conditions of isolation prevailed, these places being thinly and scatteredly populated.⁵ Three decades later, however, the situation in Colchagua, Curicó, and Talca had changed radically and these provinces were already turning into some of the country's largest wheat producing areas. Thus, in 1868 for example the Anuario Estadístico referred to central Chile as being composed of the provinces between Aconcagua and the rivers Mataquito and Lontué (i.e., between Aconcagua and Talca), describing the provinces to the south of Talca, from Maule to Concepción, as provincias australes (southern

provinces).⁶ Of course, in those days what is today thought of as southern Chile was then almost complete wilderness. The notion of what may be considered as central or southern Chile, and beyond it the agricultural frontier, has naturally varied with time as the different provinces were being populated and brought into agriculture production for exchange. Today's concept of central Chile as the region comprising the provinces from Aconcagua to Concepción, has indeed a very limited value for historical analysis.

I have therefore used a definition of central Chile which includes a much smaller area than the Aconcagua to Concepción region conventionally employed, and one which is more relevant from an historical point of view. I have considered that central Chile is composed of the provinces from Aconcagua to Talca inclusively, while those from Linares/Maule to Concepción (inclusively) make up what I describe as an intermediate region. These two regions are still quite sizeable and heterogeneous but they nonetheless show distinctive patterns which wider aggregations hide. They are not, however, to be seen as a substitute for provincial analysis which is sometimes necessary. Finally, I have aggregated the more southern provinces, from Arauco to Llanquihue, within a region described as the south and La Frontera. All in all these three regions account for no less than 90% or more of the country's agricultural land.

To aggregate the data supplied by the Statistical Office from the 1860s to the 1930s in the three regions described above is not a mere exercise in arithmetic. It requires careful consideration of the several changes and re-organizations of the country's political map. In the 1860s and 1870s for example, Linares was not a province but only a department of Maule, and similarly, Malleco, Bío-Bío, and Cautín, were at points departments of Arauco. In the mid-1870s the provinces of Santiago was split in two, one part remaining as Santiago while the other became the province of O'Higgins. By that time also, the

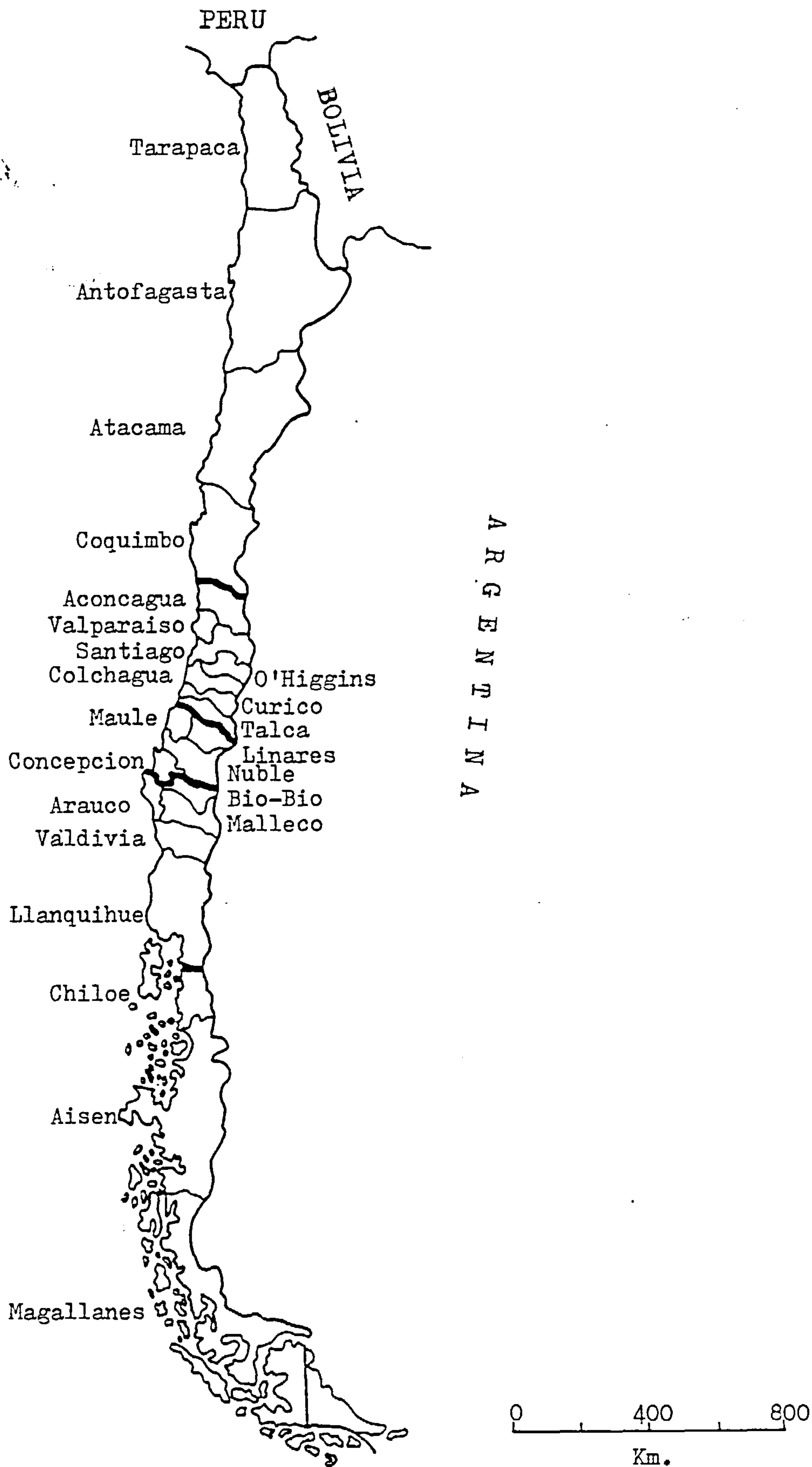
department of Curepto was part of the province of Curicó whereas today it is part of Talca. In the late 1920s many formerly created provinces became again departments only, being re-organized then in larger provinces (e.g., Curicó lost provincial status and most of it became part of Talca, Arauco became part of Concepción, Malleco and Cautín were fused with Bío-Bío, and Llanquihue was incorporated as part of Chiloé, amongst other changes). The 1930 agricultural census for example has the data aggregated according to this provincial re-organization. But only a few years later, however, the provincial re-organization of the late 1920s was abolished and for the most part the provinces and their departments were reversed to the way in which they had been previously organized. Thus, what appears in the 1936 agricultural census as Talca, is not the same Talca of the 1930 census. The student should therefore be extremely careful when aggregating data at provincial level. In order to avoid any source of confusion I now proceed to list the various provinces, with their respective departments, which form part of the three regions described in this thesis, and according to which the data has been aggregated (see below).

Provinces not included in the three regions considered (below) are : Magallanes, Aisén, Chiloé, Coquimbo, Atacama and (as from 1878) the whole of Antofagasta and Tarapacá, the first two provinces being in the extreme south and the last three being chiefly desertic areas of the far north, with very little agricultural land. Only Chiloé in the south and Coquimbo in the north have had any significant agricultural production. The data of all these provinces appears aggregated in this thesis under the heading of other. Since the provinces included under this heading are so very heterogeneous, the corresponding aggregated data has little or no meaning in itself. It is but the difference between the country's total and the three regions considered (central, intermediate, south and

La Frontera).

	<u>PROVINCE</u>	<u>PROVINCIAL DEPARTMENTS INCLUDED</u> ⁷
CENTRAL CHILE	Aconcagua	Petorca, La Ligua, Putaendo, San Felipe, Los Andes.
	Valparaíso	Quillota, Limache, Valparaíso, Casablanca.
	Santiago	Santiago, Victoria, Melipilla, San Antonio.
	O'Higgins	Maipo, Rancagua, Cachapoal.
	Colchagua	Caupolicán, San Fernando.
	Curicó	Santa Cruz, Curicó, Vichuquén.
	Talca	Lontué, Curepto, Talca.
INTERMEDIATE REGION	Maule	Constitución, Chanco, Cauquenes, Itata.
	Linares	Loncomilla, Linares, Parral.
	Nuble	San Carlos, Chillán, Bulnes, Yungay.
	Concepción	Coelemu, Talcahuano, Concepción, Puchacay, Rere, Lautaro.
SOUTH & LA FRONTERA	Arauco	Arauco, Lebu, Cañete.
	Bío-Bío	Laja, Nacimiento, Mulchén.
	Malleco	Angol, Collipulli, Traiguén, Mariluán (today's Victoria)
	Cautín	Llaima, Imperial, Temuco.
	Valdivia	Villarica, Valdivia, La Unión, Rio Bueno.
	Llanquihue	Osorno*, Llanquihue, Carelmapu.

*(Today Osorno has provincial status).



MAP 1: CHILE, 1900. WITH AN INDICATION OF PROVINCES AND REGIONS.

NOTES : APPENDIX 2

- (1) See for example Bauer, A.: 1975, p.xv (Preface), and p.85; and Hurtado, C.: 1966, p.161.
- (2) See CIDA: 1966, p.3-4.
- (3) See Gay, C.: 1973 vol. 1, pp.67-70.
- (4) See Johnson A.L.: 1978, p.206.
- (5) See Gay, C.: 1973 vol. 1, p.111 (also p.153).
- (6) Anuario Estadístico 1868 (Entrega No. 9) p.306.
- (7) The political organization of the country is, briefly, as follows. The province is the basic nucleus and is ruled by the central government through an appointed Intendente. The provinces in turn are composed of departments, each governed by a Gobernador (otherwise known as Delegado de Gobierno). Each provincial department has several sub-departments where the authority used to lie (until the late 19th-century) entirely with the Sub-Delegado de Gobierno, who was also appointed by the central government. The municipalities, created in the late 19th-century, however, in addition to their administrative functions did share some of the power at the sub-departamental level, although control of the police has always remained in the hands of the government's appointed Sub-Delegados.

APPENDIX 3

i. The number of inquilinos and other workers employed by the estates : 1921-1936.

The 1921 Anuario Estadístico reports a total of 82,000 inquilinos employed throughout the country. The figure reported for the number of inquilino-dwellings, however, is only 74,000.¹ It is a wholly unusual occurrence for an inquilino, who is the head of an extended household, not to have a dwelling. The Anuario does not mention the criteria for defining a dwelling and therein may lie the discrepancy (e.g., two or more semi-detached houses, or the rows of adobe-brick humble terrace houses along a single dust street, built on some estates in the first decades of this century, may have been a source of confusion for the census taker). The 1921 Anuario, moreover, does not enter the definition of inquilino used for the counting and here too may lie a source of confusion for the census taker, perhaps more so than in the counting of dwellings. It is likely that members of inquilino families such as the elder son, may have been, in some cases, themselves counted as inquilinos. I suspect that the number of dwellings is a more secure indication of the number of inquilinos, and I have thus considered this figure, 74,000 , as a reflection of their actual number in 1921. There is nonetheless an additional factor to consider when interpreting this data. This figure says little about the inquilinaje relation itself, which was stronger in the estates of central Chile than in the south. Some inquilinos depended on partial wages for their sustenance more than others.

The 1936 census reports a total number of 108,000 inquilinos but (as explained in chapter 2 section 2)

this figure is undoubtedly misleading.² Out of the 19,400 holdings employing inquilinos, only 12,000 employed any member of the inquilinos' households (voluntarios or obligados), and only 12,700 employed any outside peons. In other words, of the 19,400 estates employing inquilinos, 7,400 did not employ any member of their households and 6,700 hired no outside peons. Moreover, of these 19,400 estates arguably employing inquilinos, 8,000 had no empleados (i.e., no mayordomo, or foremen or any supervisor or administrative staff). Hence, one may say that around some 7,000 estates reportedly employing inquilinos did not use any other type of worker and had no overseers or administrative personnel. Given the hierarchical structure which the hacienda (or medium size estate) and the inquilinaje presuppose, there is no doubt in my mind that these 7,000 holdings were rather small properties employing very few workers who were not inquilinos proper, although they may have been housed and perhaps allotted tiny pieces of land such as a back-yard garden plot for example. Many of these may have been counted amongst the small urban or semi-urban properties (the chacras and quintas), which were surveyed for the first time in the census of 1936.²

If one assumes that each of these 7,000 holdings in question, employed on average no more than 3 of such ill-counted 'inquilinos' (hence a total of 21,000), the actual number of inquilinos is down from the 108,000 reported by the census, to only 87,000.³ I have considered the latter figure as a more accurate indication of the actual number of inquilinos than the figure as supplied by the 1936 census.

ii. Estimate of the proportion of labour-power obtained by the estates through the inquilinaje and wage relations

This is certainly a painstaking exercise to say the least. There are no solid foundations upon which to

establish an estimate of the kind made above (of the number of inquilinos). One problem is that the census does not indicate the number of days worked by each type of worker. This information can be assumed with some confidence for the case of inquilinos, and with some guesswork for the members of inquilino families (which I shall do below). One needs to further assume what proportion of the days worked by members of inquilino-households were remunerated, and which were only partially paid(e.g., when did the members of the inquilino-families work as voluntarios or as obligados?). This information is not reported by the census either. But this is not all, however, for one is dealing here with national figures and statistical averages, which turn to be quite unrepresentative of the particular estates, and this is probably the most important limitation of the data below.

Table A.3.1

Types and number of workers employed by the estates:
Chile 1936 (national totals).

	000's workers (1)	000's holdings employing them (2)	Average per holding (3)	Average per inquilino (4)
<u>Inquilinos</u>	*87.0	*12.4	7.0	1.0
Mbrs. <u>inquilino</u> households	106.0	12.0	8.8	1.3
Outside peons	95.0	12.7	7.5	1.1
<u>Empleados</u>	31.0	11.4	2.7	0.4

Source : Censo Agropecuario 1936, p.34

*(figure adjusted according to part i of this appendix)

Take it that it is harvest season for instance, which is the time when all the workers reported(above) are most likely to have been simultaneously employed. According

to table A.3.1 (collum 4), for every 2.3 resident workers employed (inquilinos plus members of their households), there is less than one (0.8) outside peons. Thus, some two thirds of those working at the harvest time are either inquilinos or members of their households. This is quite unrepresentative of any sizeable estate where most of the labourers needed for the harvest are composed of outside peons. The figures above are only a national average. The number of inquilinos per estate for example, is only seven (collum 3 of table A.3.1). A significant number of holdings of less than 200 hectares in size reported having employed inquilinos, and the low national average of seven inquilinos per estate is probably influenced by the fact that these holdings employed fewer inquilinos than the large estates.³ Smaller holdings also used a lower proportion of seasonal peon labour than the large estates.

Bearing in mind all the above qualifications on the limitations of the data, I tender the following estimate of the proportion of labour-power obtained through the inquilinaje and the wage relation. The estimate below is based on the following assumptions. The inquilino's labour obligations consist of supplying 240 man/days' labour, of which 20% is remunerated while the remaining 80% is supplied to the estate as unpaid inquilinaje labour-power.⁴ The members of inquilino households work for the landowner 190 days a year, of which on average only $\frac{2}{3}$ are remunerated (either because at times they work as obligados or because their pay is sometimes lower than for outside peons as a condition of the inquilinaje relation).⁵ Outside peons work for some 80 days a year each, being fully remunerated, i.e., none of their labour-power is obtained through the inquilinaje.

	<u>Inquilinos</u>	Members of <u>inquilinos'</u> households	Outside peons	Total
a. <u>No. of workers</u>	87,000	106,000	95,000	288,000
b. <u>Days' labour</u> (each)	240	190	80	-
c. <u>Total days' labour</u> (000's, days: <u>a</u> x <u>b</u>)	20,880	20,140	7,600	48,620
i) of these obtained through <u>inquilinaje</u>	16,704(80%)	6,713(33%)	-	23,417
ii) of these obtained through wage payment	4,176(20%)	13,427(67%)	7,600	25,203

Thus, perhaps slightly less than half of the labour-power was obtained through the inquilinaje relation, although as stated above this is a average figure for all the holdings employing inquilinos throughout the country. In medium to large estates (of over say, 200 hectares of land in size), the proportion of labour-power obtained from outside peons and therefore by paying wages was no doubt, in most cases, higher than the national average. Yet, the number of harvesting machinery weighs heavily on the proportion of outside peon within the total labour force of the estates, and here again one could expect to find a great deal of variation and differences between haciendas.

NOTES : APPENDIX 3

- (1) Anuario Estadístico 1921, pp.123-24. This information was actually collected by the Statistical Office in the partial census of 1919.
- (2) Censo Agropecuario 1936, p.34.
- (3) The data on land distribution per size of holding supplied by the Censo Agropecuario 1936 p.8, reveals that there were 10,349 estates of over 200 hectares in the whole country. The difference between this figure and the number of estates which I have considered as employing inquilinos (12,400), gives a total of 2,051 properties of less than 200 hectares which reported having inquilinos. Properties of less than 200 hectares in size are usually described as fundos or funditos, not as haciendas. McBride, G. (1936) p. 165, reckons that by the 1920s the majority of haciendas have between 15 and 30 inquilinos.
- (4) According to descriptions in chapter 2 (section 2). See also note 25 of chapter 2.
- (5) Ibidem. Data in Kay, C. (1971): p.141 also served as as a very broad reference for this estimate.

APPENDIX 4

COMMENTS ON THE STATISTICAL DATA ON CHILEAN EXPORTS
OF WHEAT AND FLOUR DURING THE 1850s TO THE 1880s.

This appendix examines some limitations in the statistical data available on Chile's 19th-century exports of wheat and flour. The Chilean Statistical Office reported figures on wheat and flour exports which were based on the information received from the port authorities. The Office supplied data both on the quantity and value of these products exported annually and, with the exception of the years prior to 1862, there appears to be no reason for questioning the overall reliability of this data, at least not as regards its usefulness for establishing trends; the figures prior to 1862, however, do not seem to be altogether consistent as shall be explained below. The Office also reported on exports by country of destination but this data is wholly unreliable. This is because prior to 1901, the port officials usually recorded the country of destination of exports according to the flag they saw on the vessel on which the produce was shipped, thus often conveying misleading information to the Statistical Office.¹

Sepúlveda's book on Chilean exports of wheat and flour supplies data on the exportation of these products by countries of destination.² Bauer (amongst other scholars) quotes Sepúlveda's figures on exports to California and Australia, which are, admittedly, estimates drawn by the author directly from port records.³ These data are notoriously erroneous. I have added below Sepúlveda's data on Chilean exports of wheat to California and to Australia, supplied by him on separate tables, and it can be seen that the figures do not tally with the data on

Chile's total exports which Sepúlveda himself supplies on another separate table. Exports of wheat to California and Australia during 1850-56 appear to be much larger than the country's total, which shows that the data is obviously inconsistent (see table A.4.1 below).

Table A.4.1 :

Sepúlveda's data on exports of Chilean wheat to California and Australia: 1848-59. (In 000's quintales)

	Exports to California -1-	Exports to Australia -2-	Exports to California & to Australia -3-	Chile's Total Exports -4-
1848	3	-	3	77.3
1849	87	--	87	131.1
1850	277	--	277	131.6
1851	175	--	175	55.4
1852	145	--	145	116.6
1853	166	11	177	48.6
1854	63	127	190	91.0
1855	15	324	339	189.0
1856	-	155	155	134.0
1857	--	15	15	149.4
1858	-	1	1	112.9
1859	--	33	33	114.5

Sources: Column 1, Sepúlveda, S.:1959, p.44(also in Bauer, A.:1970, p.147);
Column 2, Sepúlveda Ibid. p.48 (also in Bauer, A.:1970, p.149);
Column 3, addition of columns 1 + 2;
Column 4, Sepúlveda Ibid. p.127.

The error could be partly due to the misleading criterion used by port officials to establish the country of destination (the flag of the carrying vessel), and also

probably to double counting of exports to California and Australia in cases when inter-coastal shipments were involved.⁴ It is equally possible that Chile's total exports of wheat during this period (1850s) were under-estimated by the data of Sepúlveda and that of the Statistical Office. I have compared Sepúlveda's data on Chile's total wheat exports with that supplied by the Statistical Office. Prior to 1862 one finds discrepancies in the figures supplied by these two sources which for the most part seem rather small, except in 1860 for which year Sepúlveda reports an exportation of 233,000 quintales of wheat, whereas the Office's figure is only 72,000;⁵ no apparent explanation exists for this extraordinary discrepancy. As from 1862, however, the export figures supplied by the Office and by Sepúlveda are identical (except in 1885, Sepúlveda's figure on total exports of wheat and flour containing a large error).⁶

Until fairly recently Sepúlveda's book was the only work which offered a compilation of statistical data on exports of Chilean wheat and flour by ports. Bauer, who maintains that the major decline of wheat exports from central Chile occurred during the first half of the 1880s, introduces a table on exports by ports based partially on Sepúlveda's data.⁷ The table consists of three columns. The first one is of national (total) exports; the second one is of exports from the port of Talcahuano from where, it is argued, produce grown in the region of La Frontera was exported; the third column is a subtraction of the second column from the first. Bauer entitles this third column "Exports from Central Chile", on the assumption that any produce not exported from Talcahuano was in fact exported from ports of central Chile (see table A.4.2 below).

Two basic doubts can be cast on the statistical evidence put forward by Bauer, one concerns the data of the table itself and the other relates to the conclusions which can be drawn from it. As regards the table's data it would seem from the figures that no wheat was exported

Table A.4.2 :

A reproduction of Bauer's table on wheat exports from La Frontera and central Chile: 1871-75 to 1891-95.

(Average annual exports in 000's quintales)

	National Exports -1-	Exports from La Frontera -2-	Exports from Central Chile -3-
1871-75	1,131		1,131
1876-80	946		946
1881-85	1,082	700	382
1886-90	836	750	86
1891-95	1,409	1,200	209

Source: Bauer, A.:1970, p.160 (quoting Sepúlveda, S.:1956, pp.100,127-28, and Estadística Comercial of the relevant years).

exported from Talcahuano ("La Frontera" in the table above) prior to 1881-85, which was not at all the case. Bauer quotes Sepúlveda's export data for Talcahuano for the period as from 1881-85 only, while omitting that of previous years. During 1871/1874-75 for example, an average of some 128,000 quintales of wheat were exported annually from Talcahuano according to Sepúlveda, and a further 420,000 from the port of Tomé located only miles north of Talcahuano;⁸ if these data are taken into account, it becomes apparent that the proportion of the country's exports produced in the provinces north of Ñuble during the 1870s was much smaller than it might be thought.

In fact, the conclusions which one can afford to draw from such figures as those presented in the table are insufficient to discuss exports of wheat grown

in the provinces of central Chile, or the south. That wheat was exported from a particular port does not necessarily mean that it was grown in the region where the port was located, in other words, that wheat was exported from ports other Talcahuano does not necessarily mean it was grown in central Chile. In fact, wheat produced in the southern provinces was shipped (through Talcahuano, Tomé, and other minor ports such as Constitución) to Valparaíso, Chile's main international port, from where it was actually exported. Thus, some of the wheat recorded as having been exported from the main port of central Chile (Valparaíso), was actually produced in the south. Inter-coastal trade must be also considered before any conclusion regarding exports of regional produce can be drawn. Moreover, in order to assess the amount of regional produce which found its way to an external market it is also necessary to consider exports in conjunction with domestic shipments to the mining districts of the north. Export figures alone for the pre-1879 and post-1880 periods are not strictly comparable because exports of Chilean wheat and flour to Tarapacá and Antofagasta, which were part of Peruvian and Bolivian territory until 1879, were no longer recorded as exports once Chile took possession of these provinces in 1879-80, being considered as part of Chile's domestic trade.

Exports and coastal shipments of wheat to and from Valparaíso are shown in table A.4.3 below. The importance of Valparaíso for agricultural exports increased dramatically with the construction of the Ferrocarril del Sur (and the railway from Santiago to Valparaíso) during the 1860s.⁹ The infra-structure and facilities of this port to cope with heavy traffic were also greatly improved. Produce of the coastal areas of Curicó and Colchagua, which prior to 1868 was shipped to Valparaíso or abroad through the tiny port of Llico, was now sent directly to Valparaíso by train, and so was that of Talca which was previously shipped through Constitución. The

railway made it possible for produce of the provinces of lower central Chile (Colchagua, Curicó, Talca) to reach Valparaíso by land, and very probably this accounts for part of the growth of net exports and domestic shipments to the north, from Valparaíso, during the latter half of the 1860s (see column 4, table A.4.3). By the 1870s Valparaíso was serving almost the whole of the region defined in this thesis as central Chile (except the coastal departments of Talca which continued to use the port of Constitución until the 1880s); the growing domestic shipments from the south to Valparaíso as from the late 1860s (shown in table A.4.3) came from Constitución, Tomé and Talcahuano. The figures of table A.4.3 show, therefore, that as regards almost the entire region of central Chile (from Aconcagua to Talca excluding coastal departments of the latter), no significant increase of exports and domestic shipments to the north of wheat grown in that region took place after the second half of the 1860s. In fact, net exports and domestic shipments from Valparaíso were declining already by the first half of the 1870s.

Table A.4.3 :

Average annual wheat exports from Valparaíso, and domestic shipments to and from Valparaíso (Valpo.): 1851-55 to 1881-85. (In 000's quintales)

	Exports from Valpo. -1-	Domestic ship- ments from Valpo. to the north -2-	Domestic ship- ments to Valpo. from the south -3-	Net exports & domestic ship- ments from Valpo -4- (1 + 2 - 3)
1851-55	40	10	9	41
1856-60	60	12	14	58
1861-65	132	15	66	81
1866-70	429	14	109	334
1871-75	460	16	189	287
1876-80	343	n/d	n/d	-
1881-85	271	21	47	245

Source of columns 1, 2 and 3 : from data in Oppenheimer, R.B.: 1976, p.506.

The decline of exports and domestic shipments of flour produced in central Chile seems to have occurred some years later than in the case of wheat, probably during the second half of the 1870s. Since no data is available on domestic shipments of flour for the period 1876-80 it is impossible to advance a more precise date as to when this decline began to take place. Yet, the very substantial fall of flour exports from Valparaíso, i.e. from 273 thousand quintales in 1871-75 to 110 thousand in 1876-80 (see table A.4.4 below), and the poor harvests of 1877 and 1878 when in fact flour had to be imported into Chile,¹⁰ suggest that in the second half of the 1870s central Chile sent less flour to the external market than during the first half of the decade. Further, the War of the Pacific broke-out in 1879 and there can be little doubt that the war was a factor which continued to hamper exports and shipments to the northern mining districts until 1881 at least; exports of flour continued to fall at any rate during 1881-85, and declined very sharply thereafter.¹¹ Thus, in all probability the trend towards a decline of exports and domestic shipments of flour produced in central Chile, shown by the figures in column 4 for 1881-85, began during the latter half of the 1870s.

Table A.4.4 :

Average annual exports of flour from Valparaíso, and domestic shipments to and from Valparaíso (Valpo.): 1851-55 to 1881-85. (In 000's quintales)

	Exports from Valpo. -1-	Domestic ship- ments from Valpo. to the north -2-	Domestic ship- ments to Valpo. from the south -3-	Net exports & domestic ship- ments from Valpo. -4- (1 + 2 - 3)
1851-55	126	46	180	(-) 8
1856-60	95	69	157	7
1861-65	194	89	177	106
1866-70	256	102	139	219
1871-75	273	120	115	278
1876-80	110	n/d	n/d	-
1881-85	86	151	75	162

Source of columns 1, 2 and 3 : from data in Oppenheimer, R.B.:1976, p.507.

The figures for 1851-55 in table A.4.4 (above) indicate that less flour left Valparaíso than entered this port. The export data for the 1850s is not altogether consistent or reliable, as we have seen, and it could be thought that the amount shipped from Valparaíso during this period was under-estimated. Nevertheless, throughout much of the 1840s Valparaíso also showed a negative trade balance in flour,¹² and there were no export duties on flour (or wheat) to suggest that smuggling or irregularities in export procedures occurred. The most likely explanation for this early negative balance lay in the very rapid growth of the population in the city of Valparaíso itself, and in the fact that road transportation was very difficult and expensive in those days; the 100 miles journey from Santiago to Valparaíso took about a week's time in ox-cart.¹³ Prior to the building of the railways in the 1860s produce from areas other than the adjacent departments of Santiago and Aconcagua was transported to Valparaíso by sea whenever this was possible. Thus, following the 1840's growth of trade, the fast population growth in the city of Valparaíso and the rising exportation (and prices) of flour, may have left a temporary negative balance in Valparaíso's port records on shipments of flour to and from, this port; the negative balance later on disappeared and gave way to a positive balance as flour from the provinces of central Chile reached Valparaíso by rail.

Although exports of Chilean wheat continued until the late 19th-century thanks to growing exportation from the southern provinces, exports of Chilean flour declined very sharply as from the second half of the 1870s.¹⁴ The fact that wheat was exported without being milled, i.e. as flour, has been connected to the backwardness of the Chilean mills which did not adopt the revolutionary transformations in the milling industry which took place elsewhere in the world during the 1870s.¹⁵ According to

the descriptions of Gay, however, it appears that during the 1850s a sophisticated milling industry had begun to emerge in Chile. Gay reports that although most of the Chilean mills were precarious in construction, there were also quite a number of the most modern designs of steam mills recently imported from Europe (Concepción alone had over 20 of these modern mills, some of which were built by merchant houses, e.g. Lillybank mills).¹⁶ Gay in fact goes as far as to suggest that the number of sophisticated mills was out-growing the commercial requirements of the flour industry in Chile, including exports.¹⁷ Writing in the early 1860s Gay maintains that one of the main reasons why the Chilean flour was becoming increasingly uncompetitive in world markets was the poor quality of the containers in which it was exported. Due to the high price of cotton, the Chilean flour was exported in jute bags and as a result of this the flour absorbed moisture and acquired an unpleasant taste, whenever it was not ruined altogether by fungus. In contrast to this, the USA exported its flour in large wood barrels which ensured that good quality was preserved during the sea voyage.¹⁸ It thus seems that the inability of leading Chilean mills to incorporate modern technology became apparent only in the 1870s, at a time when a major revolution in milling processes and equipment was taking place in countries elsewhere in the world. Prior to this, however, Chile's flour had already competed in the world market with disadvantage due to its poor quality on arrival to the countries of destination.

NOTES : APPENDIX 4

- (1) See Fernández, M.: 1978, pp. 135-37.
- (2) Sepúlveda, S.: 1959.
- (3) See Bauer, A.: 1970, pp. 147 and 149.
- (4) It is quite possible that the error in Sepúlveda's data was due to the unreliability of the ports' records on exports by country of destination. Sepúlveda's table on exports of wheat and flour towards the Pacific (i.e. the sum total of exports to all countries in the Pacific), is in fact consistent with his data on Chile's total exports of wheat and flour; this suggests that the mistake was probably made when attempting to calculate what amount of wheat went to which particular country.
- (5) Data from Sepúlveda, S.: 1959, p. 127, and from Sinopsis Estadística 1916, p.
- (6) Here Sepúlveda made a mistake when calculating the wheat contained in the 56,396 quintales of flour exported in 1885. According to the same ratio used by Sepúlveda these 56,396 quintales contain 70,495 quintales of wheat (1 flour = 1.25 wheat), which added to the 1,073,471 quintales of wheat exported in that year, should total 1,143,966 quintales of wheat and flour; Sepúlveda's figure is 1,778,421.
- (7) Bauer, A.: 1970 p. 160.
- (8) Sepúlveda, S.: 1959, pp. 99-100.
- (9) See Oppenheimer, R.B.: 1976, pp. 51-52.
- (10) The poor harvests of 1877 and 1878 were due to storms and floodings following a year of drought in 1876. The damage to the crops and fields was enormous. See for example, Sater, W.F.: 1979, pp. 72-79, and Vicuña Mackenna, B.: 1877, chapters 2-3. There were shortages of wheat and flour, and the government had to import from the USA, Argentina, and Uruguay.
- (11) See Appendix 6, table A.6.13.
- (12) See Oppenheimer, R.B.: 1976, p. 507.
- (13) See Gay, C.: 1973, vol. 2, pp. 246-47.
- (14) See Appendix 6, table A.6.13.
- (15) See Bauer, A.: 1975, p. 66, and Tscherebilo, S.: 1976, pp. 134-35.

(16) See Gay, C.: 1973, vol. 1, pp. 52-53. (See also Bauer A.: 1975, p. 66).

(17) See Gay, C. Ibid. p. 53.

(18) Ibid. p. 56, and vol. 2, p. 82.

APPENDIX 5

i. Weights and Measures

Of capacity :

1 Chilean Fanega = 97 litres
= 2.67 British bushels
= contains 71.5 kilos
of wheat.

1 Litre = contains 0.737
kilos of wheat.

Of weight :

1 Quintal = 100 kilos
= 1.968 British cwt.
= equivalent to
1.399 Chilean fane-
gas of wheat.

Of surface :

1 Hectare = 10,000 square metres
= 0.637 Chilean cuadras
= 2.471 acres

1 Chilean Cuadra = 15,700 square metres
= 1.57 hectares
= 3.879 acres

ii. Monetary Units: the dollar used in this thesis

The Chilean peso was a fairly stable (hard) currency from the 1830s until the mid-1870s. Thereafter, however, the peso relentlessly dropped against the world's major currencies; except for limited periods of time inflation became a permanent feature of the country's economy as from the late 1870s. This devaluation of the peso made it necessary to choose an appropriate alternative currency to express monetary values in this thesis (e.g., prices, exports/imports, trade balances).

One of the difficulties in dealing with monetary statistics of Chile's economic historiography, is the heterogeneous types of currencies employed by various scholars.¹ This poses practical problems for comparing the data of different authors, because none of the world currencies can be singled out as being ideally suited for measuring changes in the Chilean peso throughout the 19th and 20th centuries. Sterling is the most appropriate for the pre-1920 period since at that time Chile's international reserves were held in this currency. Sterling was also the strongest world currency during that time (most of Chile's international transactions were made in sterling), and it was certainly more stable than the American dollar particularly prior to 1847, and during 1860-67 when the American dollar fell sharply against sterling as a result of the Civil War.² After World War I, however, sterling lost much of its strength; the exchange rate fell from a long term 4.8 American dollars to the pound prior to 1916, to 4.4 dollars per £ in 1919, reaching a low peak of 3.7 dollars per £ in 1920 (see column 3 in table A.5.1 below). Sterling recovered its former value of 4.8 dollars in 1925, but it was

devalued again in the 1930s, and again notably in the late 1940s. Thus, the American dollar is the most appropriate currency to measure changes in the value of the Chilean peso from 1919 onwards; Chile's international reserves were held chiefly in dollars, the peso becoming officially linked to the dollar instead of sterling as from the 1930s.

Scholars focusing on periods prior to the 1920s, therefore, usually use sterling instead of pesos, whereas those dealing with periods after World War 1 operate mostly in American dollars. Abstract gold monetary units are also frequently used, the most common being pesos of 6 and of 18 pence gold content. As was stated above this diversity of currencies used, which is due to the objective limitations of sterling and the American dollar mentioned, poses a practical problem for comparing data of various authors and different periods. In choosing a standard monetary unit suited for the period in this thesis (1850-1930s), two criteria were employed. One criterion was that any such monetary unit would necessarily be an abstract one, since neither sterling nor the American dollar were suitable currencies for measuring the value of the Chilean peso throughout the period. The other criterion was that the abstract monetary unit chosen should be, both homogenous and practical for the purpose of establishing long term statistical series which could be compared. I have called this unit, the dollar, but it is not quite the same as the pre-1934 American dollar, as is explained below.

The objective contained in the first of the above criterion was achieved by first measuring the value of the peso from 1830 to 1918 against sterling, and the value of the peso from 1919 onwards against the American dollar, the sterling value of the peso from 1830 to 1918 being subsequently transformed into American dollars at the fixed rate of 4.8 dollars to the pound. By this method the value of the peso was not only measured against

the most appropriate currency of the relevant period (sterling prior to 1919, American dollars thereafter), but it was also expressed in terms of American dollars throughout without the unwanted variations of the latter during 1860-67; i.e., without the American dollar's own weakness during the Civil War reflecting on the value of the peso, for which purpose a fixed rate of 4.8 dollars to the pound was employed. Further, the gold content of the American dollar changed in 1933; one pre-1934 American dollar equals 1.693125 dollars of subsequent years.³ It was therefore necessary to express the whole series of values of the Chilean peso according to either the pre-1934 or the post-1933 gold content of the American dollar. The latter alternative was chosen because it allows one to establish a complete statistical series of the value of the peso, linking the pre-1934 and the post 1933 periods in terms of a homogeneous currency which is that used by the large majority of works and Chilean official publications since 1934. The dollar used in this thesis, therefore, is an abstract currency as regards all years prior to 1934, in the sense that during that period it was not an actual world currency; it was not the actual American dollar as it was then transacted against the peso or sterling.

Table A.5.1 (below) is based on the following procedures and sources :

Column 1: dollars per peso (in post-1933 American dollars)

- i. 1830-1918 : the figures correspond to indirect, nominal exchange rates of dollars per peso, calculated on the basis of the exchange rates of the peso and sterling in column 2, i.e., the value of the peso was measured against sterling and then transformed into dollars at the fixed rate of 4.8 dollars to the pound, as described above. Column 2 was thus multiplied by $(0.02 \times 1.693125) 0.0338625$; times 0,02 to transform pence per peso into pre-1934 American dollars

per peso at the rate of 4.8 dollars per pound, and times 1.693125 to transform this into post-1933 American dollars per peso.

ii. 1919 - 1933 : the figures correspond to the direct exchange rates of the peso and the pre-1934 American dollar according to D'Ottone and Cortés (1965) p.1004, which were multiplied here by 1.693125 to transform these values into post-1933 dollars.

iii. 1934 onwards ; the figures correspond to the direct exchange rates of the peso and the post-1933 American dollar in D'Ottone and Cortés Ibid.

Column 2 : pence per peso

The figures correspond to the actual exchange rate of sterling and the peso as transacted in Chile. Source, Hurtado, C. (1966) p.157, and D'Ottone and Cortés Ibid.

Column 3 : current American dollars per pound

The figures correspond to the actual exchange rates of American dollars per pound sterling, at their current values in the various years. Source, D'Ottone and Cortés Ibid.

Table A.5.1

Rates of exchange of pesos, dollars, and sterling (1830 - 1940)

	<u>Dollars per Peso</u> (in post-1933 American dollars)	<u>Pence per Peso</u> (current values of each year)	<u>Dollars per Pound</u> (current values of each year)
1830	1.49	44.0	4.15
1831	1.52	44.9	4.17
1832	1.52	44.9	4.21
1833	1.51	44.6	4.13
1834	1.55	45.8	4.14
1835	1.52	44.9	4.16
1836	1.52	44.9	4.13
1837	1.51	44.6	4.16
1838	1.52	44.9	4.13
1839	1.54	45.5	4.10
1840	1.53	45.2	4.09
1841	1.54	45.5	4.14
1842	1.55	45.8	4.17
1843	1.54	45.5	4.16
1844	1.51	44.6	5.00
1845	1.50	44.3	4.16
1846	1.50	44.3	4.71
1847	1.49	44.0	4.90
1848	1.47	43.4	4.80
1849	1.52	44.9	4.82
1850	1.56	46.1	4.90
1851	1.55	45.8	4.90
1852	1.55	45.8	4.89
1853	1.60	47.3	4.88
1854	1.56	46.1	4.81
1855	1.55	45.8	4.82
1856	1.54	45.5	4.85
1857	1.55	45.8	4.85
1858	1.53	45.2	4.86
1859	1.54	45.5	4.86
1860	1.48	43.7	4.82

Table A.5.1 (continued)

Rates of exchange of pesos, dollars, and sterling (1830-1940)

	<u>Dollars per Peso</u> (in post-1933 American dollars)	<u>Pence per Peso</u> (current values of each year)	<u>Dollars per Pound</u> (current values of each year)
1861	1.50	44.3	4.78
1862	1.53	45.2	5.57
1863	1.50	44.3	7.12
1864	1.50	44.3	9.91
1865	1.55	45.8	7.45
1866	1.57	46.4	6.74
1867	1.55	45.8	4.86
1868	1.56	46.1	4.87
1869	1.51	44.6	4.84
1870	1.53	45.2	4.85
1871	1.56	46.1	4.86
1872	1.57	46.4	4.84
1873	1.52	44.9	4.80
1874	1.51	44.6	4.86
1875	1.48	43.7	4.85
1876	1.37	40.5	4.86
1877	1.43	42.2	4.85
1878	1.34	39.6	4.83
1879	1.11	32.8	4.83
1880	1.04	30.7	4.83
1881	1.04	30.7	4.81
1882	1.20	35.4	4.84
1883	1.19	35.1	4.82
1884	1.08	31.9	4.83
1885	0.86	25.4	4.84
1886	0.81	23.9	4.80
1887	0.83	24.5	4.83
1888	0.89	26.3	4.84
1889	0.90	26.6	4.81
1890	0.82	24.2	4.83

Table A.5.1 (continued)

Rates of exchange of pesos, dollars, and sterling (1830-1940)

	<u>Dollars per Peso</u> (in post-1933 American dollars)	<u>Pence per Peso</u> (current values of each year)	<u>Dollars per Pound</u> (current values of each year)
1891	0.64	18.9	4.82
1892	0.64	18.9	4.85
1893	0.51	15.1	4.84
1894	0.42	12.4	4.88
1895	0.54	15.9	4.88
1896	0.59	17.4	4.84
1897	0.60	17.6	4.82
1898	0.53	15.7	4.82
1899	0.49	14.5	4.81
1900	0.57	16.8	4.81
1901	0.54	15.9	4.84
1902	0.51	15.2	4.83
1903	0.56	16.6	4.81
1904	0.55	16.4	4.85
1905	0.53	15.6	4.82
1906	0.49	14.4	4.78
1907	0.43	12.7	4.80
1908	0.34	9.6	4.85
1909	0.36	10.8	4.85
1910	0.36	10.8	4.82
1911	0.36	10.8	4.83
1912	0.34	10.1	4.81
1913	0.33	9.8	4.81
1914	0.30	9.0	4.93
1915	0.28	8.3	4.76
1916	0.32	9.5	4.77
1917	0.43	12.7	4.76
1918	0.49	14.6	4.77
1919	0.33	10.6	4.43
1920	0.30	12.1	3.66

Table A.5.1 (continued)

Rates of exchange of pesos, dollars, and sterling (1830-1940)

	<u>Dollars per Peso</u> (in post-1933 American dollars)	<u>Pence per Peso</u> (current values of each year)	<u>Dollars per Pound</u> (current values of each year)
1921	0.19	7.32	3.85
1922	0.20	6.57	4.43
1923	0.21	6.48	4.57
1924	0.18	5.79	4.42
1925	0.20	5.86	4.83
1926	0.20	6.06	4.85
1927	0.20	6.11	4.86
1928	0.20	6.07	4.87
1929	0.21	6.07	4.85
1930	0.20	6.02	4.86
1931	0.18	6.43	4.54
1932	0.05	3.20	3.51
1933	0.05	1.18	4.24
1934	0.04	1.91	5.04
1935	0.04	1.94	4.90
1936	0.036	1.73	4.97
1937	0.038	1.86	4.94
1938	0.037	1.81	4.89
1939	0.031	1.66	4.44
1940	0.030	2.05	3.83

Sources: D'Ottone, H. and Cortés, H.: 1965, pp. 1003-04, and Hurtado, C.: 1966, p. 157 (table based on the procedures described in Appendix 5.ii, above).

NOTES : APPENDIX 5

- (1) The most common currencies used in works dealing with the 19th and early 20th centuries are : sterling, pesos of 6, 12, and 18 pence gold content, and the Chilean peso fuerte which was equivalent to 38 gold pence until 1897 and to 12 gold pence as from 1898.
- (2) See D'Ottone, H. and Cortés, H.: 1965, p.1, 100.
- (3) See Hurtado, C.: 1966, p.158.

APPENDIX 6

MISCELLANEOUS STATISTICAL TABLES

*(The reader is referred to appendices 1.i, 4 and 5 for comments on the sources, use, and limitations of the data contained herewith)

TABLE A.6.1

Wheat production and area cultivated with wheat

Total Chile: 1861 - 90, 1908 - 36,

	Production (000's quintales)	Cultivated Area (000's hectares)
1861	2,043	-
1862	2,260	-
1863	2,438	-
1864	2,850	-
1865	-	-
1866	3,832	421.2
1867	2,922	-
1868	4,080	-
1869	3,111	-
1870	3,398	-
1871	(a) 4,182	-
1872	(a) 4,000	(a) 449.1
1873	4,520	454.6
1874	3,580	-
1875	3,818	-
1876	-	-
(R) 1877	2,944	-
1878	2,808	-
1879	3,681	-
1880	4,043	-
(R) 1881	3,500	-
1882	4,555	-
1883	3,900	-
1884	4,304	477.8
1885	(b) 3,746	(b) 433.7
1886	3,300	-
(D) 1887	3,287	-
(R) 1888	2,200	-
(R) 1889	1,466	196.3
1890	1,757	180.1
1908	(c) 5,148	(c) 460.4
1909	4,809	445.4
1910	5,357	339.8
1911	5,009	391.6
1912	6,115	442.5
1913	6,416	446.2
(R) 1914	4,464	412.1
1915	5,171	434.6
1916	5,493	462.6
1917	6,123	514.8
1918	6,292	526.9
(R) 1919	5,519	494.2
1920	5,420	484.1

Continued/..

TABLE A.6.1
(Continued)

Wheat production and area cultivated with wheat

Total Chile: 1861 - 90, 1908 - 36,

	Production (000's quintales)	Cultivated Area (000's hectares)
1921	6,314	509.0
1922	6,433	544.2
1923	7,059	596.0
1924	7,645	621.2
(R) 1925	6,660	578.5
1926	7,259	585.1
(R) 1927	6,431	600.3
1928	8,330	745.7
1929	8,077	693.9
1930	9,125	698.0
1931	5,798	651.4
1932	5,772	614.0
1933	7,829	593.1
1934	9,619	851.2
1935	8,236	857.9
1936	8,659	775.6

Sources/

- Sources:
- 1962-63 from Tscherebilo, S.: 1976: p.125 (source's data has been slightly adjusted to a fanega of 71.5 kilos).
 - 1861,75 from Johnson, A.L.: 1978:p.199 (source's data has been slightly adjusted to a fanega of 71.5 kilos).
 - 1864-73, 1876-90, 1921, Anuario Estadístico of relevant year.
 - 1908, 1913-14, 1916-20, 1922, 1924-27, Sinopsis Estadística of each year.
 - 1909-12, 1915, 1923, 1928-36, Anuario Estadístico 1939, (Agricultura) p.15.
- (a) Data for Curicó incomplete or missing in the Anuario. Figures in the table are estimates according to Curicó's data for 1873 (277,400 quintales of wheat produced in 25,000 hectares of cultivated land).
- (b) Data for Chiloé reported by the Anuario is faulty. The figures in the table have been adjusted accordingly. Chiloé's production and area cultivated in 1884 being considered for the adjusted national total of 1885. See Appendix 1(i).
- (c) This figure is shown in the Anuario and the Sinopsis as from 1910. The data initially reported in 1908 contains errors and is incomplete, being later on corrected by the Statistical Office. See Appendix 1(i).
- (R) Indicates very heavy rainfalls (floodings).
- (D) Indicates severe drought.

TABLE A.6.2

Wheat production by regions in chosen years: 1860-1930
(in 000's quintales)

	Central Chile	Intermediate Region	South & La Frontera	Others	National Total
1860	1,235	(a) (430)	(a)	(378)	2,043
1866	1,919	1,344	337	232	3,832
1867	1,889	731	170	132	2,922
1868	2,506	1,075	313	186	4,080
1869	1,990	726	161	234	3,111
1870	2,130	931	157	180	3,398
1871(b)	2,581	1,074	303	224	4,182
1872(b)	2,240	1,075	416	269	4,000
1873	2,671	1,305	386	158	4,520
1875	1,931	(a) (703)	(a)	(1,184)	3,818
1877	(c) (1,972)	(c) (756)	-	-	2,944
1878			-	-	2,808
1884	2,124	990	984	206	4,304
1885	1,795	887	853	(d) 211	(d) 3,746
1913	2,105	1,308	2,834	169	6,416
1914	1,460	991	1,837	176	4,464
1916	1,730	1,117	2,471	175	5,493
1917	2,009	1,333	2,608	173	6,123
1918	2,179	1,263	2,738	112	6,292
1919	1,602	1,105	2,643	169	5,519
1920	1,464	1,014	2,812	130	5,420
1921	1,794	1,397	2,970	153	6,314
1922	2,002	1,390	2,840	201	6,433
1924	2,066	1,304	4,121	154	7,645
1925	1,879	1,174	3,490	117	6,660
1926	2,178	1,330	3,638	113	7,259
1927	1,759	1,068	3,368	146	6,341
1930	2,571	2,187	4,083	284	9,125

TABLE A.6.2
(continued)

Wheat production by regions in chosen years: 1860-1930
(in 000's quintales)

- Sources:
- 1860, 1865 from Johnson, A.L. :1978:p.199
 - 1866-73, 1877-78, 1884-85, 1921: Anuario Estadístico of each year.
 - 1913-14, 1916-20, 1922, 1924-27: Sinopsis Estadística of each year.
 - 1930: Censo Agropecuario 1930
- (a) The data, as supplied by the source, is not possible to re-aggregate for the intermediate and the south and La Frontera regions as defined in this thesis.
- (b) Data for Curicó incomplete or missing in the Anuario. Figure in the table is an estimate based on Curicó's production in 1873 (277,000 quintales of wheat).
- (c) Average production during 1877-78. Data for the southern provinces supplied by the Anuarios is incomplete, floodings damaging the crops in the intermediate region (and in the Talca province in central Chile). Hence no data for the south and La Frontera appears in the table.
- (d) Data for Chiloé supplied by the Anuario is faulty. Figure in the table is an estimate based on Chiloé's production in 1884.

TABLE A.6.3

Area cultivated with wheat by regions in chosen years: 1866-1930
(in 000's hectares)

	Central Chile	Intermediate Region	South and La Frontera	Others	Total
1866	210.7	147.4	37.0	26.1	421.2
1868	235.7	119.2	(a) -	-	-
1872 (b)	231.8	147.4	48.2	21.7	(b) 449.1
1873	225.2	155.4	56.1	17.9	454.6
1877/78(c)	173.6	(c) 147.1	-	-	425.9
1884	200.0	159.0	101.3	17.5	477.8
1885	177.9	146.1	90.6	(d) 19.1	(d) 433.7
1913	123.5	112.0	195.9	14.8	446.2
1914	101.9	106.3	190.1	16.5	412.1
1916	112.2	113.0	222.6	15.4	462.6
1917	124.4	134.1	244.2	12.1	514.8
1918	139.3	121.8	251.9	13.9	526.9
1919	122.9	116.6	238.3	16.4	494.2
1920	119.4	112.0	232.0	20.7	484.1
1921	123.0	122.9	249.1	14.0	509.0
1922	135.7	128.2	262.1	18.2	544.2
1924	131.1	131.2	342.3	16.6	621.2
1925	137.9	126.3	304.3	10.0	578.5
1926	138.7	134.0	300.5	11.9	585.1
1927	145.9	139.5	301.6	13.3	600.3
1930	158.6	187.2	326.6	25.6	698.0

Sources - 1866-1885, 1921: Anuario Estadístico of each year.

- 1913-20, 1922-27: Sinopsis Estadística of each year.

- 1930: Censo Agropecuario 1930

(a) Data for the Arauco province missing in the Anuario. Hence, others and total also omitted in the table.

(b) Data for the Curicó province missing in the Anuario. Figure in the table is an estimate based on Curicó's area cultivated with wheat in 1873 (25,000 hectares).

(c) Average area cultivated during 1877-78. Data for the southern provinces supplied by the Anuarios is incomplete, floodings causing severe damages to the crops in the intermediate region (and in the Talca province in central Chile). Hence, no data for the south and La Frontera appears in the table.

(d) Data for the Chiloé province supplied by the Anuario^{are} faulty. Figure in the table is an estimate based on Chiloé's area cultivated with wheat in 1884.

TABLE A.6.4

Wheat yields per hectare, by regions, in chosen years: 1866-1930
(in quintales per hectare)

	Central Chile	Intermediate Region	South & La Frontera	Others	Total
1866	9.1	9.1	9.1	8.9	9.1
1868	10.6	9.0	(a) -	(a) -	(a) -
1872	(b) 9.7	7.3	8.6	12.4	(b) 8.9
1873	11.8	8.4	6.9	8.8	9.9
1877/78	(c) 11.3	(c) 5.1	-	-	(c) 6.8
1884	10.6	6.2	9.7	11.8	9.0
1885	10.1	6.1	9.4	(d) 7.2	8.4
1913	17.0	11.7	14.4	11.4	14.4
1914	14.3	9.3	9.7	10.7	10.8
1916	15.4	9.9	11.1	11.4	10.1
1917	16.1	9.9	10.7	14.3	11.9
1918	15.6	10.4	10.9	8.1	11.9
1919	13.0	9.5	11.1	10.3	11.2
1920	12.3	9.1	12.1	6.3	11.2
1921	14.6	11.4	11.9	10.9	12.4
1922	14.8	10.8	10.8	11.0	11.8
1924	15.8	9.9	12.0	9.3	12.3
1925	13.6	9.3	11.5	11.7	11.5
1926	15.7	9.9	12.1	9.5	12.4
1927	12.1	7.7	11.2	11.0	10.6
1930	16.2	11.7	12.5	11.1	13.1

Sources: Tables A.6.1, A.6.2, and A.6.3.

- (a) Data on the area cultivated in the Arauco province is missing in the Anuario Estadístico. Hence, Others and Total also omitted in the table.
- (b) Data on production and area cultivated with wheat in the Curicó province is missing in the Anuario Estadístico. Data in the table is an estimate based on Curicó's production and area cultivated with wheat in 1875 (277,000 quintales and 25,000 hectares respectively).
- (c) Average yields per hectare during 1877/78. Data on wheat production and cultivated area in the southern provinces supplied by the Anuario Estadístico is incomplete, floodings causing severe damages to the crops in the intermediate region (and in the Talca province in central Chile). Hence, no data for the south and La Frontera appears in the table.
- (d) Data on Chiloé's production are faulty. Figure in the table is an estimate based on production and area cultivated with wheat in Chiloé in 1884.

TABLE A.6.5

Wheat production in chosen provinces: 1867 - 1885
(In 000's quintales)

	1867	1868	1869	1870	1871	1872	1873	1884	1885
Santiago*	775	1,081	894	893	970	856	959	915*	772*
Curico	163	184	-	-	-	-	281	247	279
Talca	299	332	238	301	330	296	409	252	358
Nuble	275	365	285	315	453	298	427	339	280

Source: Anuario Estadístico of the relevant years.

*Santiago includes O'Higgins, which became a separate province only in the early 1880's.

TABLE A.6.6

Area planted with vineyards by regions: 1914, 1921, 1930, 1936
(in 000's hectares)

	1914	1921	1930	1936
Central Chile	22.1	21.6	26.9	34.6
Intermediate Region	34.6	37.7	44.4	49.5
South & Frontera	6.7	5.7	9.4	9.5
Other	4.6	1.6	1.7	2.1
Total	65.9	66.6	*82.4	95.9

Source: Sinopsis Estadística 1914, p.193; Anuario Estadístico 1921, p.125; Censo Agropecuario 1930, pp.66-67; Censo Agropecuario 1936, p.39.

* There is a slight difference between this figure, supplied by the 1930's Census and based on information of the Inland Revenue, and that which appears in the retrospective statistical series of the 1936's census showing a total of 85,000 hectares planted with vineyards in 1930.

TABLE A.6.7

Area planted with fruit trees by regions: 1914, 1916, 1921.
(in 000's hectares)

	1914	1916	1921
Central Chile	5.8	9.3	10.6
Intermediate Region	1.9	4.0	4.7
South & Frontera	6.9	6.5	8.8
Other	2.8	2.6	3.6
Total	17.4	22.4	27.7

Source: Sinopsis Estadística 1914, p.192; Sinopsis Estadística 1916, p.125, and Anuario Estadístico 1921, p.125.

TABLE A.6.8

Area planted with beans, maize, lentils, chickpeas, by regions: 1914, 1921, 1930, 1936.
(in 000's hectares)

	1914	1921	1930	* 1936
Central Chile	30.4	40.0	58.1	*
Intermediate Region	18.3	25.2	42.5	*
South & Frontera	5.2	7.2	16.9	*
Other	3.6	4.7	7.3	*
Total Chile	57.5	77.1	24.8	164.2

Source: Sinopsis Estadística 1914; Anuario Estadístico 1921, Anuario Estadístico 1930, Censo Agropecuario 1936.

* No regional aggregation of the 1936 census data is possible.
(See Appendix li).

TABLE A.6.9

Area planted with peas, oats, potatoes and rye, by regions: 1914, 1921, 1930, 1936.

	1914	1921	1930	* 1936
Central Chile	11.9	12.0	15.0	*
Intermediate Region	10.5	8.3	25.6	*
South & Frontera	61.3	51.0	107.8	*
Others	9.0	9.0	17.0	*
Total Chile	92.7	80.3	165.4	162.2

Sources: Sinopsis Estadística 1914; Anuario Estadístico 1921, Anuario Estadístico 1930; and Censo Agropecuario 1936.

* No regional aggregation of the 1936 census data is possible (see Appendix li).

TABLE A.6.10

Area cultivated with the most important crops. National totals for chosen years (1873-1936)
(In 000's hectares)

	Wheat	Barley	Maize	Beans	Lentils	Chick Peas	Peas	Potatoes	Oats	Rye	Total
1873	454.6	58.9	54.3	32.7	0.7	1.3	17.0	18.8	-	0.4	638.7
1884	477.8	51.0	77.8	39.6	0.6	1.8	17.5	21.1	-	0.3	687.5
1885	(a) 433.7	43.5	65.6	43.1	0.6	2.3	18.5	24.9	-	1.1	633.3
1908	(b) 460.4	55.6	25.5	33.9	2.0	2.5	18.2	31.1	36.3	2.1	667.6
1909	445.4	51.9	25.1	32.7	1.8	3.1	14.3	30.3	28.4	2.4	635.4
1914	412.1	61.8	23.7	30.8	0.9	2.1	8.1	32.9	49.2	2.5	624.1
1916	462.6	49.6	26.7	44.5	1.0	2.7	10.8	31.9	65.1	4.4	699.3
1917	514.8	50.6	19.7	34.7	1.6	3.0	14.9	28.5	51.1	2.5	721.4
1921	509.0	57.9	28.1	43.7	3.0	2.3	12.8	33.7	32.0	1.8	724.3
1922	544.2	57.1	31.8	42.9	2.1	3.6	11.0	33.4	28.3	1.6	756.0
1925	578.5	65.7	17.0	38.8	8.3	2.4	13.2	29.1	53.6	1.7	808.3
1926	585.1	79.6	21.6	43.2	7.4	3.7	10.0	25.6	57.7	2.0	835.9
1930	698.0	61.6	37.9	66.5	14.5	5.9	21.1	42.6	98.3	3.4	1,049.8

TABLE A.6.10

Area cultivated with the most important crops. National totals for chosen years (1877-1936)
(In 000's hectares)

	Wheat	Barley	Maize	Beans	Lentils	Chick Peas	Peas	Potatoes	Oats	Rye	Total
1931	651.4	67.2	37.2	66.5	13.4	6.3	19.5	44.8	77.9	3.2	987.4
1935	857.9	59.5	46.4	97.7	24.9	11.3	38.7	55.9	76.4	7.7	1,276.4
1936	775.6	66.0	41.9	73.7	38.3	10.3	22.8	42.8	86.9	9.7	1,168.0

Sources: 1873,1884-85: Anuario Estadístico of each year.
 1908-16: Sinopsis Estadística, 1916.
 1917-26: Sinopsis Estadística, 1927.
 1930: Censo Agropecuario, 1930.
 1931-35: Sinopsis Estadística, 1935.
 1936: Censo Agropecuario, 1936.

(a) See note (b) in table A.1.1. of this Appendix.

(b) See note (c) in table A.1.1. of this Appendix.

(c) Figure from the Anuario Estadístico, 1930.

TABLE A.6.11

Crop-Mix by Regions : 1921 (in 000's hectares)

	Wheat	Barley	All other crop land	Vineyards	Fruit Trees	Total
Central Chile	123.2	46.0	55.8	21.6	10.6	260.6
Intermediate Region	122.9	0.9	33.9	37.6	4.7	200.0
South & Frontera	236.1	6.1	53.7	5.8	8.8	310.5
Other	26.8	4.9	63.8	1.6	3.6	97.3
Total Country	509.0	57.9	207.2	66.6	27.7	868.4

Source: Anuario Estadístico 1921 p.125-26.

TABLE A.6.12

Total - Annual exports of wheat and flour

Chile, 1844 - 1935 (In 000's quintales)

	Wheat	Flour	(a) Total (wheat & flour)
1844	50.1	55.6	119.6
1845	47.0	28.1	85.1
1846	63.0	47.9	123.0
1847	93.4	69.5	180.2
1848	77.3	82.3	180.2
1849	131.1	137.5	303.0
1850	131.6	296.1	501.6
1851	55.4	186.8	288.8
1852	116.6	175.7	336.3
1853	48.6	210.9	312.2
1854	91.0	219.7	365.7
1855	189.0	318.9	587.6
1856	134.0	156.0	329.1
1857	149.4	74.5	242.6
1858	112.9	77.8	210.2
1859	114.5	108.7	250.3
1860	223.0	164.6	428.8
1861	409.2	203.5	663.5
1862	270.6	96.8	391.4
1863	318.2	96.0	438.1
1864	294.8	339.6	719.3
1865	520.1	554.8	1,213.6
1866	864.4	464.2	1,444.6
1867	1,003.6	360.6	1,454.3
1868	1,160.8	291.3	1,525.0
1869	629.1	331.6	1,043.6
1870	655.6	230.6	943.9
1871	1,025.1	407.8	1,534.9
1872	1,097.3	247.6	1,406.7
1873	1,115.3	268.1	1,450.4
1874	1,592.6	381.4	2,069.3
1875	827.1	265.7	1,159.2
1876	847.1	145.1	1,028.5
1877	695.2	109.5	832.0
1878	375.6	124.5	531.3
1879	1,421.8	135.3	1,591.0
1880	1,387.8	114.2	1,530.5
1881	896.7	189.4	1,133.4
1882	1,290.6	156.3	1,485.9
1883	1,233.9	101.1	1,360.2
1884	913.5	66.3	996.4
1885	1,073.5	56.4	1,144.0

Continued/

TABLE A.6.12
(Continued)

Total - Annual exports of wheat and flour

Chile, 1844 - 1935 (In 000's quintales)

	Wheat	Flour	(a) Total (wheat & flour)
1886	1,221.0	69.2	1,307.5
1887	1,245.5	30.4	1,283.6
1888	928.9	31.5	968.3
1889	497.0	31.4	536.2
1890	289.3	21.6	316.3
1891	1,780.5	56.9	1,851.6
1892	1,458.0	38.9	1,506.6
1893	1,859.6	21.8	1,886.9
1894	1,162.4	31.2	1,201.3
1895	785.8	36.6	831.5
1896	1,375.7	30.8	1,414.2
1897	723.9	52.4	789.4
1898	769.6	60.7	845.5
1899	458.1	66.5	541.3
1900	94.4	9.1	105.8
1901	15.6	3.5	20.0
1902	250.0	24.7	280.9
1903	538.6	46.6	596.9
1904	740.5	91.8	855.3
1905	80.1	74.4	173.1
1906	2.1	39.6	51.6
1907	353.1	33.5	395.0
1908	1,346.2	17.5	1,368.0
1909	1,092.6	52.3	1,157.9
1910	611.4	98.6	734.7
1911	138.4	51.5	202.8
1912	656.0	56.9	727.1
1913	523.7	56.1	595.9
1914	41.5	25.4	72.2
1915	4.9	0.7	5.8
1916	105.8	28.9	141.9
1917	144.0	112.4	284.5
1918	625.3	409.5	1,137.6
1919	397.6	234.5	690.8
1920	228.3	104.5	350.9
1921	414.8	123.7	569.4
1922	19.0	120.9	170.1
1923	215.8	144.4	396.2
1924	1,645.6	221.4	1,921.9
1925	1,413.7	139.1	1,587.6

Continued/

TABLE A.6.12
(Continued)

Total - Annual exports of wheat and flour

Chile, 1844 - 1935 (In 000's quintales)

	Wheat	Flour	(a) Total (wheat & flour)
1926	284.5	105.7	416.5
1927	6.8	95.9	126.6
1928	117.7	71.3	206.8
1929	68.1	75.2	162.1
1930	395.7	86.2	503.5
1931	14.8	10.8	28.3
1932	5.8	10.8	19.2
1933	2.3	0.1	2.4
1934	504.3	30.8	542.9
1935	187.6	18.7	211.0

Source: Sepúlveda, S. (1959) pp. 127-28. See also Appendix 4 of this thesis.

(a) Flour exports being expressed in terms of grain content (flour = 1.25 wheat), i.e., being multiplied by 1.25.

TABLE A.6.13

Chile's average annual exports of wheat and flour and average wholesale wheat prices in Santiago and Liverpool: 1844-48 to 1931-35.

(in 000's quintales, and dollars per quintal)

	Wheat Exports 000's quintales	Flour Exports 000's quintales	*Total (wheat & flour) Index (1871-75 = 100)	Wheat price Santiago Price (per quintal)	Wheat price Santiago Index (1871-75 = 100)	Wheat price Britain Price (per quintal)	Wheat price Britain Index (1871-75 = 100)
1844-48	66	57	137	2.16	34	-	-
1849-50	131	217	402	2.30	37	-	-
1851-55	100	222	378	7.21	114	-	-
1856-60	147	116	292	7.95	126	9.97	98
1861-65	363	258	686	4.97	79	8.85	87
1866-70	863	336	1,283	5.99	95	10.15	99
1871-75	1,131	314	1,524	6.30	100	10.22	100
1876-80	946	126	1,104	6.23	99	8.85	87
1881-85	1,082	114	1,225	5.32	84	7.47	73
1886-90	836	37	882	5.29	84	5.82	57

TABLE A.6.13

Chile's average annual exports of wheat and flour and average wholesale wheat prices in Santiago and Liverpool: 1844-48 to 1931-35
(in 000's quintales, and dollars per quintal)

	Wheat Exports 000's quintales	Flour Exports 000's quintales	* Total (wheat & flour) Index (1871-75 = 100)	Wheat price Santiago Price (per quintal)	Wheat price Santiago Index (1871-75 = 100)	Wheat price Britain Price (per quintal)	Wheat price Britain Index (1871-75 = 100)
1891-95	1,409	37	1,455	3.73	59	5.19	51
1896-1900	684	44	739	4.12 (a)	65	5.55 (a)	54
1901-05	325	48	385	4.58	73	5.23 (b)	51
1906-10	681	48	741	5.27	84	5.86	57
1911-15	273	38	321	7.21	114	6.94	68
1916-20	300	178	522	11.34	180	13.13	128
1921-25	742	150	929	8.19	130	9.91	97
1926-30	175	87	283	7.75 (c)	123	7.75 (c)	76
1931-35	143	14	161	3.61	57	3.27	32

TABLE A.6.13

Chile's average annual exports of wheat and flour and average wholesale wheat prices in Santiago and Liverpool: 1844-48 to 1931-35.

(in 000's quintales, and dollars per quintal)

Sources: Tables A.6.12 and A.6.15 of this Appendix.

- (a) average price for 1897-1900 only.
- (b) average price for 1901-02, 1904-05 only.
- (c) average price for 1928-30 only.

* Flour exports being expressed in terms of wheat content
(1 flour = 1.25 wheat). i.e. being multiplied by 1.25.

TABLE A.6.14

Value of Agricultural Exports per group of products

Chile: 1844-1875 (in 000's dollars)

	Livestock, lard, salted meats, butter	Leathers & wools	Wheat & flour	Barley	All others	Total
1844	92.7	213.6	802.6	80.5	165.1	1,354.5
1845	105.8	441.3	516.2	56.0	152.6	1,271.9
1846	80.4	404.7	864.9	44.9	223.3	1,618.2
1847	169.0	301.9	1,246.2	61.2	298.6	2,076.9
1848	109.2	249.4	973.6	51.3	340.2	1,723.7
1849	197.9	351.1	1,670.6	116.9	369.6	2,706.1
1850	98.0	353.7	3,503.9	337.6	538.4	4,831.6
1851	117.5	319.6	2,742.1	879.5	500.5	4,559.2
1852	170.2	553.2	2,871.8	1,717.1	784.0	6,096.3
1853	177.1	293.8	3,255.2	854.1	783.0	5,363.2
1854	284.1	438.8	3,496.1	524.3	461.3	5,204.6
1855	136.6	332.8	6,675.4	411.2	533.3	8,089.3
1856	160.9	506.7	4,156.8	429.8	564.5	5,818.7
1857	324.4	1,775.7	2,623.8	521.9	528.3	5,774.1
1858	256.0	1,534.9	2,199.2	555.4	620.4	5,165.9
1859	396.4	1,879.3	2,416.3	895.4	744.2	6,331.6
1860	351.4	2,111.8	3,284.9	656.4	627.9	7,032.4
1861	305.9	1,240.4	4,449.6	670.1	442.1	7,108.1
1862	355.7	1,359.4	3,187.6	549.6	525.4	5,977.7
1863	430.7	1,088.9	2,813.9	552.5	514.0	5,400.0
1864	401.3	2,331.8	5,040.3	1,046.3	570.9	9,390.6
1865	673.5	1,493.1	7,942.3	1,034.0	1,093.6	12,236.5
1866	778.0	1,598.1	9,217.2	603.0	960.3	13,156.6
1867	777.6	1,369.1	11,886.6	1,426.9	1,114.1	16,574.3
1868	776.1	1,560.1	12,486.6	817.3	1,350.0	16,990.1
1869	595.1	1,226.1	7,370.2	174.6	1,885.3	11,251.3
1870	897.8	1,296.1	7,050.1	924.7	2,501.8	12,670.5
1871	1,270.0	1,267.8	12,685.0	1,417.9	2,550.7	19,191.4
1872	1,889.3	3,358.5	11,397.7	1,934.7	2,769.3	21,349.5
1873	1,651.9	1,317.8	11,676.5	2,048.1	2,404.7	19,099.0
1874	1,435.4	1,587.0	15,825.4	1,787.5	1,986.0	22,621.3
1875	1,408.5	1,794.6	8,054.2	2,008.4	2,023.7	15,289.4
Totals	16,874.4	35,951.1	174,382.8	25,189.1	30,927.1	283,324.5

Source: Ministerio de Hacienda (Chile) :1875: pp 567-70.

TABLE A.6.15

Wholesale prices of wheat in Santiago and Liverpool: 1845-1935*
(in dollars per quintal)

Price/ year	Price in Santiago	Price in Liverpool	Price/ Year	Price in Santiago	Price in Liverpool
1845	4.10	-	1871	6.33	10.60
1846	4.71	-	1872	6.79	10.64
1847	2.68	-	1873	6.29	10.98
1848	2.16	-	1874	-	10.44
1849	2.05	-	1875	5.78	8.42
1850	2.54	-	1876	5.47	8.62
1851	5.02	-	1877	5.56	10.62
1852	11.95	-	1878	9.16	8.68
1853	6.77	-	1879	5.97	8.04
1854	5.92	-	1880	5.01	8.29
1855	6.40	-	1881	5.78	8.48
1856	9.43	12.92	1882	5.45	8.42
1857	8.70	10.53	1883	5.50	7.78
1858	9.29	8.25	1884	5.06	6.68
1859	7.30	8.20	1885	4.82	5.99
1860	5.01	9.95	1886	3.96	5.78
1861	4.46	10.34	1887	4.30	6.09
1862	6.29	10.36	1888	5.48	5.81
1863	4.77	8.38	1889	6.97	5.58
1864	4.94	7.50	1890	5.73	5.81
1865	4.40	7.65	1891	-	6.91
1866	3.82	9.17	1892	5.04	5.66
1867	6.49	12.04	1893	3.24	4.93
1868	7.89	11.93	1894	2.87	4.13
1869	5.50	8.99	1895	3.78	4.31
1870	6.27	8.61			

Continued/..

TABLE A.6.15
(continued)

Wholesale prices of wheat in Santiago and Liverpool: 1845-1935*
(in dollars per quintal)

Price/ year	Price in Santiago	Price in Liverpool	Price/ Year	Price in Santiago	Price in Liverpool
1896	3.86	4.76	1916	7.68	10.35
1897	4.80	5.83	1917	11.18	14.36
1898	4.24	6.53	1918	13.23	13.47
1899	3.43	5.13	1919	9.90	13.71
1900	3.99	4.71	1920	14.70	13.75
1901	5.67	4.99	1921	8.55	16.08
1902	3.83	5.22	1922	8.60	8.44
1903	3.36	-	1923	7.14	7.69
1904	3.67	4.99	1924	6.66	7.68
1905	6.36	5.73	1925	10.00	9.65
1906	5.88	5.36	1926	-	9.46
1907	4.52	4.90	1927	-	-
1908	4.25	6.67	1928	8.54	7.88
1909	5.94	6.06	1929	8.34	6.68
1910	5.76	6.29	1930	6.36	7.68
1911	6.48	5.78	1931	6.75	4.53
1912	5.78	6.25	1932	2.62	3.54
1913	5.94	8.39	1933	3.62	3.76
1914	7.20	5.87	1934	2.49	2.19
1915	10.64	8.39	1935	2.59	2.32

* All prices transformed from pesos or sterling into dollars according to data in table A.5.1.

Sources: Price in Santiago - 1845 from Pregger Roman, C. :1975: p.221.
 - 1846-1896 from Bauer, A. :1970: pp. 223-24.
 - 1897-1916, Sinopsis Estadística 1916, p.118.
 - 1917- 1925, Sinopsis Estadística 1925, p.117.
 - 1928-1935, Banco Central, "Boletín", diciembre 1938, p.614.

Price in Liverpool- 1856-1896, from Hurtado, C. :1966: p.156.
 - 1897-1935 quoted from the British Gazette, in February Monthly Review of The Economist, issues of 1900, 1907, 1913, 1920, 1927, 1931 and 1936. Prices correspond to Foreign Wheat.

TABLE A.6.16

Wholesale prices of potatoes and barley in Santiago and in Liverpool:
1897-1936 (in dollars per quintal)

	<u>Potatoes</u>		<u>Barley</u>	
	Santiago	Liverpool	Santiago	Liverpool
1897	-	2.6	4.2	-
1898	-	3.5	4.8	-
1899	1.9	2.8	4.4	-
1900	2.8	3.3	3.4	-
1901	2.7	3.7	4.3	4.8
1902	1.5	2.2	5.1	5.0
1903	2.2	-	5.0	-
1904	2.2	4.5	4.4	4.2
1905	3.7	2.6	4.2	4.6
1906	2.9	2.6	5.4	4.7
1907	2.6	2.9	6.5	4.6
1908	2.7	3.5	4.8	5.1
1909	5.4	2.6	5.4	5.0
1910	5.4	3.0	5.4	4.8
1911	5.8	3.3	6.5	4.5
1912	6.1	3.8	6.5	6.3
1913	5.3	3.2	6.3	5.6
1914	2.7	2.8	5.4	4.9
1915	5.0	7.2	9.2	4.9
1916	2.9	4.1	7.0	9.0
1917	13.3	9.8	9.0	12.8
1918	9.3	5.7	19.1	11.0
1919	6.2	8.1	-	11.8
1920	5.4	8.9	11.1	20.3
1921	5.6	7.3	4.6	13.9
1922	7.0	5.7	4.9	8.6
1923	6.1	2.9	5.2	6.4
1924	3.1	5.1	7.7	8.3
1925	5.0	7.7	7.8	11.6
1926	-	5.3	-	8.5
1927	-	-	-	-
1928	3.3	4.9	8.1	9.1
1929	5.1	4.9	6.2	8.1
1930	4.1	3.1	4.5	6.9
1931	2.3	4.6	3.9	6.2
1932	0.9	6.1	2.2	4.8
1933	1.4	4.1	2.5	4.9
1934	0.9	2.7	2.1	4.6
1935	1.1	2.8	2.3	4.2
1936	1.5	3.9	2.4	4.1

TABLE A.6.16
(continued)

Wholesale prices of potatoes and barley in Santiago and in Liverpool:
1897-1936 (in dollars per quintal)

Sources: Prices in Santiago: 1897-1916: Sinopsis Estadística 1916
p.118.
1917-25: Sinopsis Estadística 1925
p.117.
1928-36: Banco Central: "Boletín",
diciembre 1938 p.614.

Prices in Liverpool: The Economist, February review of the
years 1900, 1907, 1913, 1920, 1927,
1931.

TABLE A.6.17

Comparative Wholesale prices in Santiago and Liverpool of Wheat, Potatoes, Barley. Average annual prices from 1897-1900 to 1931-35.

(In dollars per quintal)

	Wheat			Potatoes			Barley		
	Santiago - 1 -	Liverpool - 2 -	1.2	Santiago - 3 -	Liverpool - 4 -	3.4	Santiago - 5 -	Liverpool - 6 -	5.6
1897-1900	4.12	5.55	0.74	2.35	3.05	0.77	4.20	-	-
1901-05	4.58	5.23	0.88	2.46	3.25	0.76	4.62	4.66	0.99
1906-10	5.27	5.86	0.90	3.80	2.93	1.30	5.48	4.82	1.14
1911-15	7.21	6.94	1.04	4.98	4.04	1.23	6.77	5.24	1.29
1916-20	11.34	13.13	0.86	7.42	7.30	1.02	11.55	12.97	0.89
1921-25	8.19	9.91	0.83	5.36	5.74	0.93	6.04	9.77	0.62
1928-30	7.75	7.75	1.00	4.17	4.52	0.92	6.27	8.13	0.77
1931-35	3.61	3.27	1.10	1.32	4.06	0.32	2.6	4.94	0.53

Sources: Tables A.6.15 and A.6.16.

TABLE A.6.18

Indices of the prices in dollars of wheat and textiles in Santiago:
1913-35 (1913 = 100)

	1 Wheat (1913 = 100)	2 Textiles (1913 = 100)	3 Relative Index 1÷2
1913	100	100	1.00
1914	121	93	1.30
1915	179	108	1.66
1916	129	136	0.95
1917	188	191	0.98
1918	223	231	0.97
1919	166	177	0.94
1920	247	188	1.32
1921	143	120	1.19
1922	145	139	1.04
1923	120	146	0.82
1924	112	129	0.87
1925	168	142	1.18
1926	-	-	-
1927	-	-	-
1928	144	161	0.89
1929	140	173	0.81
1930	107	157	0.68
1931	114	121	0.94
1932	44	40	1.10
1933	61	49	1.24
1934	42	47	0.89
1935	44	51	0.86

Sources: - index of wheat prices, from data in table A.6.15.

- index of prices of textiles from Sinopsis Estadística 1925, p.118, and Banco Central, "Boletín" (diciembre) 1938, p.634. The index of textile prices supplied by these two sources accounts for changes of the prices in pesos, which have been deflected here by the changes in the value of the peso against the dollar (calculated from table A.5.1).

TABLE A.6.19

Total stock of ploughs and of some farm machinery in Chile, in chosen years: 1867 - 1965.
(in 000's of units)

	Ploughs		Reaping Machines		Sowing machines	Threshing Machines (fixed)	Combine Harvesters	Tractors	Reaping and Stalking/Pasture-Packing Machines
	Iron	Wood	for Cereals	for forage pastures					
1867	n.d	n.d	0.017		0.001	0.137	-	-	-
1870-71(a)	n.d	n.d	0.14		0.03	0.53	-	-	-
1909	n.d	n.d	4.06		1.16	2.67	n.d	n.d	0.84
1913	n.d	n.d	6.16		2.23	3.46	n.d	n.d	1.16
1921	109.32	n.d	2.14	4.33	2.13	3.47	n.d	0.40	n.d
1930	142.44	95.79	3.11	6.16	3.20	4.54	0.24	1.66	4.54
1936	164.84	108.72	2.35	7.06	3.32	5.07	0.25	1.56	5.39
1955	192.88	n.d	n.d	n.d	5.70	5.21	3.45	14.18	n.d
1965	285.20		3.45	12.54	9.23	4.93	3.77	22.30	n.d

TABLE A.6.19
(continued)

(a) Figures correspond to whatever year, 1870 or 1871, which shows the largest number of machines per provincial department as reported by the Anuarios Estadísticos.

n.d No data is available but machinery apparently did exist in Chile; (-) no data is available and apparently machines did not exist in Chile.

Sources: Anuarios Estadísticos of 1867, 1870, 1871, 1921.

Sinopsis Estadística of 1909, 1913.

Censo Agropecuario 1930.

Censo Agropecuario 1936.

III Censo Agrícola y Ganadero (1955).

IV Censo Agrícola y Ganadero (1965).

TABLE A.6.20

Production and area cultivated with wheat and barley, yields per hectare, and stock of machinery for cereals, in chosen provinces: 1921.

	Production (000's quintales)	Area Cultivated (000's hectares)	Yields per Hectares (quintales)	Reaping Machines		Threshing Machines		Sowing Machines	
				Total No	(a) per 1,000 hrs	Total No	(a) per 1,000 hrs	Total No	(a) per 1,000 hrs
Santiago	536	33.0	16.2	105	3.2	191	5.8	188	5.7
Colchagua	533	33.3	16.0	51	1.5	174	5.2	146	4.4
Talca	408	29.1	14.0	83	2.9	147	5.1	129	4.4
Maule	280	29.4	9.5	56	1.9	63	2.1	21	0.7
Malleco	932	85.1	11.0	445	5.2	386	4.5	219	2.6
Llanquihue (b)	529	32.1	16.5	215	6.7	765	23.8	170	5.3

(a) Number of machines per 1,000 hectares of land cultivated with wheat and barley as shown in the second column of the table.

(b) Includes today's province of Osorno (as described in Appendix 2 to this thesis).

Source: Anuario Estadístico 1921: pp 115-17, 126-27.

TABLE A.6.21a

Production and area cultivated with wheat and barley, yields per hectare, and stock of some farm machinery for cereals, by regions: 1921.

	Production (000's quintales)	Area Cultivated (000's hectares)	Yields per Hectares (quintales)	Reaping Machines		Threshing Machines		Sowing Machines	
				Total No	(a) per 1,000 hrs	Total No	(a) per 1,000 hrs	Total No	(a) per 1,000 hrs
Central Chile	2,722	169.2	16.1	464(b)	2.7	945	5.6	817	4.8
Intermediate Region	1,412	123.8	11.4	398	3.2	403	3.2	274	2.2
South and La Frontera	3,052	242.2	12.6	1,197	4.9	2,009	8.3	798	3.3
Others	224	31.7	7.1	77	2.4	108	3.4	238	7.5
Total	7,410	566.9	13.1	2,136	4.5	3,465	6.1	2,127	3.7

Source: Anuario Estadístico 1921, pp 115-17, 126-27.

- (a) Machines per 1,000 hectares of land cultivated with wheat and barley as shown in the table's second column.
- (b) Figure for the Curicó province supplied by the 1921 Anuario Estadístico is faulty (i.e. 473 machines for cereal reaping, see Appendix 1. of this thesis). I have thus assumed the number of machines for cereal reaping in Curicó in 1921, as being that supplied by 1930 Census, i.e. 83 machines. The regional and national totals are adjusted accordingly in the table.

TABLE A.6.21b

Production and area cultivated with wheat and barley, yields per hectare, and stock of some farm machinery for cereals, by regions: 1930.

	Production (000's quintales)	Area Cultivated (000's hectares)	Yields per Hectares (quintales)	Reaping Machines		Threshing Machines		Sowing Machines	
				Total No	(a) per 1,000 hrs	Total No	(a) per 1,000 hrs	Total No	(a) per 1,000 hrs
Central Chile	3,321	202.4	16.4	536	2.6	1,123	5.6	1,048	5.2
Intermediate Region	2,208	188.7	11.7	562	3.0	710	3.8	423	2.2
South and La Frontera	4,133	331.0	12.5	1,863	5.6	2,559	7.7	1,595	4.8
Others	461	37.5	12.3	149	4.0	150	4.0	138	3.7
Total	10,123	759.6	13.3	3,110	4.1	4,542	6.0	3,204	4.2

Source: Censo Agropecuario 1930, pp 106-13.

(a) Machines per 1,000 hectares of land cultivated with wheat and barley as shown in the table's second column.

TABLE A.6.22

Amount of fertilizers used in Chile, area fertilized, and area cultivated with the main crops: 1921, 1930, 1936.

	- 1 - Amount of fertilizers (000's tons)	- 2 - Area fertilized (000's hectares)	- 3 - Area cultivated with main crops (000's hectares)	1÷2 Amount of fertilizer used per hectare	2 as % of 3 Percentage of cultivated land fertilized
1921	24.3	75.8	724.3	0.32	10.5%
1930	41.7	156.1	1,049.8	0.27	14.9%
1936	203.3	279.6	1,168.0	0.73	23.9%

Sources: Anuario Estadfstico 1921: pp. 114-17; Censo Agropecuario 1930, p.55; and Censo Agropecuario 1936: p.36; and Table A.6.10 of this Appendix.

Column 1 includes all types of commercial fertilizers, organic and chemical.

Column 2 includes the following crops which together account for some 90% of the total cultivated area: wheat, barley, beans, maize, lentils, chickpeas, peas, potatoes, oats and rye (see Table A.6.10 of this Appendix).

TABLE A.6.23

Land treated with fertilizers as proportion of the area cultivated by regions: 1921, 1930*.
(In 000's hectares)

	1921			1930		
	Cultivated area - 1 -	Area treated with fertilizer - 2 -	2 as % of 1	Cultivated area - 1 -	Area treated with fertilizer - 2 -	2 as % of 1
Central Chile	221.2	11.4	5.2	275.5	35.5	12.9
Intermediate Region	157.3	9.4	6.0	256.8	25.3	9.9
South and Frontera	300.4	50.6	16.8	455.7	84.3	18.5
Others	45.4	4.4	9.8	61.8	10.9	17.6
Total Chile	724.3	75.8	10.5	1,049.8	156.1	14.9

Sources: Anuario Estadístico 1921 pp. 114-17.
Censo Agropecuario 1930, p.55,
Tables A.6.3, A.6.8, A.6.9 of this Appendix.

* Area cultivated includes the following crops: wheat, barley, beans, maize, lentils, chickpeas, peas potatoes, oats and rye. All kinds of fertilizers are included.

TABLE A.6.24

Nominal and Real debt of landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised***	Bonds in Circulation	Bonds Issued less Bonds Amortised	Bonds in Circulation
	In 000's pesos (shows annual debt, in pesos)	In 000's pesos (shows accumulated debt in pesos, of column 1) In 000's dollars (shows debt as accumulated in pesos, - column 2 - valued in dollars for year n)	In 000's dollars (shows annual debt of column 1, in dollars at the exchange rate of each year)	In 000's dollars (shows debt as accumulated in dollars, i.e. accumulated total of column 4)
	- 1 -	- 2 -	- 4 -	- 5 -
1856	1,946	1,946	2,997	2,997
1857	1,004	2,950	1,556	4,553
1858	407	3,357	623	5,176
1859	925	4,282	1,425	6,601
1860	721	5,003	1,067	7,668
1861	576	5,579	864	8,532
1862	48	5,627	73	8,605
1863	-294	5,333	-441	8,164
1864	-202	5,131	-303	7,861
1865	-12	5,119	-19	7,842

TABLE A.6.24 (Continued)

Nominal and Real debt of landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised***	Bonds in Circulation	Bonds Issued less Bonds Amortised	Bonds in Circulation
	In 000's pesos (shows annual debt, in pesos)	In 000's pesos (shows accumulated debt in pesos, of column 1) - 2 -	In 000's dollars (shows annual debt of column 1, in dollars at the exchange rate of each year) - 4 -	In 000's dollars (shows debt as accumulated in dollars, i.e. accumulated total of column 4) - 5 -
1866	-217	4,902	-341	7,501
1867	-307	4,595	-476	7,025
1868	-588	4,007	-917	6,108
1869	-325	3,682	-491	5,617
1870	833	4,515	1,274	6,891
1871	274	4,789	427	7,317
1872	527	5,316	827	8,145
1873	25	5,341	38	8,183
1874	1,651	6,992	2,493	10,676
1875	2,302	9,294	3,407	14,083

TABLE A.6.24 (Continued)

Nominal and Real debt of landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised***	Bonds in Circulation	Bonds Issued less Bonds Amortised	Bonds in Circulation
	In 000's pesos (shows annual debt, in pesos)	In 000's pesos (shows accumulated debt in pesos, of column 1) In 000's dollars (shows debt as accumulated in pesos, - column 2 - valued in dollars for year n)	In 000's dollars (shows annual debt of column 1, in dollars at the exchange rate of each year)	In 000's dollars (shows debt as accumulated in dollars, i.e. accumulated total of column 4)
	- 1 -	- 2 -	- 3 -	- 4 -
1876	2,033	11,327	15,518	2,785
1877	1,497	12,824	18,338	2,141
1878	2,529	15,353	20,573	3,389
1879	1,399	16,752	18,595	1,553
1880	2,006	18,758	19,508	2,086
1881	1,298	20,056	20,858	1,350
1882	475	20,531	24,637	570
1883	1,076	21,607	25,712	1,280
1884	891	22,498	24,298	962
1885	1,274	23,772	20,444	1,096
				- 5 -
				16,868
				19,009
				23,398
				23,951
				26,037
				27,387
				27,957
				29,237
				30,199
				31,295

TABLE A.6.24 (Continued)

Nominal and Real debt of landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised*** <u>In 000's pesos</u> (shows annual debt, in pesos)	Bonds in Circulation <u>In 000's pesos</u> (shows accumulated debt in pesos, of column 1) - 2 -	Bonds Issued less Bonds Amortised <u>In 000's dollars</u> (shows annual debt of column 1, in dollars at the exchange rate of each year) - 4 -	Bonds in Circulation <u>In 000's dollars</u> (shows debt as accumulated in dollars, i.e. accumulated total of column 4) - 5 -
1886	624	24,396	505	31,800
1887	1,340	25,736	1,112	32,912
1888	2,736	28,472	2,435	35,347
1889	2,230	30,702	2,007	37,354
1890	1,451	32,153	1,190	38,544
1891	2,143	34,296	1,372	39,916
1892	2,568	36,864	1,644	41,560
1893	11,009	47,873	5,615	47,675
1894	9,766	57,639	4,102	51,277
1895	10,407	68,046	5,620	56,897

TABLE A.6.24 (Continued)

Nominal and Real debt of Landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised***	Bonds in Circulation	Bonds Issued less Bonds Amortised	Bonds in Circulation
	In 000's pesos (shows annual debt, in pesos) - 1 -	In 000's pesos (shows accumulated debt in pesos, of column 1) In 000's dollars (shows debt as accumulated in pesos, - column 2 - valued in dollars for year n) - 2 - - 3 -	In 000's dollars (shows annual debt of column 1, in dollars at the exchange rate of each year) - 4 -	In 000's dollars (shows debt as accumulated in dollars, i.e. accumulated total of column 4) - 5 -
1896	7,146	75,192	4,216	61,113
1897	7,610	82,802	4,566	65,679
1898	2,214	85,016	1,173	66,852
1899	4,166	89,182	2,041	68,893
1900	5,318	94,500	3,031	71,924
1901	997	95,497	538	72,462
1902	-1,205	94,292	-615	71,847
1903	2,267	96,559	1,270	73,117
1904	5,691	102,250	3,130	76,247

TABLE A.6.24 (Continued)

Nominal and Real debt of landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised***	Bonds in Circulation	Bonds Issued less Bonds Amortised	Bonds in Circulation
	In 000's pesos (shows annual debt, in pesos)	In 000's pesos (shows accumulated debt in pesos, of column 1) In 000's dollars (shows debt as accumulated in pesos, - column 2 - valued in dollars for year n)	In 000's dollars (shows annual debt of column 1, in dollars at the exchange rate of each year)	In 000's dollars (shows debt as accumulated in dollars, i.e. accumulated total of column 4)
	- 1 -	- 2 -	- 3 -	- 4 -
1906	5,198	120,525	59,057	2,547
1907	22,633	143,158	61,558	9,732
1908	31,854	175,012	59,504	10,830
1909	7,207	182,219	65,598	2,595
1910	22,858	205,077	73,828	8,229
1911	13,271	218,348	78,605	4,778
1912	-7520	210,828	71,682	-2,557
1913	42,270	253,098	83,522	13,949
1914	36,906	290,004	87,001	11,072
1915	22,985	312,989	87,637	6,436
				- 5 -

TABLE A.6.24 (Continued)

Nominal and Real debt of landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised***	Bonds in Circulation	Bonds Issued less Bonds Amortised	Bonds in Circulation
	In 000's pesos (shows annual debt, in pesos)	In 000's pesos (shows accumulated debt in pesos, of column 1) In 000's dollars (shows debt as accumulated in pesos, - column 2 - valued in dollars for year n)	In 000's dollars (shows annual debt of column 1, in dollars at the exchange rate of each year)	In 000's dollars (shows debt as accumulated in dollars, i.e. accumulated total of column 4)
	- 1 -	- 2 -	- 3 -	- 4 -
1916	18,130	331,119	105,958	5,802
1917	26,570	357,689	153,806	11,425
1918	33,669	391,358	191,765	16,498
1919	10,054	401,412	132,465	3,318
1920	27,109	428,521	128,556	8132
1921	52,971	481,492	91,484	10,065
1922	52,595	534,087	106,817	10,519
1923	68,614	602,701	126,567	14,409
1924	70,474	673,175	121,172	12,685
1925	-74,260	598,915	119,783	-14,852
				- 5 -
				156,591
				168,016
				184,514
				187,832
				195,964
				206,029
				216,548
				230,957
				243,642
				228,790

TABLE A.6.24 (Continued)

Nominal and Real debt of landowners with the Caja de Crédito Hipotecario: Chile, 1856-1927

Year n	NOMINAL DEBT*		REAL DEBT**	
	Bonds Issued less Bond Amortised***	Bonds in Circulation	Bonds Issued less Bonds Amortised	Bonds in Circulation
	In 000's pesos (shows annual debt, in pesos)	In 000's pesos (shows accumulated debt in pesos, of column 1) In 000's dollars (shows debt as accumulated in pesos, - column 2 - valued in dollars for year n)	In 000's dollars (shows annual debt of column 1, in dollars at the exchange rate of each year)	In 000's dollars (shows debt as accumulated in dollars, i.e. accumulated total of column 4)
	- 1 -	- 2 -	- 4 -	- 5 -
1926	3,851	602,766	770	229,560
1927	74,356	677,122	14,871	244,431

Source: Column 1 and 2 Sinopsis Estadística 1927, p.86

Column 3: Column 2 x rate of exchange of dollar (Table A.5.1)

Column 4: Column 1 x rate of exchange of dollar (Table A.5.1)

Column 5: Accumulated total column 4.

* Nominal debt meaning that the debt is calculated in pesos, and no account is taken of inflation or changes in the value of the Chilean currency.

** Real debt meaning that the accumulated debt is calculated in a hard currency, i.e. dollar, on a year-to-year basis.

*** Includes payments of interests.

TABLE A.6.25.a

Distribution of land ownership by regions: 1921.

	Less than 5 hrs.	5 - 50 hrs.	51 - 200 hrs.	201 - 1,000 hrs.	1,001 - 5000 hrs.	more than 5000 hrs.	Total
	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares
Central Chile	17,002 n/d	7,569 n/d	1,823 n/d	1,165 n/d	499 n/d	214 n/d	28,272 n/d
Intermediate Region	10,240 n/d	14,057 n/d	3,220 n/d	1,387 n/d	315 n/d	45 n/d	29,264 n/d
South & La Frontera	2,360 n/d	11,046 n/d	5,835 n/d	2,561 n/d	769 n/d	122 n/d	22,693 n/d
Other	8,690 n/d	5,562 n/d	413 n/d	242 n/d	151 n/d	132 n/d	15,190 n/d
Total Chile	38,292 n/d	38,234 n/d	11,291 n/d	5,355 n/d	1,734 n/d	513 n/d	95,419 n/d

Source: Anuario Estadístico 1921, p.125

TABLE A.6.25.b

Distribution of land ownership by regions: 1930.

	Less than 5 hrs.	5 - 50 hrs.	51 - 200 hrs.	201 - 1,000 hrs.	1,001 - 5000 hrs.	more than 5000 hrs.	Total
	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares	No of props. 000's hectares
Central Chile	25,956 33.1	11,144 180.4	2,380 237.4	1,294 590.5	535 1,207.6	168 2,654.0	41,477 4,903.0
Intermediate Region	13,696 28.4	23,631 397.8	4,749 465.9	1,885 819.9	399 805.6	59 766.2	44,419 3,283.8
South & La Frontera	3,366 7.5	17,018 390.4	8,174 842.3	3,495 1,532.7	855 1,697.5	135 2,036.6	33,043 6,507.0
Other	14,342 21.1	11,211 165.5	818 84.1	465 234.4	263 646.2	206 11,467.9	27,305 12,619.2
Total Chile	57,360 90.1	63,004 1,134.1	16,121 1,629.7	7,139 3,177.5	2,052 4,356.9	568 16,924.7	146,244 27,313.0

Source: Censo Agropecuario 1930, pp 4 - 7.

☐ Props: properties

☐ Hrs: hectares

TABLE A.6.26

Percentage distribution of land ownership, by regions: 1930.

	Less than 5 hrs.		5 - 50 hrs.		51 - 200 hrs.		201 - 1,000 hrs.		1,001 - 5,000 hrs.		more than 5000 hrs.		Total	
	% of properties	% of land	% of properties	% of land	% of properties	% of land	% of properties	% of land	% of properties	% of land	% of properties	% of land	% of properties	% of land
Central Chile	62.6	0.7	26.9	3.7	5.7	4.8	3.1	12.0	1.3	24.6	0.4	54.1	100	*100
Intermediate Region	30.8	0.9	53.2	12.1	10.7	14.2	4.2	25.0	0.9	24.5	0.1	23.3	*100	100
South and La Frontera	10.2	0.1	51.5	6.0	24.7	12.9	10.6	23.6	2.6	26.1	0.4	31.3	100	100
Other	52.5	0.2	41.0	1.3	3.0	0.7	1.7	1.9	1.0	5.1	0.8	90.9	100	*100
Total Chile	39.2	0.3	43.1	4.1	11.0	6.0	4.9	11.6	1.4	16.0	0.4	62.0	100	100

Source: Table A.6.25.b.

* (Adjusted : \pm 0.01%)

TABLE A.6.27

Taxes on agriculture and government's ordinary revenue:
Chile, 1851-1910.

	Tithes (diezmo)	Tribute on land (impuesto territorial)	Roads & bridge tolls (impuesto de caminos)	Tax on revenue (impuesto agrícola)	Ordinary revenue of Chilean Government
1851	581.6	111.3	96.7	-	6,863.3
1852	819.5	153.5	98.3	-	8,531.6
1853	928.7	161.6	119.3	-	8,874.2
1854	920.2	151.1	116.1	-	9,054.6
1855	367.1	155.1	96.7	807.4	9,735.3
1856	-	154.3	110.5	813.9	10,053.1
1857	-	154.3	103.1	815.5	9,932.7
1858	-	152.7	114.5	808.3	9,144.2
1859	-	154.7	96.1	815.7	9,722.8
1860	-	147.9	104.1	780.3	10,907.9
1861	-	-	69.1	1,008.1	8,852.9
1862	-	-	58.5	1,025.2	9,669.9
1863	-	-	44.7	953.2	9,954.0
1864	-	-	37.4	964.6	9,864.7
1865	-	-	30.9	1,008.7	11,320.0
1866	-	-	27.6	1,024.8	9,763.5
1867	-	-	28.4	1,030.7	15,457.5
1868	-	-	37.4	1,018.4	16,670.1
1869	-	-	118.6	1,010.8	17,910.4
1870	-	-	92.8	996.7	17,701.4
1871	-	-	-	1,004.6	18,118.2
1872	-	-	-	1,019.1	21,328.2
1873	-	-	-	980.7	23,158.7
1874	-	-	-	977.5	23,187.1
1875	-	-	-	1,549.2	23,647.2
1876	-	-	-	1,451.8	21,426.9
1877	-	-	-	1,475.3	19,511.1
1878	-	-	-	1,387.0	18,814.4
1879	-	-	-	1,166.3	17,194.1
1880	-	-	-	1,104.1	29,715.4
1881	-	-	-	1,104.9	38,788.7
1882	-	-	-	1,229.3	49,172.3
1883	-	-	-	1,284.0	52,880.7
1884	-	-	-	1,228.6	41,295.6
1885	-	-	-	985.7	31,072.9
1886	-	-	-	943.5	30,310.1
1887	-	-	-	936.6	38,087.8
1888	-	-	-	1,012.0	44,576.6
1889	-	-	-	1,032.9	49,253.5
1890	-	-	-	940.1	43,378.0

TABLE A.6.27
(continued)

Taxes on agriculture and government's ordinary revenue:
Chile, 1851-1910.

	Tithes (diezmo)	Tribute on land (impuesto territorial)	Roads & bridge tolls (impuesto de caminos)	Tax on revenue (impuesto agricola)	Ordinary revenue of Chilean Government
1891	*	*	*	*	*
1892	-	-	-	741.2	39,200.5
1893	-	-	-	85.9	29,139.3
1894	-	-	-	73.2	27,656.5
1895	-	-	-	6.5	47,886.7
1896	-	-	-	2.4	48,089.4
1897	-	-	-	4.1	47,199.4
1898	-	-	-	0.06	46,852.5
1899	-	-	-	0.07	15,623.7
1900	-	-	-	0.05	14,736.9
1901	-	-	-	0.02	12,812.4
1902	-	-	-	-	16,134.3
1903	-	-	-	-	15,851.1
1904	-	-	-	-	15,350.3
1905	-	-	-	0.14	17,527.6
1906	-	-	-	-	19,302.6
1907	-	-	-	-	26,937.6
1908	-	-	-	-	33,183.4
1909	-	-	-	-	47,694.3
1910	-	-	-	-	56,093.9

Source: Legation of Chile in London :1915: pp. 21-41.

*: Two government budgets existed in 1891 due to civil war.
-: no tax was collected.

TABLE A.6.28

Chile's Balance of Trade: 1848-1860.
(in millions of dollars)

	Imports	Exports		Balance
1848	12.6	12.3	-	0.3
1849	16.3	16.1	-	0.2
1850	18.4	19.4	+	1.0
1851	24.6	18.8	-	5.8
1852	23.8	21.8	-	2.0
1853	18.5	19.4	+	0.9
1854	27.2	22.7	-	4.5
1855	28.6	29.7	+	1.1
1856	30.5	28.0	-	2.5
1857	31.3	30.7	-	0.6
1858	27.8	28.1	+	0.3
1859	28.3	30.1	+	1.8
1860	27.2	28.9	+	1.7
Total (1848-60)	315.1	306.0	-	9.1

Source: adapted from Ministerio de Hacienda (Chile): 1875: p.575.

TABLE A.6.29

Contribution to total exports by economic sectors: Agriculture,
Mining and Others (1844-48 to 1886-90). As percentages

	Agriculture	Mining	Crafts, manufactures and others	Total
	%	%	%	%
1844-48	14	62	24	100
1849-50	21	60	19	100
1851-55	26	56	18	100
1856-60	21	72	7	100
1861-65	23	71	6	100
1866-70	35	61	4	100
1871-75	40	53	7	100
1876-80	29	69	2	100
1881-85	12	83	5	100
1886-1900	11	85	4	100

Source: Adapted from Ministerio de Hacienda (Chile) : 1875: pp. 567-75 and Carmagnani, M.: 1971: pp. 184-85.

TABLE A.6.30

Total number of cattle in Chile in chosen years: 1867-1936.
(in 000's)

		Cattle
	1867	625
	1868	586
(a)	1869	259
	1870	270
	1871	419
(b)	1872	241
	1873	261
	1877	266
	1878	232
	1879	307
	1880	267
	1884	298
	1885	399
	1913	2,083
	1914	1,968
	1915	1,944
	1916	1,869
	1917	2,030
	1918	2,225
	1919	2,163
	1922	1,995
	1925	1,918
	1930	2,388
	1936	2,573

Sources 1867-1885, Anuario Estadístico of each year.
1913-1927, Sinopsis Estadística 1927, p.65.
1927-1936, Anuario Estadístico 1948, (Agricultura) p.30.

(a) Outbreak of Anthrax.

(b) Outbreak of Foot & Mouth disease.

A.6.31

Annual rainfall in Santiago, Talca and Concepción: 1875-1927.
(in milimitres)

Annual Rainfall				Annual Rainfall			
Stgo	Talca	Concepción		Stgo	Talca	Concepción	
1875	239	576	n/d	1903	194	n/d	1,137
1876	203	658	n/d	1904	686	n/d	2,131
1877	650	1,165	n/d	1905	616	n/d	1,561
1878	401	667	1,347	1906	293	n/d	1,352
1879	166	553	1,103	1907	269	n/d	1,153
1880	652	1,266	1,716	1908	202	n/d	976
1881	441	715	1,283	1909	184	n/d	666
1882	304	607	1,241	1910	271	493	1,046
1883	365	566	1,130	1911	169	577	1,089
1884	287	716	1,078	1912	291	674	1,102
1885	398	644	1,065	1913	268	744	1,361
1886	109	220	911	1914	701	1,524	1,674
1887	563	830	1,461	1915	237	680	1,299
1888	693	1,340	n/d	1916	225	464	1,272
1889	230	552	n/d	1917	204	765	1,005
1890	222	520	n/d	1918	377	737	1,443
1891	615	1,558	n/d	1919	650	1,119	1,567
1892	123	307	n/d	1920	290	674	1,069
1893	239	n/d	1,030	1921	435	663	840
1894	243	n/d	1,189	1922	448	746	1,540
1895	293	n/d	1,306	1923	307	594	1,224
1896	263	n/d	1,281	1924	66	248	719
1897	355	n/d	1,200	1925	259	530	1,424
1898	499	n/d	1,883	1926	761	1,116	1,773
1899	773	n/d	2,231	1927	406	664	1,529
1900	819	n/d	2,128				
1901	384	n/d	1,573				
1902	506	n/d	1,737				

Sources: Sinopsis Estadística 1925 p.3 .
Sinopsis Estadística 1927 p.3 .

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