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Understanding the Adoption and Implementation of Sector Skills Councils in Chile

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Submitted in fulfilment of the requirements of the Degree of Doctor of Philosophy (PhD)

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Abstract

Technical and Vocational Education and Training (TVET) policies have gained increased interest in global agendas, being a particular concern in ensuring that youths have the skills needed to enter the labour market. In this line, international organisations and cooperation agencies have widely promoted sector skills bodies. This policy seeks to involve employers in skills formation and foster collaboration among different stakeholders to ensure that the skills developed through TVET meet labour market needs. However, academic research about this specific policy is limited. Moreover, even when several countries have adopted these bodies, little is known about them from a policy transfer perspective (i.e. studying the travel of an education policy from one place to another). This thesis addresses this gap by examining the adoption and implementation of private-led Sector Skills Councils (SSCs) in Chile. Thus, two main research questions guided this study: *Why and how private actors in Chile have adopted SSCs? How have different employers and TVET providers implemented SSCs' initiatives in Chile?*

This qualitative research utilised a multiple-case study design for which data was collected through semi-structured interviews and documents analysis. First, based on a Cultural Political Economy approach, the adoption of SSCs was investigated by examining the main factors that could account for the mechanisms involved in the process. Second, the implementation of SSCs was studied by considering a policy enactment focus and the principles of the Realist Evaluation approach to understand how two main actors affected by the policy, employers and TVET providers, have fulfilled the policy expectations.

The findings of this thesis show the crucial role of ideational factors (i.e. the influence of policy entrepreneur) to trigger policy change and the specific economic, institutional, political and educational conditions at the national and sectoral levels that may explain the adoption of SSCs. As a result, it advances our understanding of the different roles played by ideational and material factors in adopting SSCs as a TVET policy. Likewise, given the unusual private-led adoption of these bodies, this study provides an empirical demonstration of this uncommon situation. Simultaneously, it offers potential new insights about the assessments made by employers and their business associations when deciding to involve in skill formation policies. Moreover, by investigating the implementation of SSCs from the perspective of the main actors expected to enact the policy, this thesis provides an initial understanding of the varied contextual and stakeholder conditions affecting these actors' responses to SSCs. In doing so, this thesis also offers an empirical demonstration of the limitations of SSCs adopted and implemented with a skills supply orthodoxy rhetoric.

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[1] Scholarship reference number: 72180010

Author's Declaration

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Printed name: Paulina Bravo Contreras

Signature:

List of Abbreviations

Abbreviations	Meaning
CFTs	Centros de Formación Técnica – Technical Training Centres
ChileValora	Sistema Nacional de Certificación de Competencias Laborales – National Certification System for Labour Competencies
CMEs	Coordinated Market Economies
CMO	Context-Mechanism-Outcome
CPC	Confederación de la Producción y del Comercio – Confederation of Production and Commerce
ETF	European Training Foundation
FCh	Fundación Chile
GDP	Gross Domestic Product
HCT	Human Capital Theory
HR	Human Resources
HRM	Human Resource Management
ILO	International Labour Organization
IPs	Institutos Profesionales – Professional Institutes
LMEs	Liberal Market Economies
MINEDUC	Ministerio de Educación – Ministry of Education
MINTRAB	Ministerio del Trabajo y Seguridad Social – Ministry of Work and Social Security
OECD	Organisation for Economic Cooperation and Development
OSCLs	Organismos Sectoriales de Competencias Laborales – Sectoral Bodies of Labour Competencies
OTECs	Organismos Técnico de Capacitación – Technical Training Organisations
OTICs	Organismos Técnico Intermedio para Capacitación – Intermediate Technical Organisations for Training
QFs	Qualifications Frameworks
SENCE	Servicio Nacional de Capacitación y Empleo – National Service of Training and Employment
SETAs	Sector Education and Training Authorities
SMEs	Small and medium-sized enterprises
SSCs	Sector Skills Councils

TVET	Technical and Vocational Education and Training
TVET-QF	TVET qualifications framework
UNESCO	United Nations Educational, Scientific and Cultural Organization
VDC	Vinos de Chile
VET	Vocational Education and Training
WoC	Wines of Chile

CHAPTER 1: INTRODUCTION

1.1 Introduction

This thesis examines the adoption and implementation of private-led Sector Skills Councils (SSCs) as a Technical and Vocational Education and Training (TVET) policy in Chile. Interest in TVET policies in developed and developing countries has increased worldwide (McGrath, 2012; Gonon and Maurer, 2014). Economic crisis, youth unemployment, low skills, and decreasing productivity levels have focused on education and training to address these issues (Keep and Mayhew, 2010; Gonon and Maurer, 2014; Legusov *et al.*, 2021; Li and Pilz, 2021). In this context, one particular concern is ensuring that TVET develops the skills that youth need to enter the labour market (Gonon and Maurer, 2014; Rageth and Renold, 2020; Valiente, Zancajo and Jacovkis, 2020). In this line, sectoral governance initiatives such as sector skills bodies have gained popularity as part of a toolkit of TVET policies widely promoted by international organisations and cooperation agencies (McGrath, 2012). In general, these bodies seek to involve employers in skills formation policies and foster collaboration among different stakeholders to ensure that the skills developed through TVET meet labour market needs (Raddon and Sung, 2006; Lempinen, 2013; Powell, 2016). However, academic research about this specific policy is limited (Sung, 2008; Kraak, 2013).

The scarce academic literature on sector skills bodies has focused on issues such as their role in engaging employers in skills formation (e.g. Raddon and Sung, 2006; Payne, 2008; Sung, 2008, 2010) or their functions and outcomes (e.g. Turner *et al.*, 2013; Petersen *et al.*, 2016; Kraak, 2019). In general, these studies show the different approaches taken by these bodies in some early adopter countries and the difficulties these bodies have faced to achieve their aims, particularly concerning the engagement of employers in skill formation. Notably, little attention has been given to current issues about these bodies related to their transfer from one context to another and their dissemination in global TVET agendas.

In contrast, grey literature has been more active to examine such aspects of these bodies. It is possible to find several reports commissioned by government agencies aimed to learn lessons from the implementation of these bodies in other, mainly Anglo-Saxon, countries (e.g. Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013) and reports published by some international organisations promoting these bodies (e.g. ILO, 2014a; ETF, 2015; Enabel and British Council, 2020). However, beyond general ideas about the expected benefits of adopting SSCs disseminated by international organisations, little is known about why and how this policy idea has been considered suitable in specific contexts

from the perspective of local policy actors. Similarly, little is known about the implementation of these bodies from the perspective of the main actors affected by the policy.

Thus, the increasing number of countries adopting these types of bodies argued in some international organisations' reports (e.g. ETF, 2015; Wilson, Tarjáni and Rihova, 2016) contrast with our knowledge from an academic perspective about these processes. In this sense, we could benefit from knowing more about the adoption and implementation of SSCs from a critical perspective that considers the local actors' standpoint and the contextual conditions that may explain these processes. Notably, we could benefit from examining countries that have recently borrowed this policy idea from early adopter countries. This approach could add new insights to the literature on these bodies and enrich the debates on the transfer of internationally diffused TVET policies (e.g. Allais, 2010, 2011; McGrath, 2012; Gonon and Maurer, 2014; Li and Pilz, 2021). Furthermore, more generally, it could add further evidence to the debates on the multiple drivers involved in the local adoption of global education policies within the comparative education literature (e.g. Ball, 2012; Verger, Novelli and Kosar-Altinyelken, 2012; Verger, 2014, 2016; Mundy *et al.*, 2016a).

The case of Chile is an interesting one to examine sector skills bodies from the perspective mentioned above. On one side, public policymaking on TVET has been particularly active during the last five years seeking to involve different stakeholders in policy discussions to deliver proposals for addressing skill formation (MINEDUC, 2016; MINEDUC and UNESCO, 2018; MINEDUC and MINTRAB, 2020). On the other side, business associations in some sectors have decided to adopt SSCs to influence TVET. This adoption of SSCs driven by private actors without state intervention contrast with the evidence of how these bodies have been adopted in most countries (e.g. Raddon and Sung, 2006; Powell, 2016). This phenomenon raises questions about this rare adoption of SSCs and the economic, political, institutional and educational circumstances that may explain it.

Moreover, given the private ownership of this initiative, how these bodies were implemented and received by other stakeholders affected by the policy is highly relevant. This study seeks to investigate these issues. The following section discusses why and outlines the research objectives guiding this study.

1.2 Rationale for the Study and Research Objectives

Given the situation discussed above, multiple rationales explain the decision to conduct this study on SSCs. First and foremost, a study of the adoption and implementation of SSCs comprises a new line of inquiry about these bodies that can be regarded as a study of policy transfer in TVET. For instance, previous research has studied the transfer of other TVET policies, such as qualifications frameworks (e.g. Allais, 2011; Maurer, 2014; López-Guereñu, 2018) or dual vocational systems (e.g. Gonon, 2014; Valiente and Scandurra, 2017; Pilz and Wiemann, 2021). Hence, by studying a different policy, this study offers the possibility of adding new knowledge to the debates on policy transfer in TVET and the literature on sector skills bodies.

Second, as mentioned, examining SSCs from a policy adoption perspective entails a difference in how these bodies have been studied to date. It involves examining the ideas and material conditions at the local level that may explain why local actors select and implement an education policy (Verger, 2014, 2016). This study follows this perspective for two reasons. First, this perspective suggests placing attention to the role of ideas in the processes of education policy adoption, which seems relevant to explore considering that sector skills bodies are a policy promoted by some international organisations and that usually appears in TVET policy agendas (e.g. UNESCO, 2016). Second, it has been argued that the stage of policy adoption is still understudied for global education policies (Verger, 2014). In this sense, this study seeks to contribute to policy adoption studies by examining the adoption of SSCs as, arguably, one of such policies.

Third, as the next chapter will show, the research on sector skills bodies has given little attention to their implementation from the perspective of the main actors affected. Most reports and studies addressing the implementation of SSCs investigate their role within the TVET systems, functions and general outcomes (e.g. Sung, 2008, 2010; Powell, 2016). Thus, there is little knowledge about the specific issues affecting the actors who enact the policy in their day-to-day practices. Remarkably, only the study conducted by Lloyd (2008) in the UK context considers the employers' perspective to assess one SSC's outcomes. The results of her study contrast with the optimistic expectations about the implementation of SSCs promoted by some international organisations. In this sense, we could benefit from more research considering a policy enactment approach (Ball, Maguire and Braun, 2012) to better understand the enablers and barriers affecting the implementation of these bodies.

Finally, studying the adoption of SSCs in Chile can fill two empirical gaps in the literature. The literature review on sector skills bodies shows that most of what is known comes from studies on the same list of—mainly Anglo-Saxon—countries where sector skill bodies were first implemented. Thus, evidence about the adoption of these bodies in other contexts, such as Latin America, is rare. Moreover, in Chile, SSCs have been adopted by private actors without state intervention. This situation is a rare type of adoption, of which, besides the slightly similar case of Hong Kong, little is known (Raddon and Sung, 2006).

Specifically, the role of business associations in adopting sector skills bodies is interesting to explore. Business associations are organisations comprised of single companies within an industry, regional or sectoral trade associations and chambers of commerce that represent the common interests of these actors (Menges, 1966; Doner and Schneider, 2000; Bril-Mascarenhas and Madariaga, 2019). These associations perform three main functions: they provide technical assistance to their members; they represent the sector's interest in national discussions; and occasionally, they act as internal regulators within the sector (Menges, 1966). In this line, these organisations usually have different work areas or committees on issues that affect their trade, such as sustainability, human capital development, taxes and regulations.

These associations do not participate in collective bargaining since collective agreements negotiations in Chile are conducted at the firm level (Gutiérrez Crocco, 2020; Pérez Ahumada, 2021). In this sense, business associations are different from employers' associations, such as those operating in the UK and other countries. However, they are involved in national discussions about industrial relations at a higher political level (Bril-Mascarenhas and Madariaga, 2019; Pérez Ahumada, 2021).

Additionally, these organisations are involved in education and training for the sector at the operational level. For instance, some business associations represent the employers' voice in state-led tripartite sectoral bodies that define certification competency standards. Also, some associations are involved in the intermediation and provision of training. In some cases, these organisations have established non-for-profit educational branches involved in managing secondary TVET schools (Doner and Schneider, 2020). All these functions are established by the education, training and certification laws with specific funding and operation rules (CNP, 2018; Sevilla and Montero, 2018). In this sense, the adoption of SSCs by these associations without state or regulatory guidelines is a new phenomenon.

Accordingly, the two research objectives guiding this study are:

1. To understand the reasons and circumstances that explain the adoption of Sector Skills Councils by private actors in Chile.
2. To explain how different key actors have implemented private-led Sector Skills Councils in Chile.

1.3 Outline of the Thesis

In line with the research objectives outlined above, the subsequent chapters of this thesis are organised as follows.

Chapter two presents the literature review that has informed this thesis and situates this research in the comparative education field focused on studying the transfer of a TVET policy. The chapter reviews the main concepts, theories, and previous studies on skill formation, sector skills councils and employer engagement in skill formation. Also, it presents an overview of the national context of this study, particularly concerning TVET policymaking and a review of recent academic studies addressing skill formation in the country. The chapter concludes by discussing the knowledge and empirical gaps on sector skills bodies addressed in this thesis.

Chapter three explains the methodology underpinning this research which is based on a qualitative strategy and multiple case-study research design. It describes how semi-structured interviews and documents were used in data collection and analysed following a template analysis and case comparison.

Subsequently, chapters four and five present the findings of this study. Chapter four presents the findings concerning the adoption of three private-led SSCs in Chile. Guided by a cultural political economy analytical framework, it identifies the different factors involved in adopting these bodies and describes how they interacted in the adoption process. Notably, it is discussed how economic challenges and their related labour and skills gaps acted as pre-conditions for the persuasion strategies of a policy entrepreneur that advocated for SSCs. Simultaneously, it is explained the prominent role of material factors at the sectoral level in the final recontextualisation of SSCs as a policy idea.

Chapter five presents the findings concerning the implementation of two SSCs in Chile. Considering a policy enactment focus and guided by the concepts and principles of realist evaluation, it is presented how employers and TVET providers have reacted to SSCs and fulfilled the policy expectations. Specifically, it is discussed that employers generally

responded positively to SSCs' request to share information about their skills demands to develop sectoral standards. However, not all employers were open to using these standards in their organisational practices. Conversely, TVET providers reactions to SSCs have been varied, with only some of them fulfilling policy expectations.

Chapter six discusses the findings reported in the previous chapters by assessing them against the literature on comparative education, sector skills bodies and employer engagement in skill formation.

First, it is argued that the adoption of SSCs by private actors in Chile can be regarded as a case of soft policy transfer. Accordingly, the chapter discusses the national and sectoral conditions involved in this process and the key role of a policy entrepreneur. Second, based on the analysis of responses from employers and TVET providers to SSCs, it is argued that the development and delivery of information about skill needs through SSCs may have modest effects on generating changes among these actors to fulfil the policy expectations. Accordingly, some additional actions from SSCs and contextual conditions explaining different outcomes are discussed.

Finally, chapter seven present the conclusions and contributions of this thesis. It is discussed why this study advances our conceptual understanding of the factors involved in the policy adoption process of SSCs and provides new empirical insights about these bodies. The chapter concludes by discussing the limitations of this research and directions for future research arising from this study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the relevant literature that has informed the development of this thesis. As the previous chapter explained, this study aims to understand the adoption and implementation of Sector Skills Councils (SSCs) by private actors in Chile. Hence, this literature review chapter presents the relevant concepts, theoretical frameworks and previous studies on sector skills bodies and skill formation, as a broader area related to these bodies. Likewise, the chapter presents a literature review of the relevant studies addressing TVET in Chile. This last section aims to present the contexts of this study and assess the timely significance of this research. Accordingly, this chapter is divided into six sections.

First, section 2.2 presents a literature review focused on examining the main theories and concepts related to skill formation. This review was considered necessary since sector skills bodies are just one of many skill policies and part of broader national skills formation systems and institutional contexts. Thus, this section aims to discuss how skill formation has been studied from different perspectives, the outcomes of these studies and the relevant theoretical frameworks to examine skills formation systems and policies. This section discusses the literature on skill formation from economic, political economy, and comparative education approaches.

Next, section 2.3 of this chapter discusses the literature on sector skill bodies. This section aims to provide an understanding of this policy from all relevant sources. Thus, this review involves both academic studies and grey literature addressing these bodies. This decision considers the claim that sector skill bodies have received little attention in the academic literature on skills (e.g. Raddon and Sung, 2006; Sung, 2008; Kraak, 2013). Moreover, reviewing non-academic sources focused on these bodies has been essential to understanding the main ideas promoted by international organisations about this policy.

Also, as the literature review of sector skill bodies will reveal, employer engagement appears as a key aspect of these bodies. For that reason, section 2.4 presents a brief discussion of the literature on employer engagement in skill formation. This examination was considered necessary to understand the central debates and studies focused on this issue that could help to explain its role in the adoption and implementation of SSCs.

Next, section 2.5 discusses the context of this study to present an assessment of the timely relevance of this research. Hence, it offers a general overview of skill formation in Chile,

followed by a discussion of the current policy reforms and issues and the relevant academic studies addressing TVET in this country.

Subsequently, section 2.6 presents a conjunct discussion of the literature reviewed in all the previous sections. The section discusses the suitability of the theoretical perspectives from economic, political economy, and comparative education bodies of literature reviewed to inform this research. Likewise, this section outlines the relevant research gaps identified in the literature that this study attempts to fill. Finally, section 2.7 summarises the main points presented in this chapter.

2.2 Literature on Skill Formation

This section discusses the main theories, key terms and relevant debates on skill formation from three approaches. Accordingly, it starts with reviewing the literature on economic approaches to skill formation, followed by political economy and finishes with a review of comparative education approaches.

2.2.1 Economic approaches to skill formation

A prominent body of literature addressing skill formation comes from scholars within the economics field. Specifically, two economic approaches, manpower planning and human capital theory, have been highly influential in developing skill formation policies (Heyneman, 2003). These approaches have considered skill as a resource with economic value (Bryson, 2017).

In this line, the rise in educational and manpower planning models came from economists' and policymakers' consideration that the labour force was a determinant of economic growth (Hughes, 1994; Spalletti, 2008). The manpower forecasting or manpower planning approach was one of the first efforts in educational planning (Spalletti, 2008). It is based on different forecasting techniques to calculate the skills needs of a country for a long-term period, providing information that could subsequently be translated to education and training needs (Castley, 1996).

One of the main assumptions behind manpower planning was that market forces fail to optimise the allocation of human resources, given the existence of surpluses and/or shortages of educated people (Blaug, 1967). In this sense, this approach provided information for policy solutions to alleviate the costs of underutilizing human resources (Spalletti, 2008) and allocating resources for education (Heyneman, 2003). Indeed, it was for this last purpose that the use of this approach gained greater acceptance within international organisations, such as the World Bank (Heyneman, 2003; Samoff and Carrol, 2003; Nuno Teixeira, 2017).

Given that the primary purpose of the World Bank was financing infrastructure, money lends for education purposes required a justification based on the workforce needed to implement infrastructure projects (Heyneman, 2003). This situation reflected a profoundly utilitarian concept of education by this organisation, which regarded education as a support activity to stimulating economic development (Samoff and Carrol, 2003). As a result, the World Bank became influential in expanding technical and vocational education because it was considered a type of education that more obviously contributed to workforce training (Nuno Teixeira, 2017). For these purposes, the World Bank recommended reorientating the curriculum towards practical subjects to develop job-related skills (Heyneman, 2003). However, as discussed later, this focus changed with the emergence of alternative analytical approaches to allocating education investments.

In fact, despite the popularity of this approach during the 1950s and early 1960s, the manpower planning approach has been a focus of intense criticism (Youdi and Hinchliffe, 1985; Hughes, 1994; Spalletti, 2008). In particular, neoclassical economists argued that planning was unnecessary since the economy can adjust through market mechanisms (Hughes, 1994; Spalletti, 2008). Noticeably, this argument contradicts the central assumption for which manpower approaches were considered necessary in the first place, as market failures were regarded as the reason for oversupply and shortages of skilled people (Blaug, 1967).

Also, it was argued that manpower planning was based on false assumptions about the fixed relationship between variables (Spalletti, 2008). In particular, the relationship between the number of workers needed and the number of goods produced. Given that the ratios considered in these approaches were static, they could not respond to changes in economic conditions and labour prices (Spalletti, 2008). Similarly, publications from organisations that previously supported its use, such as the World Bank, discouraged manpower planning techniques based on the criticism about the assumptions of fixed relations of this approach (e.g. Youdi and Hinchliffe, 1985; Middleton, Ziderman and Adams, 1993).

Concurrently, the rise in the criticisms of the manpower planning approach was in line with some of the central assumptions of the Human Capital Theory (HCT) developed by Becker (1962, 1994), Schultz (1961) and Mincer (1974) during the 1960s (Hughes, 1994). This theory is recognised as one of the most prominent theories of skill formation (Lauder, Brown and Ashton, 2017). It considers education and training as investments in human capital leading to economic returns by making individuals more productive (Carneiro,

Dearden and Vignoles, 2010; Chiappero-Martinetti and Sabadash, 2014; Bryson, 2017). Thus, HCT tends to look at skills related to the costs and economic returns of acquiring them for individuals, firms and the economy (Bryson, 2017). Its leading proponents argue that investments in human capital through education raises earnings and productivity since individuals acquire knowledge and skills that have economic value. Thus, education and training are considered critical to driving economic growth (Schultz, 1961; Becker, 1994; Mincer, 1996).

As a result, the HCT has had a marked influence on policy-making concerning skill formation (Ashton, 1999; Keep and Mayhew, 2010; Lauder, 2015). As Lauder (2015) suggest, HCT provides an attractive and straightforward policy prescription "provide the means for individuals to have a good general education and they will increase their income and the nation's wealth" (p.491). Consequently, policymakers in different parts of the world tend to accept that education and training investments are valid means to economic growth and equity (Carneiro, Dearden and Vignoles, 2010). Besides, HCT considers a series of assumptions that have informed public policy on education, particularly in a direction based on the supply of skills (Dobbins and Plows, 2017). In this regard, three of the most significant assumptions held by this theory are: that individuals pursue education in their self-interest given that it will lead to higher economic returns; that given the deep efficiency of education, employers will not hire incompetent people; and that employers will respond to greater access to highly-skilled people by adapting their production processes and investing in technology to fully use the skill available (Lauder, Brown and Ashton, 2017).

Likewise, HCT has influenced a substantial body of research focused on rates of return to education at different levels (Psacharopoulos and Patrinos, 2018). These analyses have been particularly significant for TVET since international evidence has suggested that economic returns to some TVET options are low (Carneiro, Dearden and Vignoles, 2010; Maurer, 2011). For instance, using rates of return analysis by the World Bank resulted in recommendations to shift public expenditure from TVET towards primary and academic education (Heyneman, 2003). Similar conclusions are still prevalent to date. For instance, recent work by Psacharopoulos and Patrinos (2018) suggest that when comparing the academic versus the vocational track at the secondary level, the returns of the academic path are higher.

As with the manpower planning approach, HCT and its central assumptions have not been exempt from criticism (Sung and Ashton, 2015). For instance, it has been argued that

considering individuals as rational actors who take their educational decisions based on cost-benefit analyses fails to consider the complexity of these decisions. HCT fails to consider the uncertainty involved and the relationships among people's beliefs, resources, preferences, and experiences that affect their choices (Brown, 2001; Green, 2013).

Moreover, the optimistic assumptions regarding employers' reactions to a better-educated workforce have been sharply questioned (Brown, 2001). For instance, competing over price and cost reduction in many economic sectors remains a profitable business strategy that does not necessarily require people with high skills (Keep, 1999; Lauder, 1999). Hence, this situation may imply that the utilisation and demand for low-skilled people remains a profitable option that might hardly be affected by the increased availability of high-skilled people.

Likewise, some scholars argue that HCT fails to consider the current debates affecting skills (Ashton, 1999; Valiente, 2014). Thus, providing wrong assumptions for policymaking involving skill formation (Brown, 2001; Sung and Ashton, 2015). In particular, several scholars have claimed that the focus of HCT on the supply of skills fails to explain the current changes taking place on the demand side. For instance, this theory does not explain the difficulty of increasing the number of highly skilled and highly paid jobs (e.g. Brown, Green and Lauder, 2001; Sung and Ashton, 2015; Brown, Lauder and Cheung, 2020). In this respect, Lauder (2015, p. 492) argues that "this is not a theory or set of empirical analyses that can be helpful to policy-makers because it fails to take into account the distinctive institutional structures within countries that shape their skill formation policies and outcomes". In this line, one of the main concerns regarding the influence of HCT in public policy relates to the high expectations placed on what education and training can achieve (Ashton, 1999; Keep and Mayhew, 2010; Dobbins and Plows, 2017; Brown, Lauder and Cheung, 2020).

To summarise, economic approaches to skill formation share that skill formation is strongly related to economic outcomes, particularly economic growth. Therefore, skills are seen as an economic resource in which individuals, states and firms can invest and get returns. This view of skills has been highly influential in education policymaking. However, as noted, it has not been exempt from criticisms, particularly from scholars studying skill formation from a political economy perspective. The following subsection reviews this approach.

2.2.2 Political economy approaches to skill formation

The second body of literature on skill formation developed by scholars from different disciplines, such as political science, sociology and economics, have studied skill formation considering a political economy approach (Bryson, 2017). Political economy can be defined as "the study of how the relationships between individuals and society and between markets and the state affect the production, distribution and consumption of resources, paying attention to power asymmetries and using a diverse set of concepts and methods drawn from economics, political science and sociology" (Novelli *et al.*, 2014, p. 10). In this sense, studies within the political economy approach focus their research on the social relations between actors with a particular interest in power issues (Mosco, 2009).

Hence, in contrast with studies within the economic approach interested in answering questions about the economic returns of skill, political economy studies are interested in questions that address skill formation concerning their institutions, actors and the outcomes of different skill formation regimes (Bryson, 2017). For instance, some of these studies examine issues such as the interactions and relationships of political actors in different institutional contexts (e.g. Crouch, Finegold and Sako, 1999; Ashton, Sung and Turbin, 2000; Hall and Soskice, 2001) or the origin and evolution of institutions for skill formation (e.g. Thelen, 2004; Busemeyer and Trampusch, 2012). Likewise, given the range of theoretical traditions underpinning the development of political economy approaches (Novelli *et al.*, 2014), studies within this approach may offer a broader perspective to understand the issues affecting skill formation and its outcomes than economic approaches.

Most research on what has been called 'the political economy of skills' has taken an institutional political economy approach. This approach explores how institutions influence individual behaviour and affect economic and political outcomes (Novelli *et al.*, 2014) and considers different variants or "schools of thought" (Hall and Taylor, 1996, p. 936).

For instance, Crouch, Finegold and Sako (1999) studied skill formation adopting a rational choice institutionalism approach to the comparative study of political economies. Rational choice institutionalism postulates that actors have a fixed set of preferences, emphasising the role of strategic interactions between rational actors (Hall and Taylor, 1996; Immergut, 1998). For rational choice institutionalists, institutions are defined as structures within which individual actors attempt to maximise their utility and influence their political choices (Kato, 1996; Immergut, 1998; Peters, 2016).

Hence, in line with this view, in their comparative study of the VET systems in France, Germany, Italy, Japan, Sweden, the UK, and the US, Crouch, Finegold and Sako (1999) studied how the different institutional forms taken by these countries affect actors' choices on skill formation. A relevant issue considered in this study is the concern within advanced industrial economies to develop a high-skilled workforce. Thus, these scholars analysed the assumptions and choices faced by the states, corporatist organisations (e.g. business associations), local agencies (e.g. local government, local networks), markets and corporate hierarchies as key actors for skill formation. The results suggest there has been a tendency within some countries to increasingly depend on the actions of private firms rather than public policy as a source of initiatives to raise skills. Accordingly, these scholars claim that a more active role of public agencies is needed to effectively address skill formation to maximise the role of high skills and work with firms to achieve this objective. Hence, it can be noticed that the proposal from these scholars contrasts with the one from neoclassical economists that suggest that market mechanisms are enough to coordinate skills formation effectively.

Similarly, Ashton, Sung and Turbin (2000) suggest that national skill formation systems can be understood by examining the relationships between four central actors (i.e. the state, the education and training system, employers and workers). They suggest that the state's role in regulating the relationship between capital (employers) and labour (workers) shapes the institutional relations that define the delivery of education and training. Moreover, these relationships would be affected by industrialisation over time, hence the dominant form of production. Based on the analysis of these relationships, Ashton, Sung and Turbin (2000) suggest four models of skills formation can be identified: the corporatist, the developmental, the market and the neo-market models.

In the *corporatist model* (e.g. Germany, Switzerland), the state regulates the relationships between actors, and there is an institutional structure coordinating the supply and demand of skills. As a result, this model leads to high value-added forms of production driving TVET. Alternatively, in the *developmental state model* (e.g. Singapore, Japan), the state plays a more significant role than the previous model in influencing and controlling other actors. Hence, in this model, the state has been able to push the economy from low to high value-added forms of production that impact the TVET system. In contrast, the private sector plays a key role in the *market* (e.g. in the UK, the USA) and *neo-market models* (e.g. Chile, Mexico), and the market coordinates the economic activities. As a result, these models tend to low value-added forms of production that affect the TVET system. Interestingly, as will

be seen in this section, this study is the only one that considers Latin American countries in the analysis. Hence, this study provides a typology that accounts for a broader range of contextual conditions than the other political economy studies reviewed in this section, mainly focused on advanced industrialised countries.

Also identifying a typology, Hal and Soskice (2001) work on the Varieties of Capitalism approach to the comparative study of political economies studied the strategic interaction between actors, such as individuals, firms and governments. However, their emphasis was on the role of the firms as a key actor within capitalist economies. Accordingly, for their analysis, these scholars compared a group of developed countries based on the presence of institutions that provide capacities or constraint cooperative behaviours between firms and other actors. As a result, Hall and Soskice (2001) identified two different types of economies. The first, Coordinated Market Economies (CMEs), where the relationships between actors are based on coordinated actions. The second, Liberal Market Economies (LMEs), which rely on market mechanisms to arrange the relationships between actors.

Skill formation was considered in their analysis because they regarded vocational training and education as one of the spheres in which firms should develop relationships with other actors to solve coordination problems central to their functioning. In this perspective, coordination issues on skill formation come from firms' problems to secure workers with the skills needed and the workers' problem of deciding how much to invest in skills. Hall and Soskice (2001) regarded firms as economic actors that avoid investing in training for their workers due to fear that other firms could poach their skilled workers. Likewise, individuals were also considered economic actors who would invest in those skills that could secure economic returns. Thus, in line with the understanding of actors and institutions from rational choice institutionalism, the skills developed through education and training result from the different institutions that affect these actors behaviour.

Hence, in countries classified as CMEs (e.g. Germany), institutions provide the conditions to generate and make extensive use of highly industry or firm-specific skills. On the other hand, in LMEs (e.g. the UK), institutions encourage the development of general skills that can be utilised in different firms and provide the conditions that make the demand of low-skills levels more viable (Hall and Soskice, 2001). Consequently, one of the critical differences in the outcomes between these two models of economies is the type of skills they produce (specific vs general).

Hall and Soskice's (2001) findings, notably the distinction between coordinated and liberal market economies, raised new questions about the origins and evolution of the different institutions that characterised these two types of economies. For instance, Thelen (2004) studied the institutions of skill formation in four developed industrial economies to understand their origins, what sustained them, and how they have changed over time. Unlike Hall and Soskice (2001), she adopted a historical institutional perspective to studying political economies. Historical institutionalism can be defined as “a research tradition that examines how temporal processes and events influence the origin and transformation of institutions that govern political and economic relations” (Fioretos, Falleti and Sheingate, 2016, p. 3). In this sense, historical institutionalists are interested in studying institutions’ emergence, maintenance, and adaptation (Sanders, 2006).

Accordingly, Thelen (2004) analysed and compared the origin of the institutions of skill formation in two countries identified as CMEs (Germany and Japan) and two countries identified as LMEs (Britain and the US). By drawing on the literature on the histories of unions, employer organisations and skills formation and primary data, her analysis suggests that the behaviour and strategies of leading firms in skill-intensive industries were the most decisive variable to the different trajectories of skill formation between these countries. This is because leading firms, particularly in large machine and metalworking industries in all countries, had the same interest and similar strategies concerning skill formation. Still, their trajectories diverged when firms adapted their strategies to respond to the different incentives and constraints they faced in each country (Thelen, 2004).

Moreover, this scholar developed a longitudinal analysis of the institutional evolution and change of the German skill formation system. The results showed that it was possible to find significant change to this system over time as a result of “significant continuities through historically "unsettled" times, and on-going contestation and renegotiation in "settled" periods” (Thelen, 2004, p. 292). Thus, Thelen (2004) concluded that contrary to what is believed about the changing effects of a crisis, institutional arrangements tend to be highly resilient in times of deep uncertainty. Accordingly, she suggests that to make sense of the current state of institutions is often necessary to examine a larger temporal framework that comprises the events and processes that shaped their development over time (Thelen, 2004).

Also, from a historical institutionalist perspective, but focusing on a more homogenous group of skill formation systems, Busemeyer and Trampusch (2012) developed collaborative work with several scholars to study collective skill formation systems. These systems are

characterised by their collective organisation of skill formation between firms, intermediary actors and the state in countries such as Germany, Austria, Switzerland, the Netherlands, and Denmark (Busemeyer and Trampusch, 2012). They explored the historical and political origins of these systems and how current challenges condition their change. Their analysis considers that conflict between firms and the state involvement in skills formation is at the centre of the political struggles over the change to VET systems.

One of the main insights from Busemeyer and Trampusch's (2012) work is identifying four political struggles between firms and state, related to who provides, who controls and who pays VET, and the links between VET and general education. While these struggles affect all skill formation systems (e.g. CMEs, LMEs), they are more relevant for collective systems because they involve continuous renegotiation between actors (Busemeyer and Trampusch, 2012). Hence, similar to the results of the historical analysis conducted by Thelen (2004) for the case of Germany, these scholars suggest that the survival of collective skills formation systems over time depends on the continuous political support to their institutional arrangements from relevant stakeholders. Likewise, this work raises questions about the features of these struggles in LMEs and if similar political support to market-based coordination arrangements could be found in these cases.

From a different perspective, and drawing on ideas from new institutionalism combined with economic sociology, Brown, Green and Lauder (2001) focus the analysis on the nation-state as a whole in their account for a “Political Economy of High Skills” (Brown, Green and Lauder, 2001, p. 29). Their approach to studying skill formation is based on the argument that “issues of skill formation and economic performance are socially constructed and experienced within social institutions such as schools, offices, or factories, that can be organised in different ways even if ‘capitalism’ is the overarching system of economic organisation” (Brown, Green and Lauder, 2001, p. 31). In this sense, these scholars reject HCT assumptions as they overlook the social dimension of skill formation and tend to look at skills as an attachment to the person who owns them.

In this line, their comparative study of the skill formation strategies and policies of Britain, Germany, Japan, Singapore, South Korea, and the US places attention to the social foundations of skills formation and the social goals they pursue. The analysis examines common “pressure points” (Brown, Green and Lauder, 2001, p. 54) that affect these countries' national skill formation systems. These pressure points converge around the impact of globalisation, the capacity for skills upgrading, opportunity and social inclusion,

and the changing models of the worker. The focus of the analysis is on the struggles between different types of actors (e.g. state, employers, trade unions, individuals) that, as a result, will define the skill formation policies in different countries. Moreover, a different aspect of this approach is the acknowledgement of globalisation as part of the pressure points. In contrast with the previous studies discussed, this approach considers the analysis of internal and external factors in the study of skill formation.

The results of Brown, Green and Lauder's (2001) study suggest that developed nations address skill formation in various ways due to their diverse historical, cultural, political and economic conditions. In this line, they argue that any study of skill formation must always consider examining these conditions. Likewise, they emphasise the vital role of the states in developing strategies for high skill formation given the relevance played by this particular actor in the variations of skill formation systems found within the countries studied.

More recently, some studies have adopted Cultural Political Economy, as developed by Jessop (2010), as an analytical framework for the analysis of skill formation and its outcomes (e.g. Zancajo and Valiente, 2018; Valiente, Lowden and Capsada-Munsech, 2020). This approach considers the interdependence and co-evolution of semiotic (i.e. ideas) and extra-semiotic (i.e. material) aspects for understanding social change (Jessop, 2010). Accordingly, similar to the institutional approaches discussed, these studies examine the influence of institutions (i.e. material factors) on the adoption of skills policies. However, they differ from these approaches by including the analysis of ideational factors from the actors involved. For this purpose, these studies have focused on single-country studies.

For instance, Zancajo and Valiente (2018) studied the change orientations of TVET policies in Chile between the years 2006 and 2018. The study results showed that two policy paradigms influenced policymakers developing TVET reforms during this time frame, HCT and the right to education. As a result, the country has seen broader participation of disadvantaged youth in tertiary education and increasing state involvement in the TVET system. However, policymakers have failed to problematise other domains, such as labour policies, that may account for the continuing inequalities affecting TVET students.

In a similar vein, Valiente, Lowden and Capsada-Munsech (2020) studied the explanatory mechanisms behind Life Long Learning (LLL) policy changes in Scotland between 2002 and 2014. The study results indicated that economic challenges posed by the global financial crisis acted as a facilitator to austerity actions in further education policies and the ideational tendency of policymakers to link LLL with skills for employment, as opposed to more

holistic learning goals. As a result, the interventions implemented by the government focused on fostering employability, mainly for vulnerable groups. Likewise, they discuss the governance changes carried out by the Scottish government to articulate these policy priorities based on new public management principles. Hence, this study has identified the main drivers for the policies studied and the governance technologies involved in the process of policy change.

Accordingly, the studies adopting a cultural political economy approach for studying skill formation have illustrated how the adoption of skills policies in a country may be affected by the interaction between economic, political and institutional conditions, global policy paradigms and local interpretations from the actors involved. In this sense, it seems an approach that synthesises some of the main features of the political economy approaches previously discussed by considering institutional material factors and ideational factors, either internal or external, in the study of skill formation.

To summarise, the studies previously discussed suggest that skill formation within a country is not just a matter of rational choices from individual actors, as the economic perspective suggests. Instead, it is affected by the social and institutional context of the political economies and the relationships between different actors (Brown, Green and Lauder, 2001; Hall and Soskice, 2001; Thelen, 2004). In this sense, this literature emphasises the political nature of skill formation processes, which is characterised by permanent tensions between actors (e.g. Brown, Green and Lauder, 2001; Busemeyer and Trampusch, 2012). Moreover, most literature on skill formation from a political economy perspective emphasises the divergent forms of skill formation in different countries. In this sense, some of the studies here reviewed present comparative studies leading to classifications proposals of skill formation systems. Differently, the comparative studies discussed in the following subsection are less focused on identifying classifications and seek to understand the drivers and processes explaining education policies. Thus, the following subsection reviews the literature on comparative education relevant to this study.

2.2.3 Comparative education approaches to skill formation

The third body of literature addressing skill formation relates to the field of comparative education. As defined by Phillips and Schweisfurth (2014, p. 23), research in this field entails "the study of any aspects of educational phenomena in two or more different national or regional settings in which attempts are made to draw conclusions from a systematic comparison of the phenomena in question". Accordingly, as this definition implies, the comparative element plays a key role and can be made at different levels. In this sense, single-country studies where comparisons are made at a particular level (e.g. regional, sectoral, school) are also considered within this field (Perry and Tor, 2008; Phillips and Schweisfurth, 2014).

Moreover, a central theme within comparative education is the study of policy transfer (Steiner-Khamsi, 2004; Phillips and Schweisfurth, 2014; Crossley, 2019). This phenomenon refers to the travelling of education policies, ideas, models, structures, strategies, practices or procedures from one place to another (Perry and Tor, 2008; Li and Pilz, 2021). Consequently, scholars in this field have developed different typologies, conceptual frameworks and analytical models for its study (Rappleye, 2006; Perry and Tor, 2008; Crossley, 2019).

An essential distinction for analysis refers to the type of transfer (Phillips and Ochs, 2004; Perry and Tor, 2008). For instance, Perry and Tor (2008) distinguish between *soft transfer* when there is a diffusion of ideas, concepts and discourse, *hard transfer* when policies are imposed, and *lesson-drawing* when policies are borrowed intentionally. Similarly, Phillips and Schweisfurth (2014) suggest that we can consider policy transfer as a continuum including various degrees from *imposed*, for instance, by a totalitarian rule, to *introduced through influence*, where there has been a general influence of ideas or methods. One degree within this continuum that has gained greater attention in the literature has been when a policy has been borrowed purposively (Steiner-Khamsi, 2004). Accordingly, the study of policy borrowing has been fertile on ideas and frameworks to study this process at the local level (e.g. Ochs and Phillips, 2002; Phillips and Ochs, 2003; Steiner-Khamsi, 2004, 2014; Rappleye, 2006).

For instance, Phillips and Ochs (2004) have developed an influential and oft-cited framework for analysing the policy borrowing process (Rappleye, 2006; Perry and Tor, 2008; Li and Pilz, 2021). This framework considers that the analysis of policy borrowing processes entails examining four stages. First, the stage of *cross-national attraction,* where

there are impulses and externalising potential elements. The impulses originate the preconditions for change and could range from internal dissatisfaction with the education system to political changes in the borrowing country. The externalising potential elements of the borrowed policy refer to a range of aspects that can be borrowed, such as the guiding principles, structures or techniques. Second, the *decision* stage refers to the type or category of decision-making involved in the process of policy borrowing. For instance, practical decision-making may involve assessments about the implementation feasibility of a policy. Differently, a quick-fix decision-making approach may be taken in times of urgent political necessity. Third, the *implementation* stage will be contingent on the context of the borrowing country and may entail support or resistance. Here the role of "significant actors" (Phillips and Ochs, 2004, p. 780) may be crucial in advancing change. Finally, the *indigenisation* or *internalisation* stage is when the policy becomes an element of the education system in the borrower country. Thus, it is possible to assess its effects on the system.

From a different perspective, Steiner-Khamsi (2004, 2014) suggests giving attention to the *politics of policy borrowing* by using the concept of externalisation (Schriewer, 1990) as an interpretative framework. Externalisation is when policymakers use references to international examples to justify educational reforms controversial in their local context (Steiner-Khamsi, 2004). This scholar argues that externalisation occurs specifically at moments of intensified policy conflict (Steiner-Khamsi, 2014). Thus, focusing on analysing local political tensions that account for the necessity to borrow from elsewhere allows understanding how external ideas are locally introduced to support local reforms (Steiner-Khamsi and Quist, 2000; Steiner-Khamsi, 2014). Likewise, this scholar argues that policymakers borrow education policies nearest to their political agendas for which they give local meaning to external policies (Steiner-Khamsi, 2014, 2016). In this line, giving attention to the politics of policy borrowing implies reviewing the lesson learned from elsewhere to uncover the political reasons behind the borrowing process (Steiner-Khamsi, 2006).

Moreover, it has been argued that policymakers are increasingly adopting educational ideas from elsewhere (Verger, 2014). In this line, scholars within comparative education are giving more attention to the phenomenon of global education policies that have been spreading internationally (Verger, Novelli and Kosar-Altinyelken, 2012; Mundy *et al.*, 2016b). These scholars argue that globalisation presents new challenges for analysing education policies by fostering further questions about the drivers of these policies (Verger, Novelli and Kosar-Altinyelken, 2012; Mundy *et al.*, 2016b).

In this regard, macro theoretical approaches, such as the World Society Theory and the Global Structured Agenda for Education, have had a strong influence on policy change analysis (Verger, 2012, 2014; Verger, Novelli and Kosar-Altinyelken, 2012). On the one hand, the World Society Theory (Meyer et al., 1997) is based on the assumption that the evolution and change of education systems result from governments' reactions to the international dissemination of values and ideas to demonstrate they are developing a modern state (Verger, 2014). On the other hand, the Global Structured Agenda for Education approach (Dale, 2000) stresses the key role of international organisations and their power in setting global agendas on education (Verger, 2014). Hence, these approaches share the emphasis on supranational forces that can affect national education policies (Dale, 2000). In this sense, they focus the analysis of policy change on the diffusion of ideas and agenda-setting (Verger, 2014).

In this line, some studies have researched the role of international organisations in the diffusion and convergence of global education policies (Verger, 2014). For instance, they discuss the influential role of organisations such as the World Bank (e.g. Mundy and Verger, 2015) and the Organisation for Economic Cooperation and Development (OECD) (e.g. Valiente, 2014) in the spread of global education policies and related policy discourses (Mundy *et al.*, 2016b). Additionally, some scholars have discussed the role of private actors such as think tanks, knowledge-brokers and consulting companies acting as policy entrepreneurs to drive education policy change (e.g. Ball, 2012; Olmedo and Grau, 2013; Junemann, Ball and Santori, 2016). In both cases, it has been argued that the adoption of education policies may be explained by persuasion dynamics, discursive selectivity and generation of meaning (Verger, 2014, 2016).

Differently, some scholars suggest conducting the study of global education policies from the perspective of local actors to understand why these ideas enter particular local contexts, focusing the analysis on the stage of policy adoption (e.g. Verger, Novelli and Kosar-Altinyelken, 2012; Verger, 2014, 2016). The study of policy adoption entails understanding "the processes, reasons and circumstances that explain how and why policymakers select and embrace global education policies" (Verger, 2014, p. 16). For this purpose, it is suggested that the analysis of policy adoption should give greater attention to the role of ideas and their interaction with material conditions at the local level in policy change (Verger, 2014, 2016).

Accordingly, the study of skills formation policies has drawn from the different perspectives within comparative education studies discussed above (Li and Pilz, 2021). Notably, the focus on the transfer of TVET policies is a central issue for research and international development debates (Gonon and Maurer, 2014; Li and Pilz, 2021). For instance, it has been recognised that international organisations, cooperation and donor agencies have played a key role in transferring specific TVET policies (Gonon and Maurer, 2014). In this line, some scholars have examined the influence of these organisations in global agendas for education and have taken a critical stance to discuss their impact on TVET policies in developing countries (e.g. Allais, 2012; McGrath, 2012; McGrath and Powell, 2016).

For example, McGrath (2012) argues there is a toolkit of TVET policies promoted by these agencies that have proliferated globally, among which are systemic governance reforms (sometimes sectoral), qualifications frameworks and quality assurance systems. Further, he claims that even when these tools have been implemented in several countries, there is insufficient evidence of their impact on economic competitiveness and social inclusion. Similarly, drawing from the example of South Africa, Allais (2012) adds that this toolkit has several problems, among which is the introduction of complex policies in the context of a small and weak TVET provision system. Indeed, her related work studying the implementation of qualifications frameworks (QFs) in sixteen countries suggests that one of the main problems in borrowing this policy is the lack of consideration of the different contextual conditions between the lending and borrowing countries (Allais, 2010, 2011).

In the same vein, one of the main focuses of debate in comparative education, particularly TVET policies, refers to the difficulty of directly transferring TVET policies from one place to another (Gonon and Maurer, 2014). Some scholars have stressed the vital consideration of the borrowing country's different contextual circumstances and needs when assessing the transfer of a TVET policy (e.g. Gonon, 2014; Pilz, 2017). From a different perspective, other scholars have emphasised a policy learning approach where local actors are highly involved in recontextualising the borrowed policy to local needs. This approach entails strengthening national policymakers' capacities to drive the design and implementation of TVET policies (e.g. Chakroun, 2010; McGrath and Lugg, 2012; López-Guereñu, 2018).

Finally, most studies on the policy transfer of TVET policies have focused on two particular policies, dual vocational training models and qualifications frameworks (QFs) (Li and Pilz, 2021). In both cases, some studies have highlighted the challenges of involving

several stakeholders relevant for TVET when introducing these policies. For instance, Valiente and Scandurra (2017) found that the main challenges to implementing dual apprenticeships in OECD countries relate to making apprenticeships attractive to employers and students. Similarly, Maurer (2014) studied the implementation of a national qualifications framework (NQF) in the garment industry in Sri Lanka. His study suggests that one of the main barriers to implementing the NQF is the lack of interest from employers in providing training and from employees in obtaining certifications. Similarly, Allais (2010) found that some of the implementation problems of qualifications frameworks in the countries studied relate to the difficulty to involve industry stakeholders and developing social dialogue. In this regard, she suggests that sectoral approaches could be more feasible to foster this involvement.

Taken together, the literature on comparative education has been interested in understanding the drivers of policy change in different contexts. Notably, policy transfer, particularly policy borrowing processes, has had a significant interest in the field. Thus, providing some models and explanations to understand why local policymakers adopt some particular education and training policies.

To sum up, this section has reviewed the literature addressing skill formation from three main approaches, economic, political economy and comparative education. As noted, these approaches present different theoretical perspectives for the study of skill formation. Economic approaches consider skills as an economic resource (Bryson, 2017). Thus, studies from this perspective focus on estimating the economic returns of education and training (Carneiro, Dearden and Vignoles, 2010). In contrast, political economy approaches go beyond this narrow economic view of skills to study skill formation (Bryson, 2017). Studies within this approach consider the interactions between different actors, the institutional, political and historical context, and the relationship between skill formation and other institutional domains. As a result, comparative studies from a political economy approach have identified different types of skill formation regimes and seek to understand the reasons for these differences (e.g. Ashton, Sung and Turbin, 2000; Thelen, 2004). This perspective contrasts with some influential theories within the comparative education field that highlight the convergence among countries adopting similar education and training policies (e.g. Meyer *et al.*, 1997; Dale, 2000). Likewise, these two last approaches differ on their main focus of analysis concerning skill formation. Political economy studies have focused on understanding the internal features of skills formation systems or regimes. In contrast, comparative education studies have centred on understanding what drives education and

training policies in different contexts (Mundy *et al.*, 2016a). In this line, some comparative education studies have emphasised looking at the role of external forces or influences to understand the local adoption of specific policies or policy ideas.

Notably, for TVET, it has been argued that a toolkit of policies has been promoted and adopted worldwide (McGrath, 2012; Gonon and Maurer, 2014). One of the policies within this toolkit is the adoption of sectoral governance initiatives such as sector skills bodies. Accordingly, the following section discusses the literature addressing this policy.

2.3 Literature on Sector Skills Bodies

Sector skills bodies are one type of TVET policy associated with sectoral governance strategies to TVET (Raddon and Sung, 2006; Moon, Ryu and Park, 2021). Accordingly, they can be understood as permanent working structures comprised by different stakeholders but necessarily involving employers, which aim to identify and analyse skills needs within a sector and work in developing actions to foster skills development that meet sector needs (Lempinen, 2013; ETF, 2015; Powell, 2016; Wilson, Tarjáni and Rihova, 2016).

The most common name given to these bodies is Sector Skills Councils (SSCs). However, these organisations have various names across different countries (Sung, 2010; ETF, 2015). For instance, they have been named Industry Skills Councils (ISCs) in Australia and South Korea, Industry Training Organisations (ITOs) in New Zealand, Knowledge Centres (or *Kenniscentra*) in The Netherlands, and Sector Education and Training Authorities (SETAs) in South Africa.

Several countries have adopted these bodies as part of their skill formation systems (Wilson, Tarjáni and Rihova, 2016). However, little has been written about them within the academic literature on skill formation (Sung, 2008; Kraak, 2013). The scarce academic literature addressing sector skills bodies has been developed by Johnny Sung and colleagues who have conducted comparative studies to understand how these bodies engage employers in skill formation in different countries (e.g. Raddon and Sung, 2006; Sung, 2008, 2010). Also, an additional group of studies focused on single-country cases to assess these bodies' role, functions, and outcomes (e.g. Turner *et al.*, 2013; Petersen *et al.*, 2016; Moon, Ryu and Jeon, 2019).

In contrast, grey literature has been more active in addressing sector skills bodies. Many reports, policy briefs, and guides have provided detailed information about the implementation of these bodies in different countries. For instance, reports commissioned by government agencies review international examples of these bodies to draw lessons from

different contexts (e.g. Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013). Moreover, international organisations such as the International Labour Organization (ILO) and the European Training Foundation (ETF) have developed different documents with recommendations for implementing or improving these bodies (e.g. ILO, 2014a; ETF, 2015; Enabel and British Council, 2020).

Accordingly, this section discusses the existing literature on sector skills bodies from academic and non-academic sources for two reasons. First, it was considered necessary to understand what is known about these bodies from all sources available. Second, as a type of TVET policy, sectoral governance initiatives such as sectoral bodies have been widely promoted by international organisations and cooperation agencies (McGrath, 2012). Hence, it was considered essential to understanding the ideas associated with these bodies promoted by these organisations.

2.3.1 Academic studies on sector skills bodies

The academic literature explicitly addressing sectoral bodies for skills development is slightly dated, with most studies conducted around ten years ago (e.g. Payne, 2008; Sung, 2008; Turner *et al.*, 2013). Only more recently, studies from the Korean (e.g. Moon, Ryu and Jeon, 2019; Moon, Ryu and Park, 2021) and South African (e.g. Petersen *et al.*, 2016; Kraak, 2019) contexts have emerged, possibly as a result of recent implementation or evaluations of sectoral bodies in these countries.

Thus, the available literature can be divided into two groups. First, a group of studies focused on employer engagement through SSCs, mainly in the UK context. These studies consider the diverse contextual conditions where sector skills bodies have been adopted to analyse employer engagement. Hence, they tend to adopt a political economy approach to understand skill formation. Second, a group of studies analysing sectoral bodies' roles, functions, and outcomes in different contexts. These studies draw from different bodies of literature (e.g. innovation studies, organisation studies). The following paragraphs discuss these studies separated according to these two groups.

The employer engagement focus

Some of the few studies within the academic literature addressing sector skills bodies have come from scholars focused on examining employer engagement in skill formation (e.g. Raddon and Sung, 2006; Lloyd, 2008; Payne, 2008; Sung, 2010). These studies entail comparative studies between different countries or single-country studies to assess how

different models of sector skills policies, including the implementation of these bodies, relate to different outcomes in terms of employer engagement.

In particular, the work of Raddon and Sung (2006) is worth mention in detail because this study has provided initial insights about sector skills bodies as a TVET policy (Kraak, 2013; Powell, 2016). These scholars studied the way employers have been involved in sectoral skill formation in eight countries. As a result, they identified four models of employer engagement in sectoral skill development, namely employer-involved, employer-owned, employer-modelled and employer-driven. These models differ in at least two aspects: how the sectoral approach and the national skill system are related and what employers have been asked to do.

For instance, the *employer-involved model* is characterised by a government implementation of a sectoral approach to skills development as part of a national strategy where employers engage in skill formation voluntarily or statutorily. This model is divided into two variants. First is a *voluntary* model where employers are expected to voluntarily engage in skills policies through consultation (e.g. the UK). Second is a *statutory* model where employers must engage by investing in training and skills through a statutory levy (e.g. South Africa).

A contrasting approach identified is an *employer-owned model* in which employers are the main actors driving and financing skill development within a sector through a sectoral body. This approach is not part of a national system, and there is little state intervention. This is the case of Hong Kong, where a few Industry Training Associations (sector skills bodies) created due to past government initiatives remain in place. These bodies are managed by employers associations with the central focus of meeting employers' demands. Raddon and Sung (2006) argue that this case is rare and only feasible under particular conditions, such as the strong link between these bodies and their employers' associations and the capacity to establish a statutory levy to fund them.

Similarly, Raddon and Sung's (2006) findings in Singapore lead them to identify an *employer-modelled approach* in which employers in some sectors are engaged in skill formation as part of a government-led initiative. This sectoral approach is based on a best practice model. Leading employers within a sector provide guidelines on how they provide on-the-job training that other organisations can use within the industry.

Finally, Raddon and Sung (2006) identified an *employer-driven approach*. This model is characterised by the engagement of employers in sectoral skills development underpinned

by the national model of the VET system predominant in the country and comprises two variants. First, an *employer-driven public VET* noticed in The Netherlands, where employers drive the public VET system as part of a national system of sectoral bodies. These bodies work with sectoral employers to identify their skill needs and then pass this information to the public VET education system to design vocational study programmes. Moreover, employers participate in skills development as training providers for a work-based pathway within vocational programmes. Second, an *employer-driven partnership VET,* which is found in some sectors in the USA. This model is not part of a national system and is based on localised initiatives in which employers develop partnerships with other stakeholders (e.g. colleges, job centres) to tackle skills issues identified within the industry.

The models identified by Raddon and Sung (2006) suggest that sector skills bodies may take diverse forms and respond to different objectives set within their national contexts. Moreover, as they argue, the development of these bodies is embedded in particular contexts, making it difficult to transfer a model from one country to another with similar outcomes.

Despite the above, further studies conducted by Sung (2008, 2010) explored the conditions within some of these countries that may account for greater employer engagement in skills policies through sectoral bodies. Contrasting the adoption of SSCs in the UK with similar processes in New Zealand and The Netherlands, he suggests that just creating sector skills bodies to involve employers in skills policies does not ensure employer engagement. Instead, these bodies should be part of a well-integrated skill formation system that makes sense to employers and foster their involvement and contribution to education and training.

For instance, drawing on the comparison between the UK and New Zealand, Sung (2008) found that the design approach of the policy reform involving sectoral bodies may account for the different outcomes of these bodies concerning employer engagement. While in the UK, sectoral bodies were added to existing institutions, in New Zealand, these bodies were part of a full reform to the skill formation system. Thus, in New Zealand, sector skills bodies were given a clear role in the system and enough influencing power and resources to work with employers.

Similarly, in a further study comparing the UK with The Netherlands, Sung (2010) identified additional conditions that may account for effective employer engagement through a sectoral approach to skills development. He departed from the notion that The Netherlands can be considered a successful case in this regard, and the analysis focused on how the government conducted reforms to the TVET system. As a result, he found that the Dutch

approach where areas such as the qualifications, leadership, funding and incentives structures are linked to the functioning and role of sectoral bodies might account for a greater engagement of employers in the skill formation system. Thus, Sung (2010) concluded that comprehensive reforms to the TVET system are needed to ensure that sector skills bodies can influence employers to get involved in skills development.

From a micro perspective, Payne (2008) studied SSCs in the UK by interviewing executives within these bodies to explore their challenges to engage employers. As a result, he found that one of the main difficulties for SSCs is involving small and medium-sized enterprises (SMEs) in skills policies, which may affect the representativeness of the information about skills demands obtained through these bodies. Also, in line with previous studies discussed, Payne's (2008) findings suggest that policy design issues affect UK's SSCs. In particular, the funding structure and allocation of resources appears inadequate for supporting these bodies to engage employers. Finally, the findings from this study also allude to political issues affecting SSCs. In particular, tensions among the interests and priorities of employers and the state concerning skill formation targets were a worry for SSCs' executives. Notably, this study opens some questions about the extent to which sectoral bodies adopted as a government initiative can be employer-led.

In the same vein, Lloyd (2008) explored the challenges of setting an employer-led skills system through SSCs in the UK. This study considers employers' perspectives and explores to what extent their skills needs are captured and represented by the SSCs. For this purpose, she focused on investigating the recruitment practices in the UK fitness sector through interviews with the professionals involved in these practices. The findings of this study suggest that it is difficult for SSCs to identify sectoral skills needs when these are diverse among employers. Moreover, signs of a qualifications oversupply in this sector suggest questioning the emphasis of some employers, and their SSC, on increasing public spending in education and training for the sector. This is because, as Lloyd (2008) argues, the low levels of pay and high turnover observed in the industry may indicate possible detrimental effects of skill oversupply. This situation opens some relevant questions about the overemphasis of these bodies on identifying employers skills needs to affect skills supply. Likewise, it presents an interesting angle for studying sector skills bodies by considering the voice of those expected to enact this policy in their daily practices.

Overall, it can be noticed that all studies discussed in this subsection aim to assess sector skills bodies capacity to engage employers in skill formation. Possibly, this is because all

the studies have considered the UK context where the government policy rhetoric has stressed the importance of employer engagement and the development of an employer-led system (Payne, 2008; Ertl and Stasz, 2010; Keep, 2015). Differently, the literature on sector skills bodies examining other countries has considered an evaluative focus concerning different issues. The following paragraphs discuss these studies.

A focus on assessment: role, functioning and outcomes

The second group of academic studies addressing sector skills bodies entails research focused on evaluating these bodies' role, functioning and outcomes. Notably, these studies conceive sector skills bodies as government policies that can be assessed from different perspectives.

For instance, Turner *et al.'s* (2013) study about the South African SETAs (sector skills bodies) aimed to assess their efficiency in using funds assigned to carry out their role in skill formation. Based on an analysis of SETAs' documents, this study's findings showed that some SETAs were inefficient in using funds to achieve their skills development targets. Moreover, most of these bodies (18 out of 21) accumulated cash reserves that could have been used for training or other skills development activities.

Also, in the South African context, some studies have focused on examining diverse aspects of management practices and professionals working within the sectoral bodies. For instance, some of these studies have involved assessments of the professionalism of their boards (e.g. Scott and Shuttleworth, 2007). Others have examined definitions of key management practices to improve their functioning (e.g. Pelser, Kriegler and Prinsloo, 2014), and others have examined work-related well-being issues among sectoral bodies employees (e.g. Rothmann and Pieterse, 2007). All these studies suggest some actions to improve the functioning of these bodies as public services and government entities (e.g. organisational development interventions, organisational redesigns). Thus, little focus is explicitly made on their role in the skill formation system. However, these studies provide an account of the different challenges and possible issues that affect the operation of state-led sector skills bodies.

In a similar vein, Moon, Ryu and Jeon's (2019) study of the Korean Industry Skills Councils evaluated the training received by the staff working within these bodies. This study focuses on the implications for training practices in public sector organisations and learning transfer in particular. However, the article offers new insights about the Korean approach for adopting these types of bodies. For instance, it shows the strong focus on building internal

technical capacity among Industry Skills Councils' staff to perform their roles, emphasising their ability to develop labour market intelligence and forecast future skills needs. Thus, this case illustrates the importance given by the government to Industry Skills Councils in producing data to inform the supply of skills.

Differently, the studies of Petersen *et al.* (2016) and Kraak (2019) focus on issues related to the role of sector skills bodies in skill formation. In this line, Petersen *et al.* (2016) focused on three South African sectors to examine the role of intermediaries to facilitate the coordination between actors involved in the demand-side and supply-side of skills. Drawing on the literature of innovation studies, they explored the different roles performed by the various public, private and public-private organisations that in some way acted as intermediaries in skill development. Concerning sector skills bodies (the SETAs), the study results suggest that these organisations could improve their capabilities to play a brokering role between actors since they are the organisations best suited to fulfil this role compared with private and public-private organisations.

Similarly, after a qualitative study involving key stakeholders in the skills system, Kraak (2019) proposes a reviewed role for the SETAs as strategic intermediaries. Moreover, the study points out the limitations of these bodies to perform an intermediation role when traditionally they have been focused on compliance with government regulations, notably in administering a training levy. In this sense, this study provides evidence of the challenges sector skills bodies face when they manage public training funds.

From a similar perspective, Sung and Ashton (2015) reviewed the role of sectoral bodies in sectoral skill formation policies drawing from theories about the acquisition and utilisation of skills within the firm and different case studies. Accordingly, they propose that sectoral bodies move away from just an advisory role about training and qualification—like the ones found in the UK and Canada—and consider a strategic role within the sector. For this role, they suggest sectoral bodies should have the capability to influence firms to promote high-skilled business models and improve their value chain. In this sense, these bodies should be resourced with knowledge about different aspects of the business operation to develop comprehensive plans for change. Thus, Sung and Ashton's (2015) account focuses on proposing an ideal model of sector skills bodies and skills policies aimed to address the demand for skills, rather than just focusing on influencing the supply.

Finally, a recent study from Moon, Ryu and Park (2021) presents the emergence of Industry Skills Councils in Korea by describing how the skills development policy has

shifted from focusing on the national level to a sectoral one. The article details that these bodies emerged in 2015 as a government initiative to identify skills needs and modernise the VET system motivated by the challenge of connecting the education system with the labour market. In this sense, it is argued that Korea is trying to move the skill formation system towards a more coordinated system where Industry Skills Councils play a crucial role as an intermediary body. For this objective, Industry Skills Councils engage multiple stakeholders, have a critical role in skills identification, and develop competency standards, sectoral standardised skill sets and development programs (e.g. dual apprenticeship). Moreover, their role, functions and the funding to perform them are established by law, giving them necessary legal support. However, the outcomes in the labour market are still yet to be seen. Accordingly, this last article provides new insights about one recent government adoption of sectoral bodies in an industrialised country. Moreover, it shows a new aspect of interest in studying these bodies, namely the emergence of sector skills bodies in new adopter countries. By doing so, this study suggests a perspective that could gain further attention, particularly considering that other countries have adopted these bodies as part of current changes to their TVET policies (e.g. GSDI, 2019).

2.3.2 Grey literature on sector skills bodies

In addition to the academic literature on sector skills bodies, many reports have provided detailed information about this particular policy. This body of grey literature can be divided into two main groups. First, one group of reports that government agencies commissioned to draw lessons from other contexts. Second, a group of documents developed by international organisations and cooperation agencies with a similar aim but notably with a policy diffusion tone to encourage the adoption of these bodies. The following paragraphs discuss these two groups of reports separately.

Lessons learning reports

Notably, the most detailed information about the functioning of sector skills bodies comes from reports developed by academics commissioned by governments or other agencies (e.g. Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013; Powell, 2016). These studies comprise literature reviews or comparative examinations of countries that have implemented sectoral bodies or some form of a sectoral approach to skills development. The main aim of these reports is to draw lessons from the experience of other countries to inform the adoption of sectoral bodies or changes to existing ones in their specific countries (Sung, Raddon and Ashton, 2006; Kraak, 2013; Powell, 2016).

These studies focus on examining different countries of interest for the report's aim. However, all of them consider at least one Anglo-Saxon case for discussion, given the association of these countries with the adoption of sector skills bodies (Kraak, 2013). Moreover, it is possible to note that these reports tend to draw from the previous ones. Nevertheless, a few studies involved primary data collection from interviews and consultations with key informants in the different countries (e.g. Sung, Raddon and Ashton, 2006; Powell, 2016). Accordingly, many common issues and lessons related to sector skills bodies are highlighted in these reports.

The first common issue is the association of sector skills bodies and sectoral skills policy reforms with the emergent need for demand-side interventions. Several reasons have been found for this shift. For instance, high levels of unemployment, low skills and low productivity have led policymakers to recognise the failure of supply-side policies (Kraak, 2013; Powell, 2016). Additionally, in some countries, ensuring that TVET meets employers' needs and that employers provide training and raise skills levels has increased its importance (Sung, Raddon and Ashton, 2006; The Research Base, 2013). Accordingly, Kraak (2013) states that interventions focused on the demand side are different from those commonly associated with supply-side ones and can be better implemented at local and regional levels. Moreover, as he argues, skill development focused on addressing the demand side should work on learning within the firm and how employers utilise and further develop skills in the workplace, which may need a sectoral approach.

Likewise, the second shared issue highlighted in these reports relates to employer engagement. It is mentioned that the literature on sectoral bodies highlights that these bodies' success is determined mainly by employer engagement with the skills system (Kraak, 2013; Powell, 2016). Further, some reports suggest that lack of employer commitment can be detrimental to sectoral bodies by diminishing their legitimacy and effectiveness (e.g. Powell, 2016). Accordingly, these reports provide suggestions to achieve employer engagement in skills development through sectoral bodies. The most common one is using financial incentives (Sung, Raddon and Ashton, 2006; The Research Base, 2013; Powell, 2016).

However, based on the review of case studies, these reports warn that financial incentives on their own are not sufficient to engage employers (Sung, Raddon and Ashton, 2006; The Research Base, 2013; Powell, 2016). Thus, what is needed is to give employers a role within the skills system to drive practices and impact skills development (Powell, 2016). Still, it is

warned that greater employer engagement should be balanced by incorporating the view of different stakeholders.

Indeed, this last point touch upon one of the main lessons drawn from the cases reviewed among these reports, which refers to the involvement of multiple stakeholders that sectoral bodies should consider. For instance, Kraak (2013) suggests that an effective sectoral bodies system is hardly achieved if there is not some form of collaboration between employers, trade unions, and government. Sung, Raddon and Ashton (2006) concur with this view and assert that involving different stakeholders is a significant challenge for sectoral bodies in the skill formation systems studied. Moreover, they suggest that this issue is not a matter of who but how and what strategies can be more effective to involve different stakeholders.

A further common lesson in the reviewed reports refers to the thoughtful integration of sector skills bodies with the TVET system. This lesson emphasises that sector skills bodies are only one part of broader skill formation systems. As such, they should work in conjunction with the other parts of the system, such as the qualifications framework and the funding mechanisms (Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013; Powell, 2016). Further, it is suggested that it is essential that sectoral bodies should have a clear role within the system. Moreover, governments should avoid establishing conflicting agencies and duplication of functions (Sung, Raddon and Ashton, 2006; The Research Base, 2013; Powell, 2016).

Further, Powell (2016) stresses that sectoral bodies' success depends on their interaction with other relevant structures, particularly those linked with economic development. In this regard, Kraak (2013) argues that this integration seems complicated in some countries because of the silo management of skills and economic policies among different ministries and government agencies. Thus, the role given to sectoral bodies and their level of influence on skill formation will depend on how they are embedded in their particular national skill formation systems and broader institutional structures (Sung, Raddon and Ashton, 2006; Powell, 2016).

Likewise, the internal capacity of sector skills bodies to perform their expected role and functions is a common factor emphasised concerning their effectiveness. For example, one of the main functions of sectoral bodies relates to identifying skills needs and developing labour market intelligence (Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013; Powell, 2016). In this regard, an essential condition for sectoral bodies, and particularly their staff, relates to the knowledge and expertise to gather and analyse relevant

information to develop sectoral labour market intelligence studies (Sung, Raddon and Ashton, 2006; Kraak, 2013; Powell, 2016). Similarly, it is emphasised the need for staff with sufficient sectoral knowledge. For instance, Powell (2016) claims that sectoral bodies should be managed by teams with theoretical and practical experience in the sector or industry and not exclusively by civil servants.

In this line, it is noticed that sectoral bodies may be required to perform a broad set of functions, such as: to develop research on skills needs (e.g. identifying skills gaps), to perform guidance activities (e.g. developing occupational standards), to act as certification or accreditation agency (e.g. accrediting qualifications standards) and to oversee funding systems (e.g. managing training levy) (The Research Base, 2013). Hence, sector skills bodies need to be well resourced and funded to perform all these functions (Kraak, 2013; The Research Base, 2013; Powell, 2016).

As mentioned, all these lessons come from the analysis of country cases with sectoral bodies in place. Thus, these reports provide detailed information about the cases studied. The most common countries reviewed are Australia, Canada, New Zealand, The Netherlands, South Africa and the UK. As a result, discussions revolve around specific issues that can be learned from the experience of different cases.

For instance, it is acknowledged that the case of sectoral bodies in the UK provides important lessons about the problems associated with state-driven and supply-based interventions. One of the main criticisms of the UK system is that sectoral bodies are not really employer-led, despite their rhetoric towards the contrary (Kraak, 2013; The Research Base, 2013; Powell, 2016). It is argued that these bodies struggled to gain employers commitment and buy-in with skills development due to a skills system that imposes targets defined by the state and civil servants (Kraak, 2013; Powell, 2016). Thus, the UK system is identified as a supply-driven approach to skills development where skills objectives come from the central state rather than from the actual needs of the demand-side (Powell, 2016).

Conversely, in New Zealand, Industry Training Organisations are primary industry-led. They are established by the industry and recognised and funded by the government (The Research Base, 2013). These sectoral bodies focus on setting industry skills standards, providing training places and labour market intelligence, and ensuring that TVET provision meets industry needs (The Research Base, 2013). Thus, the Industry Training Organisations have been created to meet industry needs and increase training levels (Sung, Raddon and Ashton, 2006). In this regard, Sung, Raddon and Ashton (2006) suggest that a challenge for

this system relates to linking the work of sectoral bodies with broader developmental objectives and government agencies in charge of productivity, innovation and skills.

Similarly, The Netherlands system of sectoral bodies is considered an example of effective employer engagement in skill formation (Sung, Raddon and Ashton, 2006; Kraak, 2013). Employers and other stakeholders are involved in the sectoral bodies (Knowledge Centres) by developing qualifications that respond to the specific needs of each sector. Also, employers deliver training by offering work placements overseen by these bodies (Kraak, 2013; The Research Base, 2013). Therefore, it has been argued that the system's success to engage employers is due to the good complementarity and reinforcement of each part of the skill formation system, including sectoral bodies that are well-funded and have a clear role (Sung, Raddon and Ashton, 2006). Accordingly, this case is presented as an example of best practice when implementing a sectoral approach to skills development (e.g. Kraak, 2013).

However, it is recognised that it may be challenging to implement the sectoral approach of The Netherlands elsewhere given the supporting role of the traditional social partnership conditions of the country (Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013). Moreover, the emphasis given to the definition of qualifications by employers has not been exempt from challenges. This is because the high number of specific qualifications defined by sectoral bodies have been questioned regarding broader employability opportunities for youths (Sung, Raddon and Ashton, 2006; The Research Base, 2013). Accordingly, plans were made by the government to reduce the number of qualifications with the focus on developing transferable skills that can be used in different sectors, a decision that may oppose employers preferences for more specific skills sets (Sung, Raddon and Ashton, 2006).

Differently, the case of Australia is discussed as an example of sectoral bodies that have been successful in involving different stakeholders, including employers, in these bodies' boards (The Research Base, 2013; Powell, 2016). This is because Australian Industry Skills Councils are not exclusively focused on representing the voice of employers. Instead, they aim to represent the interests of all stakeholders involved within an industry (The Research Base, 2013). Additionally, one of these bodies' main recognised strengths is their ability to develop training packages based on continuous consultation with stakeholders and updated to be responsive to the needs of their industries. These training packages are bundles of competency standards, qualifications, and assessment guides that TVET providers can use

to offer training according to industry requirements (The Research Base, 2013; Powell, 2016).

Additionally, the Australian case illustrates the difficulties faced by these bodies in a two-tier system of governance, particularly concerning definitions made by different local authorities (Powell, 2016). This is an issue shared with the Canadian Sector Councils, which operate in a two-tier system (federal and regional). It has been argued that sectoral bodies in Canada have been challenged by the development and operational strategies defined at the national level and their applicability at the regional level (Powell, 2016). Moreover, similarly to the case of the UK, these sectoral bodies have been criticised for being quasi-governmental organisations with federal civil servants establishing definitions (The Research Base, 2013). Thus, better links and coordination with stakeholders at the regional and local levels has been suggested as a necessary improvement to the system (Sung, Raddon and Ashton, 2006; The Research Base, 2013).

Finally, the South African case has been discussed as an example of the combination of adopting a sectoral approach based on the creation of sectoral bodies (SETAs) with a national levy (Sung, Raddon and Ashton, 2006). Among many other functions, the SETAs are responsible for managing levy funds, identifying sector skills needs and developing skills plans, and developing learnerships for their sectors (Sung, Raddon and Ashton, 2006; The Research Base, 2013). However, the SETAs have been criticised for their lack of capacity to perform these functions (The Research Base, 2013; Powell, 2016). Some reasons for these problems discussed refers to the high number of objectives assigned to these bodies (The Research Base, 2013; Powell, 2016) and a focus on compliance of operational targets instead on a real impact on skills development (Kraak, 2013; The Research Base, 2013). Moreover, the management of the levy funds by the SETAs has been criticised by the lack of accountability and ineffective use (Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013). In this sense, the case of South Africa has been used to draw some lessons about the potential problems faced by sectoral bodies in the administration of funds for training.

The reports reviewed in this subsection have focused on drawing lessons from analysing country cases that have implemented sectoral bodies. Accordingly, common lessons from the UK, Canada and Australia relate to the contrast between the broader mandate of sectoral bodies and their funding (Powell, 2016). Thus, the reports have discussed the importance of

having sectoral bodies that are well-resourced and funded, have a clear role, and are well-integrated with the rest of the TVET systems.

Inversely, it has been argued that the implementation of sectoral bodies in New Zealand and The Netherlands show how to effectively engage employers and enhance cooperation between actors (Sung, Raddon and Ashton, 2006; Kraak, 2013; The Research Base, 2013). However, the experience of these countries suggests the difficulties and challenges for governments related to trying to balance the desire of having industry and employer-led bodies and supporting broader government aims (Sung, Raddon and Ashton, 2006). The following subsection also discusses some of these issues from the perspective of international organisations.

Dissemination by International Organisations

There is a significant amount of reports, policy briefs, fact sheets and presentations from international organisations addressing sector skills bodies (e.g. ETF, 2014, 2015; ILO, 2014b, 2014a; Gasskov, 2018; West, 2019; Comyn, 2020). These documents argue that an increasing number of countries have adopted sectoral bodies or some form of a sectoral element to enhance their skill formation system (Lempinen, 2013; ETF, 2015; Wilson, Tarjáni and Rihova, 2016). Accordingly, they are focused on discussing recommendations for adopting or improving these bodies in specific countries, which entail several ideas underpinning these recommendations. These ideas are discussed in the following section.

In particular, the review will be centred on four selected documents directed to a broader audience and elaborated by international organisations and cooperation agencies (i.e. Lempinen, 2013; ETF, 2015; Wilson, Tarjáni and Rihova, 2016; Enabel and British Council, 2020). However, references to other documents oriented to specific country audiences developed by these organisations will be made when appropriate. Hence, the following paragraphs discuss the main ideas diffused by international organisations concerning the drivers for adopting sectoral bodies, the roles of different actors, and these bodies' functions.

Drivers for adoption: skills for employment and positive socio-economic outcomes of skills policies.

One of the main ideas underpinning the need for sectoral bodies to address skill development relates to the relationship between skills and employment, and thus on the role of TVET to ensure that skill development is relevant to the needs of the labour market. In this line, the aim of TVET systems to prepare people for employment is mentioned as an undisputable

given that can be noted in phrases such as "one key goal of any education and training system is to train employable graduates" (Lempinen, 2013, p. 5). Thus, under this consideration, sectoral bodies are presented as a policy to develop bridges or methods of coordination between education and training systems and the labour market (Lempinen, 2013; ETF, 2015; Wilson, Tarjáni and Rihova, 2016; Enabel and British Council, 2020).

Moreover, given the challenges posed by the rapidly changing skills needs in the labour market, sectoral bodies are presented as signs of modern policy reforms to TVET systems to address these challenges (ILO, 2014a). For instance, in the report by Enabel and British Council (2020, p. 5), it is suggested that "a major goal of TVET modernisation is to move from an emphasis on supply to demand, requiring education and training provision to meet the needs of the labour market" for which sectoral bodies can serve as a valuable policy. Interestingly, although an emphasis on the demand is mentioned, this perspective shows a persisting skills supply orthodoxy (Hodgson *et al.*, 2019) underpinning this policy.

At the same time, it can be noticed that it is argued that the adoption of reforms to skills policies, among which are sectoral bodies, are associated with broader beneficial outcomes of social and economic nature. In this line, it is maintained that governments adopt skills policies as part of their strategies to achieve economic development and social inclusion goals (Wilson, Tarjáni and Rihova, 2016). Thus, besides employability, other common words used to promote the implementation of TVET policies involving sector skills bodies are productivity, competitiveness, efficiency, reduced skills gaps and shortages, social mobility, equity and job quality (Lempinen, 2013; ETF, 2015; Wilson, Tarjáni and Rihova, 2016; Enabel and British Council, 2020).

Role of actors: employers as the key actors and social partnership

Having established why adopting sector skills bodies may be desirable, a central idea presented in these reports concerns employers' role in the TVET system, particularly in sector skills bodies. Thus, employers' involvement, commitment, support or engagement is notoriously associated with these bodies and established as a condition for their success (Lempinen, 2013; Wilson, Tarjáni and Rihova, 2016; Enabel and British Council, 2020). A common argument is that employers are the stakeholders who best know what is needed in the workplace, and thus they can provide valid information to inform the TVET system (West, 2019). Further, they also have a recognised role in delivering training in the workplace that sectoral bodies are expected to enhance (Lempinen, 2013; Wilson, Tarjáni and Rihova, 2016; Enabel and British Council, 2020).

In this regard, all these reports suggest the need for greater engagement of employers with sectoral bodies and, where possible, perform a leading role. However, some differences can be noticed in the emphasis on the expected employer leadership within these bodies. For instance, the report developed by Enabel and British Council (2020) devotes a whole section to employer engagement. Moreover, it emphasises that the central role of sectoral bodies is to be the voice of employers. Further, it is recommended that these bodies should be run by employers and supported by other stakeholders.

From a different perspective, the documents developed by or with the European Training Foundation (ETF) participation concur with the vital role of employers in sectoral bodies but conceive these bodies as platforms for cooperation and dialogue about skill development between different stakeholders. Thus, sectoral bodies should consider the participation, voice and interests of additional actors, including workers, government and TVET providers (e.g. Lempinen, 2013; ETF, 2015). Similarly, underpinned by their advocacy for social dialogue in work-related matters (ILO, 2013), policy briefs and reports developed by or with the participation of the International Labour Organization (ILO) also points towards this conception of sectoral bodies (e.g. ILO, 2014a, 2014b; Wilson, Tarjáni and Rihova, 2016).

This last point takes to an additional, prominent idea that can be noticed in most of the documents reviewed, which refers to the role of sectoral bodies in developing cooperation among different stakeholders. Indeed, the definition of sectoral bodies promoted by the ETF illustrates this point by stating that "SSCs are partnerships of a least two different types of stakeholder. They are platforms for systematic cooperation supporting VET policies […]" (ETF, 2015, p. 1). Accordingly, the participation of social partners (employers and workers) as the leading representatives of the industry is considered essential for sectoral bodies. Likewise, the development of strong links with governments and TVET providers is strongly recommended within the documents reviewed (e.g. Lempinen, 2013; ETF, 2015; Wilson, Tarjáni and Rihova, 2016).

Main functions: Labour Market Intelligence as the core function

It is recognised that sectoral bodies may perform several functions. However, developing labour market intelligence strikes as the most relevant and essential one among all reports reviewed. As West (2019, p. 2) argue in an ILO policy note for Indonesia, "at the core of an SSCs role is specifying the nature of the skills that an industry sector needs". In this line, it is suggested that all the following work of sectoral bodies should consider evidence-based data about the skills needs of sectors (ETF, 2015; Wilson, Tarjáni and Rihova, 2016; Enabel

and British Council, 2020). Consequently, this goes back to the first point discussed in this section, referring to the idea that the needs of the labour market should drive education and training. In this conception, labour market intelligence is considered an essential tool and sectoral bodies as the main brokers of this information between industry, TVET providers and government agencies (Wilson, Tarjáni and Rihova, 2016). In this sense, it can be noticed how these reports repeatedly suggest a strong role of a skills supply orthodoxy underpinning these bodies.

In summary, this section has discussed the literature about sector skills bodies from academic and non-academic sources. First, the reviewed academic literature was divided into two groups according to their main focus to study these bodies, namely *employer engagement through SSCs* and *assessing sectoral bodies' roles, functions and outcomes*. Accordingly, it was noted that some studies within the first group use a systemic perspective to examine sectoral skills bodies by analysing their relationships with the broader TVET system. In contrast, other studies have taken a micro-perspective to examine these bodies. In both cases, it is possible to notice a political economy approach to understand skill formation. Sector skills bodies are studied by examining the relationships between different actors with a particular focus on the role of employers. These studies recognise that different institutional contextual conditions affect these bodies outcomes. Notably, most analyses consider material aspects such as regulations, funding, formal roles and TVET system structure. Also, little attention is given to the ideas underpinning this policy. Possibly, given that, overall, the primary debate within these studies centres on sectoral bodies capacity to engage employers in skill formation.

Differently, the second group of academic studies on sector skills bodies shows an evaluative focus concerning the functioning of these bodies. The diversity of aspects assessed in these studies shows there is not a particularly strong debate. However, a common aspect identified between some recent studies refers to the desired *intermediary* role for sectoral bodies in skill formation. Further, some studies outline some conditions that could help enhance this role.

Also, the reviewed grey literature has provided detailed information about the implementation of sector skills bodies in different countries. The focus of these reports has been drawing lessons from different cases. Thus, these reports discuss the importance of having sector skills bodies with a role clearly defined within the skill formation system and the necessary resources to fulfil their role. Notably, these reports depart from the assumption

that sector skills bodies are a policy response to the need for demand-side interventions to address skill formation. Similarly, reports from international organisations and cooperation agencies point to the same need. However, as noticed in the review of these last reports, the emphasis presented about the aims of these bodies is still skewed on enhancing skills supply. Thus, these reports illustrate how HCT assumptions continue to underpinning this policy.

Finally, despite the different focus of these literature bodies, some common points can be noticed. Notably, an issue that has been commonly stressed relates to the role of employers in this policy. Accordingly, given the prominent role of employers in sector skills councils, and the attention given in the literature addressing these bodies, the next section will review the literature on employer engagement in skill formation.

2.4 Employer Engagement in Skill Formation

This section presents a brief review of the literature on employer engagement in skill formation. This review was considered relevant for this study because the diverse literature on sector skills bodies highlights employer engagement as one of the main reasons to adopt these bodies (Raddon and Sung, 2006) or an essential condition for their effectiveness (Sung, 2008, 2010; Powell, 2016). Accordingly, this review aims to better understand the main theories and debates on employer engagement in skill formation that can inform the study of sector skills bodies.

The literature review was restricted to studies that explicitly consider employer engagement or involvement as one of the main issues under analysis. Moreover, it is important to mention that the selection of relevant literature considered studies focused on TVET. This decision is because it is for this type of education where the involvement of employers becomes more strategic given its direct relation with the world of work (UNESCO, 2016; Amegah, 2021) and where the action of sector skills bodies is centred. Thus, studies addressing employer engagement in education at the primary level (i.e. activities with schools) and university were not considered relevant for this study's purpose.

Accordingly, it was found that employer engagement in skill formation has been a focus of ongoing debate in the academic literature. Broadly speaking, added to the relationship with sector skills bodies, the reviewed literature can be divided into two more perspectives: the role of employer engagement in skills policies and the study of specific initiatives and their outcomes. The following paragraphs review these two perspectives.

2.4.1 Employer engagement and skills policies

The first body of literature that addresses employer engagement in skill formation is from UK-based scholars that discuss some of the problems of related skills policies (e.g. Gleeson and Keep, 2004; Keep, 2005; Laczik and Mayhew, 2015; Hodgson *et al.*, 2019). Although this work critically addresses the policy sphere of skill formation and its approach to employer engagement in the UK, it has also provided powerful arguments to its review in other contexts (e.g. Taylor, 2009; McGrath, 2011).

For instance, Gleeson and Keep (2004) criticised the policies carried out in England that have attempted to give employers an increasing influence over the VET system. They argue that skills policies have been underpinned by wrong assumptions about employers' motivations and preferences concerning skills, which has resulted in a VET system where employers have been given "voice without accountability" (Gleeson and Keep, 2004, p. 50). Accordingly, they suggest three main potential problems with this approach to engage employers in skill formation. First, an undue employers influence over education. Second, it has provided the conditions for employers to transfer their part of the responsibility for training and skills development to the state and individuals. Third, issues with the suitability of the information and signals from employers to the education system. In this context, these scholars suggest policymakers need to consider policies where the power and responsibility for skills formation are shared between employers, the state and education providers.

Moreover, Keep's (2005) further work on employer engagement and skills policies points towards the absence of discussions concerning the role and responsibility of employers as learning providers and the structure of their demand for skills in these policies. In this regard, he argues that state support and financial incentives have been used to encourage employers to provide training for youths (i.e. in the form of apprenticeships), but labour market regulations are also needed.

This last issue concurs with some studies addressing employer engagement in policies on initial VET, particularly concerning the implementation of apprenticeship schemes (e.g. Laczik and Mayhew, 2015; Gambin and Hogarth, 2017). The authors of these studies also criticise an exclusive focus on financial incentives for encouraging employers to train based on assumptions about poaching concerns. They argue that evidence suggests that this strategy does not seem enough to achieve the expected apprenticeship levels. Moreover, they doubt that poaching externalities are actually a serious problem. Thus, these scholars offer alternative policy solutions to encourage employers to provide apprenticeships. For instance,

Gambin and Hogarth (2017) suggest that one alternative may be implementing strategies to limit apprentices mobility after their training completion, which at the same time should be accompanied by further training and development practices. From a different perspective, Laczik and Mayhew (2015) suggest it may be more appropriate to develop an integrated industrial strategy with skills policies that include cooperative groups of employers within specific sectors.

More recently, Hodgson *et al.* (2019) argued that policy should move beyond employer engagement and instead foster the development of education-employer partnerships. This proposal is based on the idea that employer engagement is a term closely related to a skills-supply orthodoxy that considers that education's role is to deliver the skills that employers say they need. In other words, this situation indicates a one-way relationship between education and employers to benefit only one part. Alternatively, they suggest that a partnership model would imply a two-way relationship where all parties benefit.

Additionally, after discussing four cases of partnerships in three sectors, Hodgson *et al.* (2019) suggest some considerations for this type of policy. Firstly, they indicate that the development of education-employers partnerships needs to recognise that each sector is different, and thus, the partnership should align with the particular sectoral context. Secondly, these scholars emphasise that it is relevant to identify and communicate the partnership's benefits for both employers and education providers. Thirdly, the communication strategies should foster honest and open dialogue between partners. Moreover, the approach should consider building networks involving a range of actors. Notably, this work contributes with further evidence to support the view that skills policies should focus on fostering collaboration and shared responsibility for skill formation advocated by other scholars (e.g. Gleeson and Keep, 2004).

Finally, on a recent review of the history of employer engagement in the UK, Huddleston (2020) argues that employers have been asked to engage in different ways (e.g. qualifications design, assessment). In this line, employer engagement has been promoted with several policy objectives (e.g. social, economic, educational). However, despite the constant changes to education and skills policies, there seems to be little progress. Accordingly, she suggests that the knowledge and capacity of employers should be acknowledged, so when encouraged to engage with education and training, the focus should be on what they can actually contribute. In this line, she argues that employers should be approached with clear expectations of the extent of their engagement.

2.4.2 Employers' involvement in specific initiatives

The second group of studies addressing employer engagement in skills formation has taken a micro perspective by focusing on understanding the involvement of employers in specific initiatives (i.e. qualifications design) and places (i.e. secondary schools, colleges, local level). Thus, these studies have provided evidence about the outcomes of these initiatives and their related skills policies.

For instance, some scholars have conducted empirical research examining employer engagement in the definition of qualifications (e.g. Laczik and White, 2009; Ertl and Stasz, 2010; Huddleston and Laczik, 2012, 2018). These studies are based on the English experience to involve employers in developing the 14-19 Diplomas and 16-19 Study Programmes. These studies have revealed some difficulties pointing out two main issues affecting the possibilities to engage employers in the process. These are the consideration of employers' expertise in qualifications design and the heterogeneity of employers within a sector.

First, findings of these studies suggest that although employers have been engaged in the definition of qualifications design, the process of qualifications development is complex and requires knowledge and expertise that employers may not have (Laczik and White, 2009; Huddleston and Laczik, 2018). In this sense, Ertl and Stasz (2010) suggest that instead of considering employers as drivers of the qualifications definition process, they may be regarded as key partners. Thus, this should be an issue that policymakers consider when setting the expectations for employers participation in qualifications definitions (Laczik and White, 2009).

Second, it has been suggested that the qualifications developed may not represent overall employers' needs. This is because employers are a heterogeneous group within a sector, and, in many cases, it has been difficult to involve SMEs in the process (Ertl and Stasz, 2010; Huddleston and Laczik, 2012). This is a critical issue to be considered by policymakers. One aim of involving employers in qualifications design is to improve the relevance of VET for the labour market. Thus, if the qualifications developed do not represent the needs of employers within a sector, these objectives could not be met.

In the same context but with a different focus, Haynes, Wade and Lynch (2013) studied employer engagement at the level of curriculum delivery, particularly with work-related learning activities. Drawing from questionnaires with teachers and learners and interviews with employers, the findings of their study identified different ways of engagement between

employers and VET providers, ranging from talks in schools, hosting visits for groups of students, and providing work experience placements. Moreover, similarly to the previous studies discussed, they reaffirmed that employers are not a homogenous group. Thus, different organisational cultures and imperatives affect their capacity and motivations to engage with work-related learning. In this regard, they suggest that distinct drivers should be used for different types of employers. Likewise, it was found that the presence of a broker able to promote employers engagement and coordinate the relationship between them and education providers seems to be critical.

More recently, Amegah (2021) studied how employers engage with upper-secondary TVET schools in Ghana. For this purpose, first, she conceptualised employer engagement in TVET as "any collective activity, either in school, industry or both locations, between actors in the trade, industry and economic community (local an international) and actors in TVET institutions (e.g. students and teachers) that allows the sharing of knowledge and capacity to develop skills demanded by employers" (Amegah, 2021, p. 6). As a result, she identified seven main types of employer engagement activities carried out by employers engaging with TVET, such as career events, training programmes, and internships. Moreover, the study's findings suggest that two main issues may explain why employers do not engage with TVET schools. First is the low value given to upper-secondary TVET formation by employers, and second is the lack of government incentives to engage employers with these schools. Accordingly, she suggests that the government should consider adopting new policies that include an employer engagement-oriented framework to enhance the TVET system. Thus, this study illustrates a different context where employer engagement has not been emphasised in skills policies, such as in the UK context, but seems to be needed to enhance the prospects of secondary TVET students.

Finally, a group of scholars from the KOF Swiss Economic Institute have recently developed theoretical accounts of the role and engagement of employers in VET (e.g. Caves and Renold, 2016; Bolli *et al.*, 2018; Rageth and Renold, 2020; Caves *et al.*, 2021). They argue that, beyond employer engagement, effective VET systems in terms of youth labour market outcomes depend on the interaction between employers (the employment system actors) and education (the education system actors) (Bolli *et al.*, 2018). Accordingly, they introduce the measure of education-employer linkage to assess the degree to which these actors share power in the change processes of VET systems, particularly the curriculum process (Bolli *et al.*, 2018; Rageth and Renold, 2020). This process is based on the changes to content and qualifications in VET programmes, which they divide into three stages—

design, application and updating—according to what they have denominated as the "curriculum value chain" (Renold *et al.*, 2015, p. 10).

Consequently, to study employer engagement in VET, the model presented within this body of literature looks at the interaction between the two groups of actors during each phase of the curriculum value chain regarding who has decision power and the power-sharing between actors (Rageth and Renold, 2017). Further, Caves *et al.* (2021) tested this model by measuring the education-employer linkage in four countries, Benin, Chile, Costa Rica, and Nepal. The findings of this study suggest that the education-employer linkage in these countries is low. However, Benin shows better education-employer linkage than the other three countries. They suggest that this may be due to the strategy of adding formal education components to an existing informal apprenticeship model in a context where employers are committed to increase skills and demand more training, and there is low enrolment in formal education.

Overall, the literature reviewed in this section shows that multiple perspectives have studied employer engagement in skill formation, ranging from a policy perspective to a more practical level, such as the involvement in qualifications design and delivery. In general, the reviewed literature suggests that engaging employers in skill formation represent a challenge that some skills policies alone may not address. Moreover, as illustrated by some of the studies reviewed, some countries have developed policies focused on fostering employer engagement, while for others, this issue is part of emerging policy debates. This is the case in Chile, where current TVET policies have begun to pay more attention to the role of employers and possible initiatives to foster collaboration. The following section discusses this issue and presents more details about the context of this study.

2.5 Skill Formation in Chile

This section presents the main features of the TVET system in Chile and discusses the central debates concerning TVET policymaking. First, the following subsection provides a general overview of the system. Next, current policy reforms and issues are discussed, drawing from government and independent reports and the academic literature addressing the Chilean skill formation system.

2.5.1 General overview

TVET in Chile is comprised of technical education at the secondary and tertiary formal education levels, training and competencies certification (MINEDUC and MINTRAB, 2020). In this line, skill formation entails four separate subsystems managed by different

Ministries and government agencies (Larrañaga *et al.*, 2014; CNP, 2018; MINEDUC and UNESCO, 2018; Sevilla and Montero, 2018).

As part of the formal education system, technical education is provided at secondary and tertiary levels, overseen by the Ministry of Education (MINEDUC) (Grafe, 2017; CNP, 2018). Moreover, technical education at the secondary level (EMTP by its acronym in Spanish) is part of the schooling subsystem, and technical education at the tertiary level (ESTP by its acronym in Spanish) depends on the higher education subsystem (Sevilla and Montero, 2018).

Training and competencies certification are not part of the formal education system and are overseen by their respective agencies within the Ministry of Work and Social Security (MINTRAB) (Grafe, 2017; CNP, 2018). Hence, training is managed by the National Service of Training and Employment (SENCE by its acronym on Spanish) and is part of the training subsystem. Competencies certification is overseen by the National Certification System for Labour Competencies (ChileValora by its acronym in Spanish) and is part of the certification subsystem (Sevilla and Montero, 2018).

Accordingly, each subsystem has its regulations and aims, which impact the characteristics of access, provision and quality assurance of TVET (CNP, 2018). The following subsections explain the features of each subsystem separately according to their administrative dependence.

TVET in the formal education system – Ministry of Education

Students may enter formal technical education at the secondary level if they choose this path for their secondary studies. After completing compulsory primary education, students should continue with four years of secondary education, for which they can decide between an academic path (*científico humanista*) or a vocational path (*técnico profesional*) (MINEDUC, 2020b).

Students that select the vocational path enter secondary technical schools or mixed secondary schools offering TVET programmes (*liceos polivalentes*). These schools are mainly public organisations offering technical programmes defined by the MINEDUC (CNP, 2018; MINEDUC and UNESCO, 2018). Accordingly, 35 programmes or specialisations and 17 sub-specialisations are offered among these schools (Amaral *et al.*, 2018; CNP, 2018). There are currently 934 secondary technical schools, covering about 39%

of secondary students' enrolment (MINEDUC and UNESCO, 2018; MINEDUC and MINTRAB, 2020).

To enter these schools, students should apply through a centralised system managed by the MINEDUC. The system uses a raffle methodology that considers the vacancies available to assign students to one of their preferred schools. Additional criteria considered by the access system includes, for instance, if the applicant has a sibling currently studying at the school, is classified as a priority student because of his/her socioeconomic situation, and being a son or daughter of a worker within the school (MINEDUC, 2021b).

Technical secondary schools provide general education during the first two years and technical programmes during the last two years of study (Larrañaga, Cabezas and Dussaillant, 2013; CNP, 2018). After completing the four years of secondary school, all students receive a certificate that is the minimum requirement to continue with formal further education studies (*licencia de enseñaza media*) (CNP, 2018). Additionally, TVET students who complete a period of internship related to their programme in an organisation are granted a diploma that certifies them as mid-level technicians (*técnico de nivel medio*) in their chosen specialisation (Larrañaga, Cabezas and Dussaillant, 2013; MINEDUC, 2020b).

TVET students that continue with further education can do it in higher education institutions. Students wishing to continue at universities have to take a point-based national exam and apply through a centralised system for those universities ascribed to this system or directly to other private universities of their choice. Students wishing to continue at TVET institutions should apply directly to the institution of their choice, for which the minimum requirement is the certificate of secondary studies completion (MINEDUC, 2021a).

Technical education programmes can be taught at Technical Training Centres (CFTs by its acronym in Spanish), Professional Institutes (IPs by its acronym in Spanish) and some universities (CNP, 2018). The differences between these organisations relate to the type of programmes they can offer (i.e. degrees or diplomas) (Sevilla and Montero, 2018). Also, the law establishes a minimum number of hours related to each programme which, in practice, translate to a minimum number of years. In this line, universities are the only organisations that can confer bachelors degrees (five years). Professional Institutes can confer technical (two to three years) and professional (four years) diplomas (non-academic degrees), and Technical Training Centres can only confer technical diplomas (CNP, 2018). Accordingly, Technical Training Centres and Professional Institutes provide most technical programmes in the country (MINEDUC, 2009).

There are currently 52 Technical Training Centres and 39 Professional Institutes in the formal education system accounting for 11,2% and 31,4% of students' enrolment in higher education, respectively (SIES, 2021). These TVET providers are primarily private organisations, and they may be for-profit. Only twelve recently created Technical Training Centres are part of the public education system (WB, 2015; MINEDUC, 2016; Bernasconi and Sevilla, 2017; SIES, 2021). However, students from low-income families can apply to government funding to cover the fees at any of these organisations, provided the organisation is accredited by the national accreditation system (Bernasconi and Sevilla, 2017; CNP, 2018). Also, the government offers a range of scholarships for TVET studies and a loan scheme with government backup (WB, 2015).

TVET programmes at Technical Training Centres and Professional Institutes are defined by each organisation (WB, 2015; Grafe, 2017; Sevilla and Montero, 2018) and the programmes and curricular bases should be reviewed and approved by a National Council of Education (CNP, 2018). As a result, many programmes are on offer with diverse quality and relevance for the labour market (WB, 2015; CPPUC *et al.*, 2018; MINEDUC and UNESCO, 2018). As a reference, in the year 2019, there were 2,403 professional programmes and 4,531 technical programmes on offer (CNED, 2019).

Finally, secondary technical schools are subject to the general quality assurance systems established for secondary schools. Thus, technical education has no specific quality assurance structure (Grafe, 2017; CNP, 2018). For higher education organisations, the quality assurance system entails a mandatory assessment by which the organisation can be granted autonomy or being mandated to close. Autonomous organisations can create their own programmes, open new campuses and apply to institutional accreditation. The accreditation process is voluntary, and it is an additional quality assurance standard that has implications in the possibility of students applying for government funding (CNP, 2018).

TVET in the training and certification systems – Ministry of Work and Social Security

TVET, as part of the training system, entails training courses provided to current workers and specific groups of adults with employment difficulties. People can access training courses through their employers or applying to particular training programmes offered by the National Service of Training and Employment (SENCE) (Sevilla and Montero, 2018).

The training courses can be provided by companies or private training providers registered as Technical Training Organisations (OTECs by its acronym in Spanish) (Sevilla and Montero, 2018). As a reference, there are currently 3,239 Technical Training

Organisations registered by the corresponding norm, and each organisation define their courses' offer (Sevilla and Montero, 2018; MINEDUC and MINTRAB, 2020). The quality of these providers is heterogeneous, and there is a low capacity of the SENCE to supervise and control this amount of providers (Larrañaga *et al.*, 2014; Grafe, 2017; Didier, 2018).

Training courses taken by current workers can be selected by their employers and subsidised with public funds through a tax scheme managed by SENCE (Larrañaga *et al.*, 2014). Accordingly, all training courses funded with this scheme should be approved by this agency (CNP, 2018). The amount of funding that can be covered with public funds is capped according to an hourly rate. Also, the percentage of the financing per hour that can be covered depends on the salary of the worker taking the course. According to this criteria, workers with lower wages can receive a 100% of the funding limit (CNP, 2018). In general, these courses are short and do not necessarily conduce to a formally recognised diploma or accreditation (Amaral *et al.*, 2018; CNP, 2018).

Also, the National Service of Training and Employment (SENCE) offers a list of training courses related to an occupation to enhance the employability of informal workers and unemployed people from vulnerable sectors. These training courses are provided by selected Technical Training Organisations and are free for the beneficiary (Larrañaga *et al.*, 2014). The person can apply directly at SENCE, and one of the main requirements is being among the most vulnerable population levels in the national registries (CNP, 2018).

Likewise, skill formation in Chile includes the certification of labour competencies, which is overseen by the National Certification System for Labour Competencies (ChileValora). This system aims to formally recognise workers' competencies independent of how they have developed them (ChileValora, 2018).

Operationally, the system is comprised of tripartite sectoral bodies called Sectoral Bodies of Labour Competencies (OSCLs by its acronym in Spanish) and certification agencies. OSCLs are formed by employers, workers, and government representatives and define labour competencies for specific occupation profiles within a sector. The primary role of these bodies is to establish competency profiles for certification purposes and usually do not perform additional functions. The certification agencies assess workers according to the profiles defined by the tripartite bodies, certify workers or deliver a gaps report that the worker needs to overcome to obtain the certification (ChileValora, 2018).

Workers and employers can request the certification of competencies. The employer can fund the certification process of employees through public funding for training.

Alternatively, workers can finance their certification process with personal funds (CNP, 2018).

Finally, the certification system aims to contribute to people's employability and enhance their continuous learning opportunities (ChileValora, 2018). However, it still faces the challenge to improve recognition to achieve these aims (Grafe, 2017; MINEDUC, 2018a). In this line, more recently, the National Certification System for Labour Competencies (ChileValora) has signed agreements with some Technical Training Centres (CFTs) and Professional Institutes (IPs) to recognise these certifications when people are entering TVET programmes. In doing so, it is expected to contribute to articulating certification with further training (Sevilla and Montero, 2018).

2.5.2 Current policy reforms and academic studies

It has been argued that during the last decades, TVET was left behind in the public policy discussions in the country (MINEDUC and UNESCO, 2018; Zancajo and Valiente, 2018). However, more recently, TVET has gained renewed interest in national education agendas. In 2016 a new national policy for TVET was enacted as part of the series of reforms to the education system driven by the Bachelet's government (MINEDUC, 2016). This policy emphasises the need to ensure the quality and relevance of TVET as a fundamental means to the country's economic and social development (MINEDUC, 2016).

Also, the policy establishes the creation of a TVET Advisory Council with members of the public and private sectors, academics and educational experts. The council's primary function is to elaborate a strategy to address the issues affecting TVET, including details of time and resources for its implementation (MINEDUC, 2016; MINEDUC and UNESCO, 2018). Accordingly, the first national TVET strategy was delivered and published in 2018 (MINEDUC, 2018a). The strategy identified the main problems affecting TVET, among which are: the disconnect between the different subsystems managing each component; lack of representation of employers and workers; low existence of education and labour routes that could facilitate the trajectories of students and workers; the inexistence of a vocational and labour orientation system; and problems of quality and relevance (MINEDUC and UNESCO, 2018).

Likewise, during the last five years, several other reports from independent government agencies and interested stakeholders, such as employers and private TVET providers, have been developed to inform the debates on TVET (e.g. Araneda *et al.*, 2017; Grafe, 2017; Amaral *et al.*, 2018; CNP, 2018; CPPUC *et al.*, 2018; Vertebral, 2018; Bravo, García and

Schlechter, 2019). These reports point to similar problems of those identified in the TVET Advisory Council strategy presented in 2018. Moreover, they contain a series of suggestions for possible policy solutions to address them.

The list of proposals covers aspects such as establishing mechanisms for coordination between education and industry, fostering the capacity of TVET to respond to labour market needs, ensuring successful education and labour trajectories, and new quality assurance and funding models. Moreover, in terms of specific policy proposals, it is salient the critical role given to the implementation of a qualifications framework (national or TVET focused) to organise and articulate the whole system (e.g. CNP, 2018; CPPUC *et al.*, 2018; Bravo, García and Schlechter, 2019). In this context, the implementation of sector skills bodies to support the development of qualifications and ensure the relevance of the TVET is also a common suggestion. Also, some SSCs have already been implemented in a few sectors by business associations (e.g. CCM, 2018; CCM4.0, 2021; VDC, 2021).

Furthermore, given the change in the government administration, a renewed TVET Advisory Council was established with members of the new government and almost the same private actors of the previous council. This council developed a new TVET strategy (2020) that explicitly considered the proposals of some of the reports mentioned before (MINEDUC and MINTRAB, 2020). In this line, implementing a TVET qualifications framework (TVET-QF) has been established as a key element to the system's reforms.

Simultaneously, academic studies on the Chilean TVET system—either comparatively or with a single focus— exploring some of the issues affecting the system have grown during the last years (e.g. Didier, 2018; Zancajo and Valiente, 2018; Doner and Schneider, 2020; Rambla, Castioni and Sepúlveda, 2020; Valiente, Sepúlveda and Zancajo, 2020; Valiente, Zancajo and Jacovkis, 2020; Caves *et al.*, 2021).

For instance, Caves *et al.* (2021) compared the cooperation between education and employers to develop upper-secondary TVET programmes in four countries, including Chile. Their results suggest that employers in Chile have low influence in developing TVET curriculums for secondary technical programmes and low incidence in triggering curriculum updates. Accordingly, the scholars suggest that secondary TVET programmes are essentially school-based, and education actors have most of the power over the definition of these programmes.

Likewise, in their analysis of TVET changes and coalitional pressure in middle-income countries, Doner and Schneider (2020) suggest that businesses were on the sidelines of the

transformations to TVET during three decades in Chile. They suggest that Chile has done well concerning expanding secondary TVET compared with other middle-income countries. Further, they argue this progress can be explained by the action of a strong centre-left coalition (*Concertación*) that, by being in power for a long time, managed to drive TVET policy from top-down. In doing so, this coalition substituted the needed bottom-up pressure from business and labour and the coordination between these actors that have been seen in other countries with more robust TVET systems. In the same vein, through a historical review of the development of the TVET system in Chile and Brazil, Rambla, Castioni and Sepúlveda (2020) suggest that, despite policy efforts, institutional coordination remains weak in Chile, and employers have had a low contribution to the development of TVET.

Additional critical perspectives on the process of TVET policymaking in Chile have also pointed out the progress made by the centre-left governments in advancing TVET policies (e.g. Zancajo and Valiente, 2018; Valiente, Sepúlveda and Zancajo, 2020). However, they have questioned the theoretical underpinnings behind the policies and policymaking processes and their outcomes. For instance, Zancajo and Valiente (2018) argue that a combination between HCT assumptions and the right-based approach had underpinned TVET policymaking during the last twelve years. As a result, policymakers have failed to problematise the labour market issues affecting TVET graduates. Further, an historical analysis by Valiente, Sepúlveda and Zancajo (2020) suggest that the institutional path-dependencies of the neoliberal ideological orientations imposed by the military regime have prevented following democratic administrations from changing the market model of education and training. As a result, it has been difficult to develop a TVET system that can effectively overcome the educational inequalities affecting TVET students.

Finally, considering the principles of the realist evaluation approach, Valiente, Zancajo and Jacovkis (2020) tested the assumptions behind the Chilean market model approach to TVET. In particular, they studied the recontextualisation of the market model of skill formation by those stakeholders affected at the local level. Drawing on interviews with TVET providers, local employers, intermediary organisations, and government representatives, they found that the reliance on the market to coordinate supply and demand of skills has had negative consequences for TVET graduates' educational and labour perspectives. On one side, there has been a growing and inflated supply of unarticulated vocational specialisations, both among different levels and with the labour market's needs. Thus, this situation has hindered students' trajectories and produced challenging circumstances for them compared with students in academic routes. On the other side, the

lack of formal coordination mechanisms between education providers and employers has resulted in low involvement of employers in TVET and a disconnect between skills supply and demand.

Taken together, the literature here discussed points out to a series of issues affecting skill formation in Chile mainly underpinned by the implications of leaving the coordination of TVET to the market. At the same time, it can be noticed a period of increasing interest among Chilean policymakers and other stakeholders to enhance, or rather, develop a skill formation system able to respond to the economic and social challenges faced in the country. In this context, the tendency to borrow policy ideas from other countries has been evident, particularly with the emphasis on qualifications frameworks and sector skills bodies. The following section discusses the implications of the situation discussed here, together with the previous review of the literature presented in this chapter.

2.6 Discussion and Research Gaps

As a TVET policy, SSCs are part of broader skill formation systems or regimes. In this sense, their study should consider the concepts and theoretical frameworks concerned with skill formation in the existing literature (Powell, 2016). Accordingly, this chapter has begun by reviewing the literature from three main approaches to studying skill formation, namely economic, political economy and comparative education. These approaches show different angles for the study of skills formation to inform this study on SSCs.

Economic approaches, particularly HCT, have been highly influential in stressing that education and skills should be considered investments that affect economic outcomes (Bryson, 2017). Hence, studies based on rates on return have been useful to inform public policies oriented to allocate funds to education and training initiatives that maximise these investments (Psacharopoulos and Patrinos, 2018). Although this approach can be helpful in the context of economic decisions and tight budgets, as political economists have pointed out, it is narrow in its view since it fails to consider broader social outcomes (Ashton, 1999; Lauder, 2015). Likewise, it has been argued that the focus of HCT on increasing the supply of skills is failing to explain current issues affecting the demand for skills, such as the vast existence of low-skilled jobs in the economy (Sung and Ashton, 2015; Brown, Lauder and Cheung, 2020). Thus, it is important to understand the assumptions behind economic approaches to skill formation and how they have informed current skills policies, particularly HCT. However, they do not seem a suitable perspective for the aims of this study that entail

understanding the adoption and implementation of a policy beyond just considering economic factors.

Conversely, the reviewed political economy approaches are more comprehensive perspectives to study skill formation. This is because they consider institutional, social and political factors in addition to economic ones affecting education and training systems. The studies within this approach aim to identify the factors and processes that explain different skill formation systems, their outcomes and the relationships with other institutional domains, particularly labour markets (Bryson, 2017). In this sense, it can be said that the emphasis of these approaches is in the study of internal variations between national skill formation regimes and, mainly, the analysis of internal factors. However, some studies have included external factors in the analysis, such as the economic effects of globalisation and the consideration of global education ideas (e.g. Brown, Green and Lauder, 2001; Valiente, Lowden and Capsada-Munsech, 2020). This seems an important consideration for the study of SSCs since, among other reasons, it has been argued that they may be a policy response to address skill formation to deal with the effects of global competition (Raddon and Sung, 2006). Moreover, arguably, sector skills bodies can be considered a global education idea promoted by international organisations, as the review of reports here presented suggest (e.g. ETF, 2015; Wilson, Tarjáni and Rihova, 2016; Enabel and British Council, 2020).

Also, this literature review showed that most studies from an institutional political economy perspective focused on skill formation had studied industrialised countries and advanced economies (e.g. the UK, Germany). Thus, these studies have provided explanatory accounts that may not necessarily apply to countries such as the one considered in this study. The exception to this situation is Ashton, Sung and Turbin's (2000) study, which considered Latin American countries in their analysis (e.g. Chile, Mexico), identifying them as a neo-market model of skill formation. This study provides valuable insights to consider in the study of SSCs in Chile, mainly to explore to what extent the features of the neo-market model identified at the national level may explain the private actors’ adoption of these sectoral bodies.

Similarly, the study from Zancajo and Valiente (2018) focused on Chile offers some explanations about the ideological drivers of TVET policymaking during the last years at the national level. Thus, it provides relevant hypotheses to draw upon for a study focused on a sectoral TVET policy such as SSCs. For instance, based on Zancajo and Valiente's (2018) findings, it could be expected to find a significant influence of HCT assumptions driving this

policy. Moreover, it can be noticed that the cultural political economy approach considered in their study offers a valuable analytical framework for the first aim of this research for at least two reasons. First, it is suitable for conducting policy analysis of specific policies (e.g. Verger, Fontdevila and Zancajo, 2017). Second, it considers institutional and ideational factors in the analysis (Jessop, 2010), which seem to be of greater importance in the case of globally diffused policies such as SSCs.

Likewise, the reviewed comparative education literature offers different analytical and conceptual frameworks that can be considered in conjunction with the cultural political economy approach to study SSCs. Notably, the concept of policy borrowing as a process by which local actors deliberately borrow policies from other contexts (Phillips and Ochs, 2004) is particularly suitable for this study. In this regard, some scholars have emphasised analysing internal factors and contexts (e.g. Phillips and Ochs, 2004; Steiner-Khamsi, 2004, 2014) and others of external forces (e.g. Meyer et al., 1997; Dale, 2000) to provide explanations for policy borrowing. Drawing on both perspectives, Verger (2014, 2016) suggests focusing on the stage of policy adoption to understand why local policymakers adopt global education policies. This perspective can be particularly interesting for the study of SSCs since little is known about these bodies from this standpoint, as will be developed in the following paragraphs.

The second section of this chapter has focused on a literature review addressing sector skills bodies. This review showed that sector skills bodies are one type of TVET policy implemented in different parts of the world (e.g. ETF, 2015; Wilson, Tarjáni and Rihova, 2016). These bodies are expected to contribute to skill formation by developing actions to connect TVET with labour market needs. In this line, most studies addressing these bodies have focused on their capacity to engage employers with skill formation, evaluate their functioning or provide lessons from their implementation in a group of—mainly Anglo-Saxon—countries (e.g. Payne, 2008; Sung, 2008, 2010; Kraak, 2013; Powell, 2016).

Noticeably, possibly because most studies examine early adopters of these bodies, they tend to be discussed from the perspective of a long-established policy within particular countries. Thus, little focus has been given to understanding how new adopters have borrowed this policy from the example of other countries. Accordingly, more research is needed to understand the processes that may explain how local actors have adopted and implemented these bodies. It seems that international organisations' common idea that addressing employability, productivity, and low-skills issues—among other economic and

social issues—as some of the main drivers of this policy have blurred the need to understand why and how it is adopted in new places. Remarkably, Moon, Ryu and Park (2021) have recently discussed the emergence of Industry Skills Councils in Korea and provided an account of the reasons for their adoption. However, little is mentioned about how this policy was borrowed from other countries, including their selection and recontextualisation processes. This study aims to address this gap in the study of SSCs.

Moreover, the literature review on sector skills bodies showed a tendency to draw lessons from implementing these bodies in other countries. Most studies and reports reviewed use analysis at the systemic level to explain the outcomes of these implementations and evaluate their success, usually in terms of employer engagement or the relevance of TVET provision. However, little has been reported from the perspective of the main affected actors by this policy. In other words, the voice of key actors in the implementation process at local settings, such as employers and TVET providers, is generally absent. Remarkably, only the study conducted by Lloyd (2008) in the UK context considers employers' voices to assess whether employers are acting as expected by the SSCs. This study showed that employers within a sector are not homogeneous and do not always respond as expected by a policy. This situation is an important issue to explore further.

In this line, a policy enactment focus (Ball, Maguire and Braun, 2012) to study SSCs could contribute to having a better understanding of the implementation of these bodies and the way key actors act in response to this policy. Studying policy enactment as developed by Ball, Maguire and Braun (2012) for education policy studies entails understanding the dual process of interpreting and translating a policy by the key actors involved (Ball *et al.*, 2011). This concept was not discussed in this literature review chapter since it has not been generally considered in skill formation studies, except for the recent research from Valiente, Zancajo and Jacovkis (2020). Thus, this is a gap that this study can address by exploring how employers and TVET providers have enacted SSCs.

Finally, this chapter has presented a section describing the context of this study and has discussed some of the current policy reforms and issues. It showed that Chile is currently under a period of increasing interest in TVET, both from public and private actors. Thus, implementing a TVET qualifications framework is underway, and discussions about implementing other policies, such as sector skills bodies, are ongoing. Interestingly, some business associations already started with the adoption of these bodies with no state intervention. This situation offers the opportunity to investigate why private actors have been

interested in driving this adoption, how they have realised they could play this role and how other actors affected have responded to these bodies. This study can offer answers to these questions by conducting empirical research focused on these private-led bodies. In doing so, this study will address two empirical gaps in the literature of SSCs, which lacks evidence about private-led bodies and SSCs in Latin America.

2.7 Chapter Summary

This chapter has presented the literature review informing this study about the adoption and implementation of private-led SSCs in Chile. The chapter reviewed the main concepts, theoretical frameworks and studies addressing skill formation—as a broad area related to these bodies—from an economic, political economy and comparative education perspective. Accordingly, the discussion in the last section of this chapter argued the importance of understanding economic theories related to skill formation, particularly HCT. Still, it is recognised that this perspective is not suitable for the aims of this study. Instead, after reviewing studies from different political economy approaches, a cultural political economy approach was argued as a more suitable analytical framework to consider. Likewise, the concepts and frameworks from comparative education related to policy transfer, policy borrowing, and policy adoption were discussed for the study of SSCs as globally diffused TVET policy. Notably, the reports reviewed from international organisations focused on promoting these bodies in the global policy community may support this view.

Moreover, after reviewing the literature on sector skills bodies, it was discussed that these bodies have mainly been studied in the academic literature from the perspective of employer engagement, their functions and outcomes. Thus, it was argued that a focus on policy adoption and enactment is a gap in the literature on sector skills bodies that this study aims to address. At the same time, this focus addresses a gap in comparative education literature, particularly on the transfer of TVET policies, which has focused mainly on studying qualifications frameworks and dual vocational training systems.

Finally, the Chilean context was discussed to explain the current issues and debates on TVET policymaking. It was argued that the adoption of SSCs in this country presents an interesting situation for studying these bodies, first because they are a rare case of private-driven SSCs. Second, there is little knowledge about these bodies in the Latin American context.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter presents the methodological underpinnings of this study. It starts with section 3.2, which presents the two main research questions that guided this study, explaining how these questions were defined based on the literature on comparative education and sector skills bodies. Subsequently, this section presents the analytical frameworks considered to guide the study further and define sub-research questions. Section 3.3 presents the research philosophy embraced in this study, critical realism, and explains how this philosophy shaped methodological decisions.

Next, in section 3.4, the case study research design is presented by discussing why this type of design has been considered suitable for this study. Similarly, section 3.5 introduces the research methods selected to collect data, namely semi-structured interviews and documents.

Section 3.6 explains how data was collected. For this purpose, the section presents how the case studies were selected, the stages of data collection, how interviews were designed and conducted, and how documents were selected. Then, section 3.7 discusses how data was analysed and interpreted, conducting qualitative data analysis and case comparison.

Finally, section 3.8 presents a brief reflection on the study's validity and reliability, and section 3.9 summarises the information contained in this chapter.

3.2 Research Questions and Analytical Frameworks

This section outline the research questions that guided this study. Research questions are critical in any study since they drive the whole research and stop the researcher from going off in unwarranted directions (Bryman, 2004). However, research questions tend to change during the research process and are likely to be refined after the literature review (Thomas, 2017). This has been the case in this research. The following paragraphs will explain how.

Given my background in HRM, my initial interest in conducting this study was in gaining a better understanding of the involvement of employers in skill formation. Motivated by the debates about skills utilisation in the UK, I was particularly interested in exploring this issue in the case of Chile, my country of origin.

However, after an initial literature review of TVET policymaking in the country and the debates concerning employers’ role, it was clear that skills utilisation was an issue far beyond

the current debates and concerns. As noticed in the previous chapter, discussions were around the quality of TVET provision and its relevance for the labour market. Accordingly, different policy initiatives driven by public and private actors have been taking place in the country. Among these initiatives, SSCs created by some business associations caught my attention. My interest in exploring these bodies increased when, after conducting a literature review on this type of policy, I learned that they are usually a government initiative to involve employers in skill formation. Moreover, most of what is known about sector skills bodies is from Anglo-Saxon countries. Thus, I considered that studying this rare case of private-led SSCs' adoption in Chile could be an interesting contribution to the knowledge about these bodies.

Further, the review of international organisations' reports promoting these bodies (c.f. ILO, 2014b; ETF, 2015) and McGrath's (2012) identification of a VET toolkit, which references this type of policy as one element, took me to consider SSCs as a globally diffused policy. Thus, opening questions about the attractiveness and recontextualisation of these bodies in different contexts, particularly in Chile.

From this point, a review of the literature on skill formation from different approaches served to guide potential avenues for inquiry about these bodies. After reviewing the literature on comparative education—particularly on policy borrowing—and several conversations with my supervisors about the possible focus of the thesis, I decided to consider two main areas of interrogation for the study of SSCs: policy adoption and policy implementation. Hence, the overall aim of this study is divided into two research objectives related to these two areas, which are the following,

- To understand the reasons and circumstances that explain the adoption of Sector Skills Councils by private actors in Chile.
- To explain how different key actors have implemented private-led Sector Skills Councils in Chile.

The policy adoption focus was decided following Verger's (2014, 2016) suggestions for studying education policies for two reasons. First, this perspective suggests placing attention to the role of ideas in the process of policy change, which considering that sector skills bodies as a policy idea has been promoted by international organisations seems relevant to explore. Particularly what ideas about these bodies are attractive to local policymakers and how they interact with local conditions. Second, it has been argued that the stage of policy adoption is

still understudied for global education policies (Verger, 2014). Thus, this study could contribute to the literature focused on this stage of policy change.

The focus on policy implementation was decided because, as noticed in the literature review chapter, little is known about the implementation of these bodies from the perspective of the main actors affected. The literature on sector skills bodies suggests that one of the main objectives of these bodies is to connect the demand for skills with its supply, for which actions and collaboration from specific actors are needed. For instance, they depend on the employers and TVET providers response to SSCs' initiatives. However, only one study investigated the response from employers to these bodies, and it showed that employers do not always respond as expected. This suggests an issue that could be explored further. Added to that, no studies addressing these bodies considering the perspective of TVET providers were found.

Accordingly, the research questions related to the two research objectives outlined above that guided this study are:

1. Why and how private actors in Chile have adopted Sector Skills Councils?
2. How have different employers and TVET providers implemented Sector Skills Councils' initiatives in Chile?

However, given that the questions remain broad, two analytical frameworks were chosen to guide the research further. The following subsections explain this selection and the features of these analytical frameworks.

3.2.1 Policy adoption: analytical framework and sub-research questions

After the review of different theoretical perspectives, I selected the Cultural Political Economy approach (Jessop, 2010) used in other studies of skill formation policies at the national level (e.g. Zancajo and Valiente, 2018). This decision is because I considered that the study of policy adoption needed to consider an approach that enables the examination of multiple drivers to understand policy change. Given the importance of this framework to guide this research, from the development of sub-research questions to the data analysis, the following paragraphs present the central concepts of this approach that guided this study.

The Cultural Political Economy approach

As developed by Jessop (2010), cultural political economy is an approach concerned with the interdependence and co-evolution of semiotic and extra-semiotic aspects to understand social change. This approach is rooted in understanding culture as semiosis (meaning-

making), which acts as a mechanism for the existential necessity of social actors to reduce complexity for understanding the world. At the same time, this approach recognises the operation of structural aspects in this process.

The starting point of cultural political economy is the role of complexity reduction by actors as a prerequisite to "*going on* in the world" (Jessop, 2010, p. 337) and suggest exploring how actors reduce complexity by analysing the role of semiotic and extra-semiotic factors in their attempts to construct social reality. This is because it is argued that these constructions cannot be understood without recognizing and studying the extra-semiotic conditions that make semiosis possible. In this line, the cultural political economy approach allows the analysis of how the interaction between ideas (semiotic) and economic, political and institutional material (extra-semiotic) drivers influence the process of policy change (Zancajo and Valiente, 2018).

Moreover, these factors interact through the evolutionary mechanisms of variation, selection, and retention (Jessop, 2010). These mechanisms are not understood as a linear, pre-determined sequence but as an evolutionary perspective that highlights how the contingent co-evolution of semiotic and extra-semiotic factors shape the emergence, privileging and realisation of particular discursive and material practices (Jessop, 2010).

The variation mechanism emerges when a policy domain begins to be questioned due to specific circumstances such as new challenges, crises or other causes (Verger, Fontdevila and Zancajo, 2017; Zancajo and Valiente, 2018). Hence, here factors of ideational or material nature can act as triggers for the continuous variation of discourses and practices (Jessop, 2010).

The selection mechanism involves the preference for particular discourses to explain events and legitimise actions (Jessop, 2010). Accordingly, concerning policy analysis, it consists of the action of policy actors to identify discourses to explain a problem's causes and the possible solutions to address it (Verger, Fontdevila and Zancajo, 2017; Zancajo and Valiente, 2018). Here semiotic factors may operate by affecting the resonance of particular ideas among actors and by limiting others. Likewise, material factors may act through contingent or established power relations, path-dependency and structures (Jessop, 2010). Accordingly, selection occurs through strategic selectivities, which can be discursive, structural, technological (in a Foucauldian sense) and agential (Jessop and Sum, 2010; Belfrage and Hauf, 2017).

Finally, retention of selected discourses involves its inclusion in actor's habitus, enactment in organisational practices, integration into institutional rules and articulation into broadly recognised state strategies and projects (Jessop, 2010). Hence, in terms of policy analysis, the retention mechanism accounts for the institutionalisation of the select policy option by including changes, for instance, in regulatory frameworks and regular practices (Verger, Fontdevila and Zancajo, 2017; Zancajo and Valiente, 2018). According to Jessop (2010), the potential for effective retention is related to the range of sites in which the selected discourses are retained.

Consequently, as an analytical approach, cultural political economy leads to examining how different factors interact in the adoption process of SSCs through variation, selection, and retention mechanisms. For instance, it highlights the importance of exploring the contextual economic, institutional and political conditions of the country and sectors under study and their interaction with the predominant ideas from the actors involved in the process. In doing so, it offers an analytical strategy to understand why and how private actors have adopted SSCs in Chile. Thus, the research questions related to policy adoption that this framework informed are:

- How did ideas and material factors influence the emergence of the problem (variation) that SSCs supposedly attempt to solve in Chile?
- How have ideas and material factors influenced the selection of private-led SSCs by employers and business associations in Chile?
- How private and public actors have retained SSCs in their regular practices in Chile?

3.2.2 Policy implementation: analytical framework and sub-research questions

As mentioned, the second research objective seeks to understand the implementation of SSCs from the perspective of two of the key actors affected, employers and TVET providers. In this sense, as briefly mentioned in the previous chapter, this objective may be related to the concept of policy enactment as developed by Ball, Maguire and Braun (2012) for education policy studies. These scholars consider that education policies are enacted rather than implemented by policy actors. In this line, policy enactment entails the *interpretations* and *reactions* of the different actors affected by the policy, which at the same time is mediated by the context in which these actors are located (Braun *et al.*, 2011).

Although these scholars propose a policy enactment framework that could have been considered an analytical framework to guide the second part of this study, this framework is underpinned in the reality of schools with a greater focus on teachers. Thus, it may not be

fully pertinent for this study that considers employers and TVET providers. For this reason, and following the advice of my supervisors and other experienced researchers in education policy, I decided to combine a policy enactment focus with the concepts and principles of the realist evaluation approach. This is because one important principle of this approach is that a policy, such as SSCs, can be received differently by distinct actors. Therefore, while not conducting a realist evaluation, I considered this principle and used the core concepts of realist evaluation as an analytical framework to guide the second part of this study. The following paragraphs explain these concepts.

The Realist Evaluation approach

Realist evaluation, as developed by Pawson and Tilley (1997), is an approach that considers policies or programs as theories about patterns of behaviour, events or conditions that might be changed. Moreover, a key aspect for realist evaluation is that the triggers of change in most interventions depend on the response of those affected by the policy (Pawson and Tilley, 2011). In this sense, realist evaluation is an approach that does not emphasise understanding what works about a policy. Instead, the focus is on asking "what works for whom in what circumstances and in what respects, and how?" (Pawson and Tilley, 2011, p. 363). Accordingly, the realist evaluation approach emphasises four interrelated concepts for understanding programs, namely context (C), mechanisms (M), outcome patterns (O) and CMO configurations (Pawson and Tilley, 1997, 2011).

First, mechanisms explain the logic of a policy, meaning what is it about an intervention that generates a change (Pawson and Tilley, 2011). In this sense, mechanisms are about the interplay of people's resources and reasoning. In other words, how the resources offered by a policy or intervention affect the reasoning of those people targeted by the intervention (Pawson and Tilley, 1997).

Likewise, context plays an essential role in realist evaluation since it is considered that the operation of mechanisms is always conditional on context (Pawson and Tilley, 1997). In this sense, the realist evaluation approach recognises that some contexts could support the program theory and some could not. Hence, in studying a policy or program, context depicts those characteristics of the circumstances in which policies are inserted and essential to its mechanisms' operation (Pawson and Tilley, 2011).

Outcome patterns entail the consequences of policies or programs that result from the activation of different mechanisms in different contexts. Moreover, an intervention can generate multiple outcome patterns, taking different forms (Pawson and Tilley, 2011).

Consequently, the realist evaluation approach is about understanding policies, programs or interventions in terms of the configurations of context, mechanisms and outcome patterns (CMO configurations) that sustain them. A CMO configuration is a proposition that indicates how a program activates mechanisms that generate changes, among whom and in what conditions (Pawson and Tilley, 2011). Thus, realist evaluation recognises that different people receive policies differently, and contextual circumstances may influence their responses. Therefore, the sub-research questions informed by the policy enactment focus and the concepts and principles of realist evaluation are:

- How employers and TVET providers have *interpreted* and *reacted* to SSCs?
- How do the different reactions of employers and TVET providers to SSCs (M) and their diverse contextual circumstances (C) explain the implementation of SSCs (O) in Chile?
- How do employers and TVET providers CMO configurations align with the policy expectations?

This section has presented the research questions that guided this study and their link to the relevant literature and selected analytical frameworks. The following section discusses the philosophical position taken for this study.

3.3 Research Philosophy

One essential step when conducting research is acknowledging our beliefs and assumptions about the world (Creswell, 2014; Saunders, Lewis and Thornhill, 2016). Thus, clarifying our ontological and epistemological assumptions is essential given their implications in decisions of design and methods in our research (Blaikie, 2010; Creswell, 2014; O'Mahoney and Vincent, 2014).

In this research, I have embraced a critical realism philosophy because I concur with the stratified ontology assumptions about reality and the epistemological assumptions about our limited possibility of knowing the world. Accordingly, this section details the main assumptions of this philosophy and why they have been considered relevant to this particular study.

3.3.1 Critical realism

Bhaskar (1975) proposed that critical realism is a philosophical position that assumes that reality (the world) exists independent of our knowledge of it. Moreover, we can learn about reality by examining the experiences available to observation and theorising about the

structures, mechanisms and contextual conditions that may explain it (Wynn and Williams, 2012; Fletcher, 2017; De Souza, 2018).

Accordingly, one distinctive ontological assumption of critical realism is the conception of the world as stratified (Sayer, 2000). For critical realism, the reality is comprised of three distinct layers or domains: the real, the actual and the empirical, of which only the empirical is accessible through observation (Bhaskar, 2008). The real is whatever exists and refers to the structures and powers of objects or entities (Sayer, 2000). Crucial to critical realism is that powers are "potentialities that may or may not be exercised" (Bhaskar, 2008, p. 40). In this line, the actual refers to what occurs if and when powers are exercised, and the empirical refers to what we perceive (Sayer, 2000; O'Mahoney and Vincent, 2014).

Likewise, the analysis of causation to understand the social world is one of the most distinctive features of critical realism (Sayer, 2000; Hu, 2018). Critical realism rejects the positivist view of causation as regular succession of events that can be measured according to repetition to build universal laws or predictions. Instead, critical realism suggests studying causation to seek explanations of what causes something to happen (Sayer, 2000; Fleetwood, 2004; Wynn and Williams, 2012). Thus, for critical realism, explanation depends on identifying the causal mechanisms that generate a particular event, and beyond that, how these mechanisms work and under what conditions may or may not be activated (Sayer, 2000; Wynn and Williams, 2012). Key to this understanding is the conception of causal powers that may be possessed, exercised or actualised by entities depending on the context. Hence, the same mechanism can produce different outcomes depending on how the context affects it (Sayer, 2000; O'Mahoney and Vincent, 2014). Also, the critical realist view of the social world as an open system suggest that we cannot study the observed events in isolation from context and that multiple mechanisms can be in place to explain these events (Sayer, 2000; Wynn and Williams, 2012). In this line, critical realism suggests looking at the experiences at the empirical layer to theorise about the structures, causal mechanisms and contextual conditions that explain why things act in certain ways (De Souza, 2018).

Moreover, critical realism recognises the need to understand the subjective meanings given to social phenomena and the material or non-discursive dimension. In doing so, it recognises that meanings are related to material circumstances and that causation can also be explained by the reasoning of social actors (Sayer, 2000; Fleetwood, 2004). In this sense, critical realism is an alternative philosophy to positivism and interpretivism in social research (Sayer, 2000; Wynn and Williams, 2012; Fletcher, 2017). First, critical realism

differs from positivism in the view that what we can observe is all that exists, thus limiting the world to empirical facts. Second, while critical realism concurs with interpretivism on the interpretive dimension of social science, it differs in the assumptions concerning the possibility of causal explanation and the generation of explanatory theories (Sayer, 2000; O'Mahoney and Vincent, 2014). In doing so, critical realism allows consideration of multiple possible explanations to study social phenomena and use causal language to describe the world (Easton, 2010; Wynn and Williams, 2012).

Accordingly, the critical realism philosophy outlined above shaped my approach to conducting this research in several ways. First, this research aims to understand why and how SSCs have been adopted and implemented in Chile. Therefore, epistemologically, by considering critical realism lenses, I acknowledge that the adoption and implementation of SSCs (reality) have occurred independently of what I could possibly know. In this line, for this study, I selected a case study design to provide a thick description of the phenomenon studied but simultaneously, I recognise that, despite my best efforts to illustrate the cases, this description could only offer a limited understanding of reality. This was an important consideration, for instance, to keep a case study where I was unable to gain access to some key informants.

Likewise, ontologically, I recognise that the nature of reality is comprised of layers of which I can only access observable experiences (material and discursive) that may account for events triggered by multiple unobservable mechanisms. In this line, the data gathered for this study is understood as accounts of observable experiences (empirical layer of reality) that can help reveal possible mechanisms that triggered the adoption of SSCs and how key actors enact these bodies.

Additionally, critical realism has also influenced the selection of analytical frameworks to guide this study. As noted in the previous section, both of the analytical frameworks selected draw upon critical realism assumptions. Hence, these frameworks have been considered heuristic devices to grasp underlying mechanisms that may explain the adoption and implementation of SSCs.

More specifically, informed by the cultural political economy analytical framework, research questions 1 to 3 seek to understand how ideas and material drivers might have affected the adoption of SSCs. Contrary to a positivist philosophy, this research does not seek to identify regularities or make statistical generalisations about these drivers (Sayer, 2004). Instead, this research is focused on identifying the drivers and interactions between

them that may explain the events related to the adoption of SSCs. Likewise, this research assumes the adoption of SSCs in a specific context (Chile) may have resulted from multiple causes, some of which may not be possible to observe. Nevertheless, according to a critical realist philosophy, they are considered real, given that they have an effect or make a difference (Fleetwood, 2004).

Similarly, informed by realist evaluation principles, research questions 4 to 6 seek to explain how employers and TVET providers enact SSCs' initiatives. In doing so, this research acknowledges the existence of causal powers that may or may not be exercised by these actors and may be affected by different contextual circumstances that could explain SSCs outcomes. In this line, it is expected to find different outcomes in the implementation of these bodies for different actors (employers and TVET providers) as a result of distinct mechanisms activated (or not) in specific contexts.

3.3.2 Abductive logic of inference

Research philosophies also have connections with specific logics of inquiry or inference defining how a researcher uses theory to answer the research question (Blaikie, 2010; Saunders, Lewis and Thornhill, 2016). Critical realism uses abduction and retroduction as dominant logics to reach explanatory accounts (Bhaskar, 2014; O'Mahoney and Vincent, 2014). Accordingly, research-informed by critical realism can rely on abduction only or use both depending on the research design selected (Ackroyd and Karlsson, 2014).

This research has predominantly taken an abductive logic of inquiry. This logic differentiates from deduction—which moves from theory to data—and from induction—which moves from data to theory—by moving back and forth to generate new knowledge (Saunders, Lewis and Thornhill, 2016). Moreover, abduction is a logic of inference where redescription and recontextualisation are essential (Danermark, Ekström and Karlsson, 2019). It involves theoretical redescription of empirical data for which it combines observations with existing theories to offer the most likely explanations of what mechanisms caused events (Bhaskar, 2008; O'Mahoney and Vincent, 2014; Danermark, Ekström and Karlsson, 2019).

In this sense, this research has taken an abductive approach by seeking to understand the adoption of SSCs by private actors in Chile and their enactment by employers and TVET providers. This entails providing a thick description of the empirical findings of the cases studied and assessing them against previous theoretical accounts related to the phenomena studied to offer possible explanations.

To sum up, this section has presented the research philosophy embraced for this study, including how its related assumptions have shaped some reflections, methodological considerations, and the logic of inference. The following section presents the research design selected for this study.

3.4 Research Design

This study has been conducted according to a qualitative strategy based on a case study research design. In doing so, I followed the research methods suggestions from Bryman (2004) and Creswell and Creswell (2018) that directly identify the case study as a type of research design. Moreover, two main features of case study research relevant to this study are worth commenting on here.

First, case study research is associated with an in-depth investigation of a case or phenomenon (Cohen, Manion and Morrison, 2011; Thomas, 2016). Accordingly, case studies are concerned with a rich and detailed description of a case, presenting it in a way that allows one to grasp the richness of the situation and to gain analytical insights from it (Hitchcock and Hughes, 1995; Thomas, 2016).

Second, case study research relies on several methods and sources of data (Creswell and Poth, 2018; Yin, 2018). As Creswell and Poth (2018) suggest, this is an important issue because it is not enough to rely on one data source to provide an in-depth understanding of a case. Likewise, Yin (2018, p. 15) adds that multiple sources of evidence used in a case study research need to convergence in a “triangulating fashion”.

Additionally, there are various types of case study research (Hitchcock and Hughes, 1995; Cohen, Manion and Morrison, 2011). Specifically, this study considers Creswell and Poth's (2018) classification that draws on Stake (1995) and Yin (2014) and has been conducted according to an instrumental multiple-case study design. This type of design refers to research in which the investigator focuses on an issue and then, to illustrate it select multiple cases, usually to show different perspectives on it (Creswell and Poth, 2018). This research design has been considered appropriate for this study for at least three reasons.

First, it has been suggested that a case study design is favoured when the research aims to answer how and why questions and when the focus is on a phenomenon in a real-life context (Hitchcock and Hughes, 1995; Cohen, Manion and Morrison, 2011). This is because an essential aspect of case study research is considering the relationship between context and the phenomenon studied. According to Yin (2018), a case study research would be preferable when the research objective is to understand a real-world case for which the contextual

conditions play a crucial role in developing that understanding. In this line, case study research develops an in-depth contextual understanding of the unit of inquiry or case (Creswell *et al.*, 2007; Cohen, Manion and Morrison, 2011). This is the case of this study, as the institutional, economic, political and educational contexts may play an essential role in understanding the adoption and implementation of SSCs.

Second, one of the main reasons for the selection of a case study relates to the suitability of this type of research design to examine situations where there may be many features or variables operating at the same time (Cohen, Manion and Morrison, 2011; Thomas, 2016; Yin, 2018). Thus, we can look at the relationships and processes of the phenomenon studied (Thomas, 2016). In this sense, it has been argued that a case study design is particularly suitable for research conducted under a critical realist philosophy such as this study (Wynn and Williams, 2012; Ackroyd and Karlsson, 2014).

Third, from a critical realist perspective, a comparative case study design containing more than one case can serve to seek explanations about the extent to which the outcomes of the phenomenon studied can be attributable to a particular mechanism, its context or their interaction (Ackroyd and Karlsson, 2014). In this line, a multiple-case study design has been chosen to examine similarities and differences among the sectors where private actors adopted SSCs.

Finally, it is worth mentioning that one of the main issues debated concerning case study research relates to its limitation for generalisation as it has been argued that it is not possible to generalise from case studies (Bryman, 2004; Blaikie, 2010; Cohen, Manion and Morrison, 2011). Advocates of generalisation through case studies argue that this depends on how generalisation is defined (Blaikie, 2010). For instance, Yin (2018, p. 20) argues that case studies "are generalisable to theoretical propositions and not to populations or universes". In other words, this scholar claims that case study research is about analytical rather than statistical generalisation (Blaikie, 2010; Cohen, Manion and Morrison, 2011). Likewise, some critical realist researchers concur with this last view (e.g. Easton, 2010; Wynn and Williams, 2012). For instance, Bhaskar (2014, p. vii) points out that critical realism "is interested in *theoretical* (transfactual), rather than empirical, *generalisations*". In this sense, theoretical generalisations are treated as indispensable in critical realism, with the logics of abduction and retroduction as essential for these purposes (Ackroyd and Karlsson, 2014; Bhaskar, 2014; Danermark, Ekström and Karlsson, 2019).

In summary, a case study research design has been selected since it allows to examine the phenomenon of adoption and implementation of SSCs by private actors in-depth using a range of methods to illustrate and investigate the mechanisms in place within these phenomena. The following section details the methods selected for this study.

3.5 Research Methods

This study relies on multiple sources of data and considered research methods that enable capturing extensive information about events, processes, participants' meanings and contextual conditions that may explain the adoption and implementation of SSCs by private actors in Chile. Thus, two types of instruments were used for data collection: semi-structured interviews and documents. The following sections detail the reasons for selecting these instruments and their advantages and disadvantages for this study.

3.5.1 Semi-structured interviews

This study considered interviews as the main method of primary data collection. This is because as research instruments, one key aspect of interviews is that they are focused conversations conducted for the specific purpose of obtaining relevant information to the research questions and objectives of the study (Cohen, Manion and Morrison, 2011; Brinkmann, 2014; Saunders, Lewis and Thornhill, 2016). Thus, as a primary data collection source, it allows the researcher to control the line of interrogation (Creswell and Poth, 2018).

There are several types of interviews, but a common classification according to structure divides them into structured, semi-structured and unstructured (Brinkmann, 2014; Merriam and Tisdell, 2016). For this study, semi-structured interviews were chosen. Semi-structured interviews allow the researcher to have a list of themes to be explored or some key questions, but these can be covered in a different order depending on the flow of the conversation (Merriam and Tisdell, 2016; Saunders, Lewis and Thornhill, 2016). Hence, this type of interview was considered suitable for this study since it requires a guide to focus the conversation but allows flexibility during the interview to explore emerging issues (Bryman, 2004; Brinkmann, 2014). Likewise, since this study considers a multiple-case study design, semi-structured interviews were thought appropriate to collect data for cross-case comparison (Bryman, 2004).

Moreover, interviews entail descriptions that usually reveal how the informants frame and understand issues or events (Bryman, 2004; Brinkmann, 2014). In this regard, Cohen et al. (2011) suggest that interviews may serve as an explanatory device to help identify variables and relationships.

Also, interviews are a valuable and necessary instrument when we cannot directly observe participants or we are studying past events (Merriam and Tisdell, 2016; Creswell and Creswell, 2018). This is an essential consideration for the selection of interviews as a data collection method in this study since at least one of the phenomenon under study has occurred in the past (adoption of SSCs), and both processes under study (adoption and implementation) are not possible to be directly observed. However, the disadvantages of this method should also be acknowledged.

First, interviews hold the possibility of "interviewee bias" (Saunders, Lewis and Thornhill, 2016, p. 397) which refers to when the interviewee decides to hold or filter information providing a partial picture of the situation explored (Creswell and Creswell, 2018). This type of bias may be a particular concern in this research since some interviewees selected for this study involved people in positions of power or key decision-makers, such as policymakers and senior executives. In this line, the interviews conducted with these participants can be considered elite interviews, which may hold particular challenges regarding interviewee bias (Mikecz, 2012; Lancaster, 2017; Solarino and Aguinis, 2020). In this respect, as suggested by researchers who have conducted elite interviews in different contexts (e.g. Harvey, 2011; Mikecz, 2012; Lancaster, 2017; Liu, 2018), extensive preparation before the interviews was used as one strategy to minimise this possible bias. This preparation included a thorough review of the interviewee professional background, his/her organisation and the policies or initiatives where the interviewee was involved.

Furthermore, information sheets and consent forms were used to ensure confidentiality and generate trust in the research process. More details about this issue will be discussed later in this chapter. Also, I had the opportunity to train for this type of interview by collaborating on a similar research project in Chile, where I conducted elite interviews in conjunction with senior researchers. This experience served as a valuable preparation to understand this type of interview's power dynamics and anticipate issues and challenges that may arise.

Also, interviewer bias may occur when the presence and behaviour of the interviewer could bias responses (Saunders, Lewis and Thornhill, 2016; Creswell and Creswell, 2018). To minimise this bias, added to the strategies previously explained, I followed suitable recommendations from Saunders, Lewis and Thornhill (2016) for conducting semi-structured interviews. For instance, a standard formality level in the language was used with all interviewees, although it was slightly relaxed when needed. Moreover, non-verbal

behaviour and details such as the appropriate dress code were carefully considered for each interview.

3.5.2 Documents

This research has used mainly written public documents available online without the need for a formal request. However, a few internal documents requested during interviews with some participants were used. The main types of public documents used in this study are official reports or presentations (from SSCs and business associations), government reports (TVET-related) and press articles. The following paragraphs discuss the reasons for selecting documents as sources of data and their possible advantages and limitations for this research.

In this research, documents have been considered an appropriate resource for answering the research questions of this study because of their content and the use and function they performed in the phenomenon studied (Prior, 2003, 2008).

First, in terms of content, documents can provide contextual data and expose ideas, relationships and decisions that may be difficult to grasp through direct observation (Merriam and Tisdell, 2016). In this sense, documents can be a valuable source of evidence to understand the explicit and hidden ideas behind policies and the people or organisations that promote them (Bryman, 2004; Simons, 2014). Hence, for this research, documents have been considered a relevant source of evidence about the material (events, dates and key actors) and ideational (discursive orientations) factors affecting the phenomenon under study that can be contrasted with data collected through the interviews.

Second, documents are produced by people in particular circumstances who direct them towards an audience with a particular focus (Finnegan, 2006; Prior, 2008). As such, documents have effects and perform functions that can be analysed (Prior, 2003). Accordingly, this study considers documents as policy instruments, and therefore technologies (Jessop, 2010) that can have a role in policy adoption and implementation processes.

In this line, as a research instrument, documents hold several advantages for conducting qualitative research (Merriam and Tisdell, 2016). Notably, four main aspects from documents recognised in the research methods literature are considered advantages for this study. First, documents provide the possibility to access and understand the language and words of potential interviewees (Creswell and Poth, 2018). Second, documents provide information to which the organisations behind have given attention (Creswell and Poth,

2018). Hence, they are a research instrument that can uncover the interests of those that have written them. Moreover, a document analysis can reveal issues that have been omitted and can be subsequently explored through interviews. Third, documents may provide historical information that could not be accessible through interviews (Merriam and Tisdell, 2016). Finally, documents are considered an unobtrusive and nonreactive source of information. They do not involve interaction where the behaviour of the researcher can alter the content (Merriam and Tisdell, 2016; Saunders, Lewis and Thornhill, 2016; Creswell and Poth, 2018). In this regard, the use of documents may help reduce possible interviewer bias during the research process.

On the other side, the disadvantages of using documents for this study relate to their possible incompleteness from a research perspective (Merriam and Tisdell, 2016; Saunders, Lewis and Thornhill, 2016). In other words, that these documents have not been developed for this study's purposes. For this reason, documents have been used in conjunction with interviews as a method for data collection. Likewise, since the researcher cannot control the quality of the documents (Saunders, Lewis and Thornhill, 2016), the selection of documents should carefully consider a criterion to assess its quality for research purposes (Bryman, 2004). This issue will be discussed in the following section that details the data collection of this study.

3.6 Data Collection

This study has been conducted according to a qualitative strategy based on a case study design. Therefore, the data collected for this study is mainly qualitative. Accordingly, this section describes how data collection was handled to accomplish the objectives of this study and provides details of the data collected.

3.6.1 Selection of case studies

This study has been conducted according to an instrumental multiple-case study design focused on illustrating the adoption and implementation of SSCs by private actors in Chile. Accordingly, an important decision concerned selecting the specific cases to consider in the study.

Before outlining how cases for this study were selected is necessary to clarify the focus of the case study, what Stake (2006, p. 4) identifies as "the quintain" in case study research. The quintain refers to "an object or phenomenon or condition to be studied" (Stake, 2006, p. 4) and that, in a multiple case study, is the shared common condition between the cases. Having a clear quintain is the starting point for multiple case study research since it helps

focus on what is aimed to be understood. Likewise, it constitutes the base criteria to select the cases, sites or manifestations that would help to understand it better (Stake, 2006). Similarly, Thomas (2016) elaborates on this analytical distinction suggesting that case study research is comprised of two parts a subject (unit of analysis) and an analytical frame (object).

Accordingly, for this study, the quintain can be defined ***as the adoption and implementation of SSCs by private actors***, where the subjects are the Sector Skills Councils and the analytical frame the processes of adoption and implementation by private actors.

Once this definition was clear, the next step was to decide which SSCs (units of analysis) should be studied. A review of secondary data sources and informal consultation allowed me to find that four SSCs were created in Chile, of which only three were in operation. It is worth mentioning that private actors created all these SSCs. Hence, they represent the entire universe of possible cases to select. Accordingly, cases were chosen based on Stake's (2006) three-question criteria for selecting cases and practical considerations about the current operation of the body and access to data. Table 3.1 shows these criteria and the final selection of cases.

Table 3.1 Criteria for selecting cases

Criteria	**Focus**	**Sector Skills Council**			
		Mining	**Wine**	**Salmon**	**Maintenance**
Is the case relevant for the quintain?	Adoption	Yes	Yes	Yes	Yes
	Implementation	Yes	Yes	No	No
Do the cases provide diversity across contexts?	Adoption	Yes	Yes	Yes	Yes
	Implementation	Yes	Yes	-	-
Do the cases provide good opportunities to learn about complexity and contexts?	Adoption	Yes	Yes	Yes	Yes
	Implementation	Yes	Yes	-	-
Is the SSC currently in operation?		Yes	Yes	No	Yes
Can access to data be secured for the study?		Yes	Yes	No	Yes
Selection for this study		**Yes**	**Yes**	**No**	**Yes**

Source: Own elaboration based on Stake (2006, p. 23)

As noticed in Table 3.1, the Mining Skills Council and Wine Skills Council cases are fully relevant for the study since they are cases of SSCs adopted and implemented by private actors. On the other hand, salmon and maintenance are cases of SSCs adopted by private actors but do not provide relevant information about the implementation of these bodies. This situation is because the Salmon Skills Council is not currently in operation, and the Maintenance Skills Council is a recently created body. Therefore, the full implementation of initiatives had not occurred by the time of the data collection of this study. However, the three cases of the Mine, Wine and Maintenance Skills Councils were selected since they can help answer the first research question of the research, and it was possible to have access for data collection. Table 3.2 shows an overview of these cases.

Table 3.2 Overview of case studies

Case	Year of creation	Description	Main stakeholder
Mining Skills Council (**CCM** by its acronym in Spanish)	2012	Sectoral skills council representing employers in the mining sector	Consejo Minero (CM) [sectoral business association]
Wine Skills Council (**CCiV** by its acronym in Spanish)	2014	Sectoral skills council representing employers and other stakeholders in the wine sector	Vinos de Chile (VDC) or Wines of Chile (WoC) [sectoral business association]
Maintenance 4.0 Skills Council (**CCM4.0** by its acronym in Spanish)	2018	Multisectoral skills council representing employers in six industrial sectors and other stakeholders	Confederación de la Producción y del Comercio (CPC) [national business association]

Sources: CCM (2021); CCM4.0 (2021); VDC (2021)

Consequently, it can be said that the three cases selected represent key or exemplary cases of SSCs to consider for this study (Bryman, 2004; Thomas, 2016) since all of them have been adopted and implemented (or will be implemented in the case of CCM4.0) by private actors in Chile. The following sections detail how data about these three cases were collected.

3.6.2 Data collection stages

The data collection for this study was conducted according to three main stages, one initial identification of documents and two rounds of interviews in Chile. Figure 3.1 illustrates these stages and the supportive actions taken particularly to inform and obtain access to interviews.

As noticed, each stage was a prerequisite for the next one. For that reason, enough time between stages was considered for the review and analyses required previous the conduction of interviews. The following sections provide more details about how access to data was obtained and the criteria for selecting interviewees and documents.

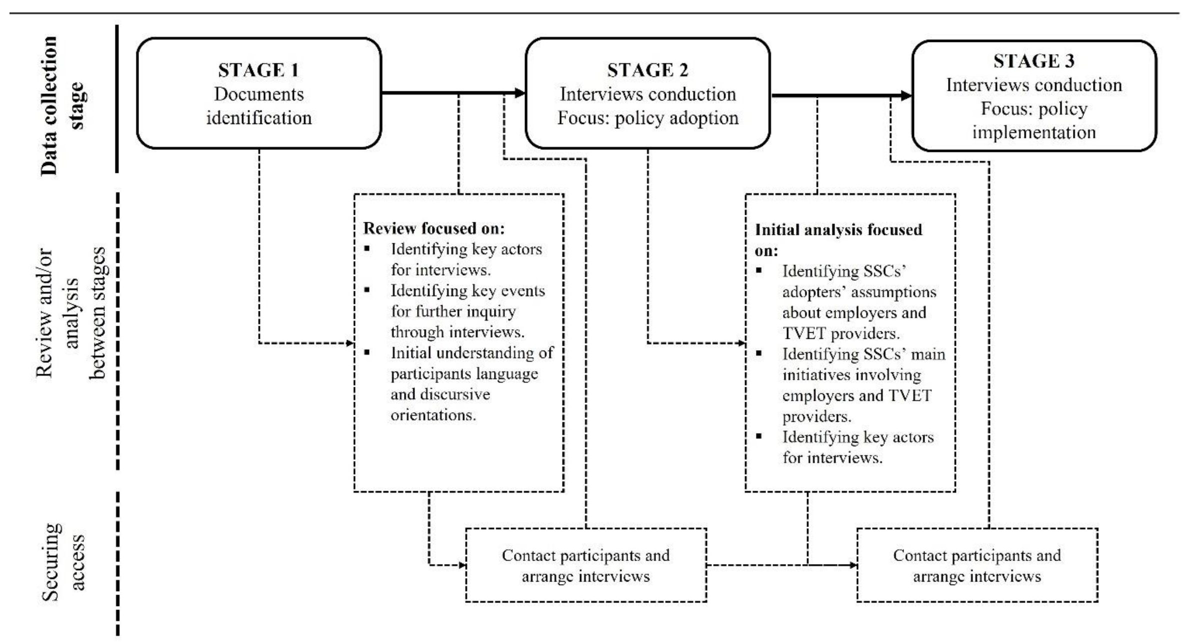

Figure 3.1 Data collection stages and supporting actions

3.6.3 Data collection through interviews

This study considered semi-structured interviews to collect primary data. Accordingly, a series of decisions have been taken concerning the design of interview guides, the selection of participants, addressing ethical concerns and strategies to gain access. The following subsections explain these decisions.

Crafting interview guides

Interview guides were crafted considering the study's research questions and comprised open-ended questions organised by themed sections. Additionally, all interview guides had an initial introductory section where the participant was asked about his/her organisation, role and skill-related challenges affecting their organisation. This action was an important consideration to understand the role of the interviewee in the policy studied and help initiate the conversation.

Guides oriented to collect data to answer the sub-research questions 1 to 3 (policy adoption) included questions organised in three sections. Each of these sections covered a group of themes: (section 1) motivations, problems, challenges; (section 2) reasons, circumstances, key actors; (section 3) functions, role, relation with context. The primary informants for these interviews were SSCs' adopters. For that reason, the interview guides were designed expecting that interviewees could talk about these themes retrospectively. Thus, the outcomes of these interviews relied on the participants' ability to remember and reflect on the events, reasons and context that may explain the adoption of SSCs. Also, these themes were used for interviews with public sector actors.

Similarly, for most of these interviews, it was expected a retrospective perspective from participants. Moreover, for themes in sections 1 and 2, public actors were expected to provide an outsider perspective about SSCs' adoption. Differently, for section 3 themes concern with SSCs' relationships with their organisations, these actors were expected to provide an insider perspective.

Guides oriented to collect data to answer the sub-research questions 4 to 6 (policy implementation) included questions organised in three sections, each covering a group of themes: (section 1) reactions: motivations, changes, effects; (section 2) contextual circumstances: enablers, barriers; (section 3) interpretations: objectives, functions role. These guides were crafted with the expectation to obtain retrospective but also current accounts from the informants. Also, careful adaptation to the words used was needed given the difference between actors (employers and TVET providers). For instance, when asking

about changes resulting from SSCs, employers were asked about changes to their HRM practices and TVET providers about changes in their programmes. Accordingly, four types of interview guides were crafted according to the particular characteristics of informants. The following section explains these characteristics. The final interview guides used for this study can be seen in Appendix 1.

Selection of participants

The first step to select participants for the study was to determine the type of actors needed as informants to collect relevant data for answering the research questions. Accordingly, the key actors identified were categorised into four groups,

1. **SSCs' adopters:** this group involves individuals with the highest involvement with the process of interest. In other words, people directly involved in adopting SSCs, or the initial initiatives related to these councils, or that can provide relevant information about the process. Examples of these participants are SSCs' executives, business associations representatives, and HR managers or executives.
2. **Context stakeholders:** this group involves people that can provide information about the contextual conditions surrounding the adoption of SSCs and the TVET sector in Chile or information about the relationship of SSCs with the public sector. Particularly concerning the relationship with ministries and public agencies of education, work and economy. Examples of these participants are policymakers, civil servants, and TVET Advisory Council members.
3. **Employers:** this group involves single employers within the mining and wine sectors that are members of the SSCs or business associations and have been involved in implementing SSCs' initiatives. Examples of these participants are HR professionals working in mining, contractor (mining) and wine companies.
4. **TVET providers:** this group involves secondary and tertiary TVET providers that offer programmes oriented to the mining and wine sectors that have been involved in the implementation of SSCs' initiatives. Examples of these participants are principals of TVET organisations, TVET school directors, TVET programme directors and teachers.

The first two groups were mainly considered to obtain information about the adoption of SSCs, and the last two, information about the implementation of initiatives. However, during the conduction of interviews, it was noted that most participants provided relevant information for both areas of interrogation. Also, it is worth remembering that, for the

reasons previously explained, the second research question has only been answered by examining the cases of the Mining and Wine Skills Councils.

Accordingly, interviews for this study followed a purposive sampling strategy. This type of strategy is used when the researcher samples based on obtaining interviews with people relevant to the study's research questions and objectives (Bryman, 2004; Cohen, Manion and Morrison, 2011; Saunders and Lewis, 2012). In this sense, participants for this study were selected because they have been considered particularly informative about the adoption and implementation of SSCs by virtue of their professional role and experience with these bodies.

Moreover, a snowballing sample approach was taken, given that it was difficult to identify all the individuals matching this criterion (Bryman, 2004; Cohen, Manion and Morrison, 2011). Therefore, initial contacts were made with people identified through public sources (i.e. sectoral documents, policy documents), and these individuals were consulted about additional relevant actors to interview for the study.

Consequently, 83 potential participants identified through public sources and snowballing were individually contacted and invited to participate in the study. These actions resulted in 45 people that accepted to be interviewed. Additionally, five individuals joined some interviews as a suggestion from those who initially accepted to be interviewed because they played an important role in the phenomenon under study. This situation resulted in a final number of 50 participants in the study. The following sections will explain how participants were contacted and present more information about the interviews finally conducted.

Research ethics and gaining access

Ethical considerations should encompass the whole research process and are particularly important when the study involves human participants (Cohen, Manion and Morrison, 2011; Saunders, Lewis and Thornhill, 2016). This section discusses the ethical considerations concerned with the process of data collection, and particularly with the conduction of interviews. Further ethical considerations will be addressed when appropriate later in the chapter.

This study was conducted according to the ethical guidelines of the University of Glasgow, and ethical clearance was obtained from the College of Social Science ethics committee before collecting data. Thus, all interviews conducted for this study were with adults over 18 years old competent to consent to participate in the study.

Participants that accepted to be part of the study were given a *Participant Information Sheet* and a *Consent Form* crafted according to the University's ethical guidelines (both documents can be seen in Appendix 2). The information sheet contained information about the researcher, the aim of the study, overall topics covered during the interview, participants' rights, confidentiality and relevant contacts in case of complaints about the procedure. Likewise, the *Consent Form* detailed the participant's rights and had specific sections where the participant could confirm his/her agreement (or not) to participate in the study and the audio recording (or not) of the conversation. Both documents were written in the participants' language (Spanish), and copies were provided. Before starting the interview, sufficient time was given to read both documents and ask questions or clarifications.

It is worth mentioning that all the interviews conducted in the first round (March-June 2019) were face-to-face. Alternatively, interviews conducted in the second round (November-December 2019) were face-to-face, telephone or video. This situation is because this stage of interviews was conducted during an unforeseen period of social unrest in the country that forced some changes to the original plans of face-to-face interviews. Thus, in consideration of travel restrictions, safety, and time, all interviews with informants outside the capital city of Santiago were conducted by phone or video call. The same procedure previously described was taken regarding the Participant Information Sheet and Consent forms in these cases. However, consent was received written or verbally, according to the preference and convenience of each participant.

Regarding securing access, the first step involved the previous consultation with key stakeholders within the SSCs to assess if potential participants would be willing to participate in the study. This step was taken approximately one year before conducting the first interviews and was also crucial to deciding this research project's feasibility.

The first group of potential participants were contacted about three weeks before the first trip to Chile for data collection. This strategy allowed scheduling interviews as early as possible during the fieldwork period and ensuring sufficient time to contact participants obtained through snowballing. Accordingly, information to contact participants was obtained from self-disclosure of emails in public websites, personal contacts, the professional social network LinkedIn and snowballing. Potential participants were approached through individualised emails or LinkedIn messages and invited to participate in the study voluntarily. The initial message included details about the aim of the study, the

purpose of the interview, the time required from them and confidentiality. No payment or reward was offered.

Likewise, the second group of potential participants was contacted three weeks before the second trip for data collection and before the beginning of the social unrest period in the country. This meant that, while some participants agreed to participate in the study, scheduling specific dates with anticipation was impossible. In this regard, most interviews were scheduled during the same week that they were conducted. Also, particular sensitivity was taken regarding the timing and particular conditions of participants before contacting them to ask for an interview. For instance, no emails were sent on days of national strikes or disturbance.

Moreover, some strategies to gain access suggested by Saunders, Lewis and Thornhill (2016) were used and adapted according to this study's particularities. For instance, to ensure familiarity with the organisation or individual before making contact (Saunders, Lewis and Thornhill, 2016), I carefully reviewed the professional background of the potential participant, his/her organisation, and the relationship with the specific SSC. This action was beneficial to personalise the messages sent to potential participants and follow some of the participants' narratives during interviews.

Likewise, to overcome organisational or personal concerns about granting access (Saunders, Lewis and Thornhill, 2016), I asked for no more than one hour for the interview, and these were conducted in places and times convenient for the participants. Moreover, as mentioned, confidentiality was promised and mentioned when asking for the interview.

Additionally, as Saunders, Lewis and Thornhill (2016) suggest, it was important to facilitate replies when requesting access. For this purpose, participants were given several options to contact me, including my email, Chilean mobile phone (for phone calls and WhatsApp messaging) and LinkedIn messaging.

Finally, an action that I think was particularly helpful to obtain access to elite interviews was establishing my credibility as a researcher (Saunders, Lewis and Thornhill, 2016). For this purpose, I carried out the following actions,

- Emails/messages were sent with sufficient information about the research and myself as a PhD researcher.
- Participants received individualised formal emails from my University account so they could check my affiliation with the University of Glasgow as a PhD researcher.

- I updated my University profile webpage and made sure it was accessible if some participants wanted to consult it.
- I ensured that my LinkedIn profile in English and Spanish was updated and accessible for consultation.

Accordingly, all these strategies helped me to gain access to the interviews that informed this study. The following subsection provides details about the data collected through these interviews.

Data collected through interviews

The primary data collection for this research resulted in conducting interviews with 50 informants within the four relevant groups previously identified. This is translated into about 30 hours of interview time, 499 pages and 263,067 words of transcription. Table 3.3 presents a summary of the data collected from interviews separated by sector.

Table 3.3 Summary of primary data collected through interviews

Case/context	Nº of informants	Total interviews time (h:mm:ss)	Nº of pages transcribed	Transcriptions word count
Mining Skills Council	19	9:46:07	168	88,618
Wine Skills Council	13	3:45:13	70	30,538
Maintenance 4.0 Skills Council	6	2:37:11	47	24,377
National context	15	13:52:56	214	119,534
Total	**50(*)**	**30:01:27**	**499**	**263,067**

(*) The addition is fifty because three of the total informants are simultaneously informants for the Mining and Maintenance 4.0 Skills Councils' cases. Time and transcription numbers corresponding to these interviewees were assigned according to the time spent talking about each SSC.

It is worth noting that I initially planned to conduct a similar number of interviewees across the three cases. However, this plan was not possible due to each sectors' particularities and the access to interviews with some potential participants. Thus, to maintain the three cases, I decided to seek relevant information to answer the research questions in sources not initially considered, such as press articles. Also, several participants from the national context that could provide information about the SSCS were used to fill informational gaps.

The following paragraphs provide more details on the issues faced and their implications for each area of interrogation.

- **The adoption of SSCs**

Interviews to obtain data about the adoption of SSCs were conducted mainly with two groups of informants, SSCs' adopters and context stakeholders.

Interviews with SSCs' adopters involved SSCs' executives, business associations representatives, HR Managers and consultants directly involved in the adoption of SSCs. These interviews ran from approximately 20-60 minutes. Even when I expected to conduct one-hour interviews, some interviewees were extremely busy and started the interviews later than scheduled. However, they were very keen to talk about the SSCs and their experience with these bodies. I noticed that their answers tend to be straightforward concerning the motivations and events that explain the adoption of these bodies, and reflective responses were more challenging to obtain. Given the little time from participants, I had to compromise going in more depth in some answers to cover all the interview guides. More time from the participants for the interview would have been ideal but practicable impossible given their profile and professional activity.

Also, as Table 3.4 below shows, the Wine Skills Council and Maintenance Skills Council cases have a small number of informants compared with the Mining Skills Council. This situation reflects the smaller scale of these bodies and the reduced number of people involved in the process. Notably, in the Wine Skills Council's case, the number of relevant people involved adopting this body was small, and not all of them were available for interviews. In some cases, and despite several attempts to contact some individuals directly and through their assistants, I never obtained an answer from them. In other cases, the person accepted the interview but then never answered the emails to schedule it. Despite this situation, I managed to obtain a few internal documents from the SSC that complemented the information from the interviews. Also, the information provided by context stakeholders was vital to fill informational gaps and collect relevant data about this sector to answer the research questions.

Interviews with context stakeholders involved policymakers and civil servants within the ministries and public agencies of education, work and economy and other stakeholders involved in TVET. These interviews ran from approximately 30-120 minutes and mainly covered the relationship of these actors with the SSCs and allowed to obtain rich information about the contextual situation of TVET in the country from these interviewees' perspectives.

In this sense, given that most of these participants are representatives of the public sector, the information provided permitted to contrast the views expressed by the private actors involved in the adoption of SSCs. Table 3.4 below shows the details of the number of participants informing each case.

Table 3.4 Adoption of SSCs: breakdown of informants for sector and type

Sector Skills Council	Nº of informants	Type	Roles
Mining	9	SSCs' adopters	4 SSCs' executives; 2 Business Associations Representatives; 5 HR Managers; 3 consultants
Wine	2		
Maintenance	6		
National level	15	Context stakeholders	6 Policymakers; 2 Civil servants; 2 Board Members, 1 consultant and 1 academic involved in the TVET Advisory Council (2016-2018); 3 Representatives from the Tertiary TVET providers association

- **The implementation of SSCs**

Interviews to obtain data about the implementation of SSCs involved two groups of informants, employers and TVET providers. However, interviews conducted in the previous stage were also important for this interrogation area for two reasons. First, the information obtained served to understand the objectives of SSCs. Second, it served to understand the assumptions from SSCs' adopters about the reactions from employers and TVET providers that were contrasted with the data collected from these two groups of informants.

Interviews with employers involved HR Managers, L&D Managers and HR Practitioners working at mining, contractor (for the mining sector) and wine companies. These interviews ran from approximately 15-60 minutes. Resembling the case of SSCs' adopters, the initial intention of having one-hour interviews was limited by the restricted time available from the participants. However, interviews lasted on average 30 minutes which was enough time to cover all the themes of the interview guide.

Interviews with TVET providers involved providers with programmes oriented to the mining and wine sectors that have participated in some of the SSCs' initiatives. Accordingly,

for the Mining Skills Council's case, the participants interviewed were from secondary technical schools and tertiary TVET providers. Differently, for the Wine Skills Council's case, all the participants were from secondary technical schools. These interviews ran approximately 20-45 minutes which was enough time to cover all the themes planned. These interviews proved to be very challenging for me as a researcher. I noted that some of these participants tend to go in different directions with their answers and involve other participants unexpectedly during the interview. For instance, in an interview with a school director, the person decided to include some teachers to provide more details on the issue discussed. This was very interesting to gain information from different perspectives and because I was able to observe how the interviewees were able to reflect on the questions collectively. Indeed, when I sent a thank you email for the interview, I was thanked back because the activity fostered further discussions about their institutional and pedagogic activities. This made me reflect on how the act of research can encourage small changes and the responsibility that entails. The details of the number of participants informing each case can be seen in Table 3.5 below.

Table 3.5 Implementation of SSCs: breakdown of informants for sector and type

Sector Skills Council	Type	Nº of informants	Roles
Mining	Employers	6	1 HR Manager; 5 L&D Managers
	TVET Providers	4	1 TVET Principal (tertiary); 1 Program Director (tertiary); 2 School directors (secondary)
Wine	Employers	5	2 HR Managers; 1 L&D Manager; 2 HR Practitioners
	TVET Providers	6	1 School Director (secondary); 2 Program Director (secondary); 3 TVET Teachers (secondary)

Accordingly, the interviews conducted have been the main data source for this research because they allowed collecting primary data suited to the study's objectives. Documents have been an additional data source, which has provided secondary data that served to complement and contrast information from the interviews. The following section provides details of how documents were selected and the type of data collected.

3.6.4 Data collection through documents

This study considered documents to collect secondary data. Accordingly, some decisions were taken concerning the selection of these documents and their use to help answer the research questions. The following subsections explain these decisions and present the characteristics of the documents used.

Selection of documents

The two types of documents used in this study have been reports and press articles. Both are considered secondary data in the form of text material. Accordingly, no visual elements such as videos or photographs were considered for this study. Also, this study only considered official documents (as opposed to personal documents) and private and state documents (Scott, 1990).

As a first step, documents were selected considering as much as possible Scott's (1990) criteria to assess the quality of documents referring to their authenticity and representativeness. Thus, the documents' authenticity, which refers to their genuineness concerning soundness and authorship (Scott, 1990), was assessed in two ways. First, it was checked that all documents selected came from official sources (for reports) and recognised media sources (for press articles). For instance, sectoral reports were downloaded from the SSCs' website or directly obtained from SSCs' executives. It was checked that press articles were published in recognised national media, specialised media for each sector or SSCs' and business associations' websites.

Second, a review was performed to check that these documents were an original source from the organisations that publish them. For reports, this was applied by checking documents' authors, reviewing their websites and verifying this information during interviews. For press articles, it was noted that some of them were full or partial copies of an original press release from the SSC or business association. In these cases, the original press release was considered for analysis, and the author acknowledged was these organisations.

The representativeness of documents, which entails judging if the documents reviewed are representative of the total of relevant documents (Scott, 1990), was tried to be reached in two different ways. For reports, all of them from the SSCs and business associations available online were reviewed, and those that were not available were directly requested to these organisations. Also, the relevance of these documents was consulted during interviews with key actors.

For press articles, two actions were taken. First, a complete review of the news sections of each SSCs' and business associations' websites. Second, a thorough web search of articles related to the SSCs. The search stopped when there were no more new articles to review. However, it is worth mentioning that both the websites review and the web search were limited by the survival and availability of press articles online. Hence, the representativeness of press articles cannot be assumed as some relevant articles may not have been available by the time of the review.

Next, a second step was a classification to assess how these documents could help answer the research questions of this study. For this purpose, Finnegan's (2006) classification of direct and indirect information was used. This allowed deciding which documents served only to obtain direct information (i.e. factual content about events, dates, names) and which documents also served to obtain indirect information (i.e. ideas, discursive orientations). This classification meant that only documents that provided the two types of data were considered for analysis in conjunction with interviews. Thus, documents for analysis were selected because of their policy tone and importance in the SSCs' adoption process. Also, some press articles were considered for analysis because they contained public statements from key actors that I could not reach for an interview. Accordingly, the final decision of which reports and press articles should be considered for analysis was taken after the interviews.

However, it is important to mention that documents that only provided direct information are considered relevant for this study since they have helped identify crucial facts about the adoption and implementation of SSCs (e.g. key events, actors, outcomes) and locate these events in time. The following section presents information about the documents finally selected.

Data collected through documents

A total of 25 reports and 77 press articles were selected and reviewed for this study as an initial step. These documents comply with the criteria discussed above and provide direct information about events, dates, outcomes or key actors involved in adopting and implementing SSCs. However, as explained, not all of them were considered for analysis. Table 3.6 shows these differences, and Appendix 3 contains the complete list of documents analysed for this study.

Table 3.6 Summary of documents considered for review and analysis

Case	Documents reviewed		Documents analysed	
	Reports	**Press articles**	**Reports**	**Press articles**
Mining Skills Council	8	27	3	2
Wine Skills Council	10	32	5	3
Maintenance 4.0 Skills Council	6	18	6	4
National Context	1	0	0	0
Total	**25**	**77**	**14**	**9**

Regarding the reports, it is also worth mentioning the some of the documents selected contain detailed quantitative information that has not been analysed beyond what these data meant for the processes studied. This decision is because what has been considered critical to obtain from these documents are the ideas and discursive orientations behind those writing them and their effects on SSCs' adoption and implementation. This situation applies, for instance, to labour market intelligence studies containing quantitative information.

Likewise, a small number of press articles related to the total reviewed were considered for analysis. As mentioned, these specific articles were selected because they contain public statements from key actors that I could not interview, either because they never accepted the invitation or because it was impossible to obtain their contact details. It is worth mentioning that I acknowledge the limitations of these secondary sources to obtain the views from these actors. However, after a thorough review and considering information from some interviews with SCCs' adopters, I realised that press releases were considered to play a critical role in promoting the ideas behind SSCs. In this line, I thought that the information contained in these articles needed to be part of the analysis.

In summary, this section has presented the details of the primary and secondary data collected for this study. The following section presents how data was analysed.

3.7 Analysis and Interpretation of Data

This study followed a template analysis approach to qualitative data analysis, a type of thematic analysis based on a coding template (Saunders, Lewis and Thornhill, 2016; King and Brooks, 2017). A coding template is a "hierarchical list of codes and themes, which is used as the central analytical tool in Template Analysis" (Saunders, Lewis and Thornhill, 2016, p. 588). As a flexible type of analysis, template analysis may use a coding template built from the data or theoretically informed (King and Brooks, 2017). This study employs the latter option in line with a critical realist philosophy (King and Brooks, 2017).

The coding templates used in this study were based on the two analytical frameworks selected to guide this research. Thus, these templates included *a priori themes* based on the cultural political economy approach to study the adoption of SSCs and the concepts of the realist evaluation approach combined with a policy enactment focus to study their implementation. Given that these frameworks informed the sub-research questions, their use to inform the coding templates helped focus on the research questions while conducting the data analysis.

The analysis of data was performed separately for each case study. Subsequently, a comparison between cases was made to arrive at the final results of this research. The following sections detail the steps followed to analyse data and to compare cases in this study.

3.7.1 Qualitative data analysis

The overall steps taken to analyse qualitative data in this study followed the general guidelines provided by Saunders, Lewis and Thornhill (2016) and King and Brooks (2017) to conduct a template analysis in qualitative research. These steps were conducted separately for each case study. This approach means that all interviews and selected documents from each case study were analysed independently. This strategy served to obtain initial potential explanatory factors emerging in each case (for adoption and implementation) and to write initial single-case reports (only for adoption) that served to compare cases. The steps taken for the analysis of each case are described next.

1. Becoming familiar with the data

This step involved a full immersion in the data. First, I transcribed all interviews. This process helped me hear and remember the non-words situations that arose during the interviews and comply with ethical considerations regarding the people who could access data. Second, I read and re-read the transcriptions several times. For this step, a necessary

action was printing interviews and reading them on paper. This action allowed greater reflection and attention to specific issues that sometimes are bypassed when reading from a computer screen. As a result, I built an initial list of emerging codes from the data. Although this list was not directly used in the following step, it informed the coding process according to the initial template.

2. Clustering and coding data

The analysis started using a coding template informed by the analytical frameworks selected for this study (Table 3.7). For this process, *a priori themes* (analytical framework themes) were used as broad categories to cluster data related to each theme. This process was conducted using the qualitative data analysis software NVivo.

As Table 3.7 shows, an initial coding template with three main themes was used to classify data to analyse the adoption of SSCs. For instance, one of the first themes was *variation, problematisation or challenges the policy attempted to address*. Hence, each interview and selected documents were analysed, looking for potential accounts within the text related to this theme. In a sense, the theme was used as a technique to ask a question to the data (Corbin and Strauss, 2008). Similarly, this process was performed with the rest of the themes. This process resulted in clusters of *units of data* related to each theme, which could be a line, a sentence, a paragraph or a response (Saunders and Lewis, 2012). An issue that occurred in this stage was that some of these units of data were lengthy in text and could be associated with more than one theme. In these situations, I followed King and Brooks (2017) guidance on *parallel coding,* and I cautiously assigned the same or a part of these units to all the related themes.

Afterwards, I read, analysed and compared all the data units in each theme cluster and performed a second clustering according to sub-themes based on the cultural political economy framework. Hence, data were classified according to the possible association with each type of factor (e.g. material, ideational). Again, by using the technique of asking questions to the data (e.g. can this [argument, statement, situation, etc.] considered as a material or ideational factor?). This process resulted in small clusters of data related to each theme and sub-theme.

Table 3.7 Coding template used for data analysis

Area of interrogation and Analytical Framework	Analytical Framework Themes for first clustering	Analytical Framework Sub-themes for second clustering
Adoption – Cultural Political Economy	1. [variation] Problematisation or challenges the policy attempted to address. 2. [selection] Motivations and reasons for the selection of SSCs as a response to identified challenges. 3. [retention] Context, examples, events, conceptions pointing to SSCs' retention.	▪ Material factors - [material economic] - [material political] - [material institutional] ▪ Ideational factors [ideational]
Implementation – Realist Evaluation and policy enactment focus	1. [interpretation] Interpretations about SSCs. 2. [translation] Translations or reactions to SSCs. 3. [motivations] Motivations to respond to SSCs. 4. [context] Contextual circumstances.	Non-applicable.

Next, each small cluster was analysed to generate codes based on the data. This time, *in vivo coding* was used as a coding method. This method implies that codes, which can be words or short phrases, are generated reflecting the actual terms found in the data (Saldaña, 2016). Accordingly, in vivo coding was considered appropriate for this step as it was expected to capture and keep as much as possible the meanings given by participants (or used in documents) to the events and processes studied. Figure 3.2 illustrates the process described until this point.

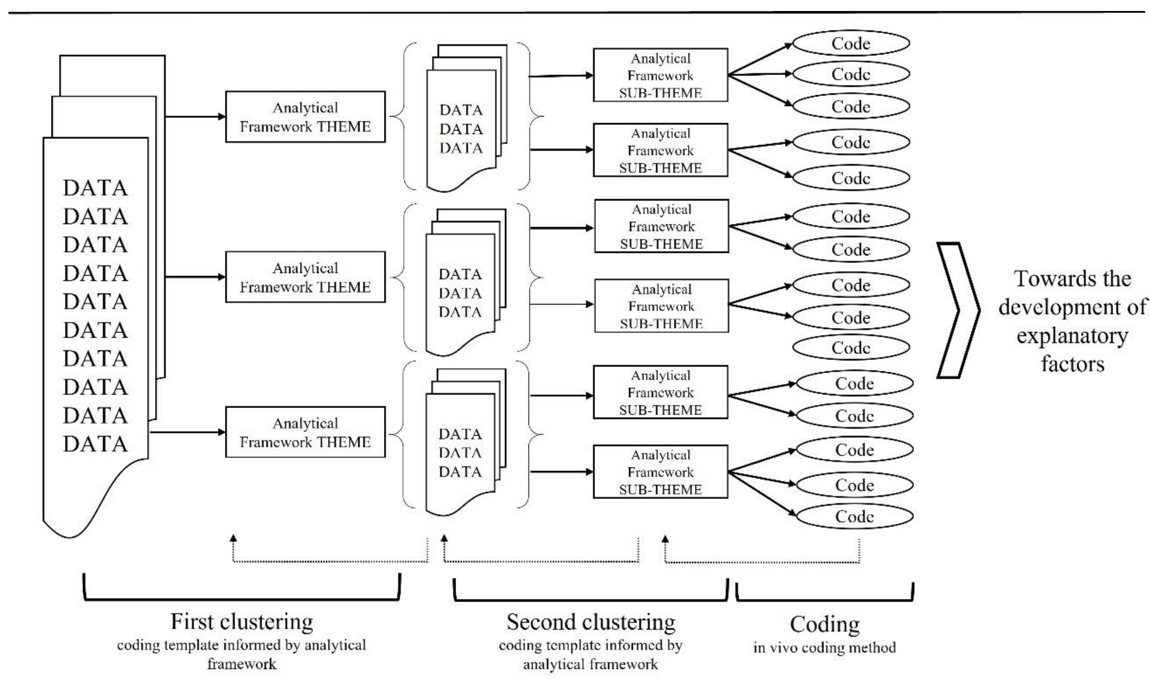

Figure 3.2 Template analysis: clustering and coding process conducted in the study

For the analysis about the implementation of SSCs, the process was similar to the one described above. However, the initial coding template was based on the concepts from realist evaluation and the policy enactment focus. Also, only one analytical framework theme level was used to cluster data and develop in vivo codes. The analysis was performed separately for the data collected by type of actor (employers, TVET providers). This decision is because, under the principles of the realist evaluation approach, an important aspect of this process was to keep track of the context and characteristics of the actors associated with the emergence of specific codes.

The next step was to analyse the codes to search for themes based on the data, which are considered explanatory factors in this study.

3. Searching for themes and recognising relationships

From the resulting codes of the previous step, a new analysis process began when the data contained within these codes were read, re-analysed, and compared to search for themes that could help answer the research questions of this study. This process was slow and entailed passing all the information to a new format (word document or PowerPoint slides) that helped me read, visualise, review and reflect on the relationships between codes several times to develop themes based on the data. For this process, a *pattern coding* method was used to group codes in a few themes containing data pointing out a similar explanation (Saldaña, 2016).

Accordingly, for the analysis of adoption, the analysis process was aimed to find themes that can be regarded as explanatory factors of the adoption of SSCs. As a result, I came up with a smaller list of factors for each case that could explain the mechanisms of variation, selection and retention of SSCs. These factors had names based on the data, although in some cases, they directly referred to common concepts found in the literature (e.g. skills shortages and gaps, market-failure).

In the case of implementation, the analytic process was aimed to find themes that could explain the different interpretations and reactions from employers and TVET providers to SSCs. In doing so, helping to understand how these actors enacted these bodies. These factors had names based on the data and, in some cases, were related to the compliance (or not) with the expectations from SSCs' adopters about these actors (e.g. use of standards, non-use of standards).

4. Refining themes

Particularly for the analysis of adoption, I wrote single-case study reports to refine themes and assess if the themes and relationships identified between them made sense. These reports involved a thick description of the cases and used several participants' quotes to illustrate the themes. This step was essential to refine the themes because of two reasons. First, the writing process served as an analytic and reflective exercise that, on several occasions, forced me to go back to the data to review meanings and my interpretations. Second, the reports informed discussions with my supervisors that helped question some of my interpretations and clarifying points.

Similarly, to refine the themes related to the implementation of SSCs, a document explaining the themes found with illustrative quotations was written and discussed with my supervisors. Here, I wrote one document separated by single-case sections. At the same time, each case section contained one subsection explaining the themes for employers and one for TVET providers.

Accordingly, the final themes resulting from this step were used as the base for case comparisons. The following section explains how the comparisons were performed to arrive at the findings of this study.

3.7.2 Case comparison

This study considered a multiple-case study design to study the adoption and implementation of SSCs by private actors in Chile. Accordingly, even when cases were analysed separately, a comparison was performed to search for similarities and differences, and ultimately common explanatory factors about the object of study.

This process followed the general recommendations from Stake (2006) to conduct multiple case study analyses. The following paragraphs explain how the comparison was performed separately by adoption and implementation.

Adoption: comparing Mining, Wine and Maintenance 4.0 Skills Councils

The first step to compare cases was to analyse each sector's themes (explanatory factors) concerning those found for the other sectors. Thus, the data findings associated with each factor were compared and contrasted between cases. This exercise enabled noticing that some themes pointed out a common issue, but its manifestation differed in each case. Thus, these themes were redefined according to the common issue. However, care was taken to acknowledge the differences between cases.

As a second step, single-case reports were re-written structured according to the analytical framework informing the study. Each case was described according to the variation, selection and retention mechanisms involved in the SSCs' adoption and the explanatory factors found in the analysis of each case. An essential aspect in this step was to incorporate the direct data identified in documents and press articles regarding dates and events. This action allowed me to locate findings in time and better grasp the processes involved.

As a final step, cases were compared by mechanism (e.g. variation). This strategy helped organise and focus the analysis on comparing the factors behind each mechanism and the processes involved. The first findings chapter shows the results of these comparisons, preceded by the results of each case study.

Implementation: comparing Mining and Wine Skills Councils

For implementation, comparisons between cases were made by each type of actor. Moreover, following the principles of the realist evaluation approach, the criteria for comparison were compliance (or not) with the policy expectations. In other words, what was compared was if the results found about the interpretations and reactions from employers and TVET providers were aligned with the SSCs' adopters' assumptions about these actors. The second chapter of findings discusses these comparisons and the findings for each actor and case.

In summary, this section presented how the data collected for this study has been analysed to develop this study's findings and answer the research questions established at the beginning of this chapter. Before presenting these findings, the last section addresses validity and reliability in qualitative research and the strategies followed to safeguard them.

3.8 Validity and Reliability in Qualitative Research

The assessment of validity and reliability in qualitative research has been a widely discussed issue in the literature of research methods with different perspectives coexisting concerning definitions and procedures to establishing it (Bryman, 2004; Cohen, Manion and Morrison, 2011; Creswell and Poth, 2018).

Creswell and Creswell (2018, p. 199) suggest that "qualitative validity means that the researcher checks for the accuracy of the findings by employing certain procedures, whereas qualitative reliability indicates that the researcher's approach is consistent across different researchers and among different projects". In the same line, some scholars have argued that validity and reliability in qualitative research need to hold different connotations to those considered in quantitative research (Bryman, 2004; Cohen, Manion and Morrison, 2011; Creswell and Creswell, 2018).

One prevalent option in qualitative studies has been considering Lincoln and Guba's (1985) concept of *trustworthiness* as an alternative criterion to validity and reliability (Bryman, 2004; Creswell and Poth, 2018). Trustworthiness is operationalised in four dimensions: credibility, transferability, dependability and confirmability, paralleling the conventional terms of internal validity, external validity, reliability and objectivity (Lincoln and Guba, 1985). This study has considered the trustworthiness criteria, and I have followed, were possible, the techniques suggested by these scholars to safeguard it. The following paragraphs discuss these dimensions and how they have been addressed for this research.

1. Credibility

Credibility parallels internal validity and entails demonstrating that the study's findings are believable (Bryman, 2004). Accordingly, it requires carrying out the research according to the principles of good practice and demonstrating the credibility of the findings by confirming the correct understanding of the multiple realities studied with those that construct them (Lincoln and Guba, 1985).

To ensure credibility, Lincoln and Guba (1985) suggest using different techniques, one of which is triangulation (Creswell and Poth, 2018), which was the technique used in this

study. Triangulation is a process carried out concerning data by which information derived from one source is checked against other sources, or derived by one method is checked against other methods or derived by one investigator is checked by other investigators (Lincoln and Guba, 1985). Specifically, in this study, triangulation of data sources and methods was carried out as follows,

- Triangulation of data sources: this technique was performed by involving different stakeholders as participants of this study. Mainly, interviews with context stakeholders from different backgrounds (public sectors, TVET consultants and academics) was key to check the accounts provided by private sector actors and vice versa.
- Triangulation of research methods: as previously mentioned, this technique was used by considering interviews, reports and press articles to validate different accounts.

Moreover, an aspect of particular worry in this research is that all data were collected in Spanish. Therefore, to report the findings for this thesis, I had to translate the relevant quotations into English. To overcome possible interpretation and translation errors, I had a peer debriefing session with a Chilean bilingual colleague. This session aimed to discuss the best way to interpret and translate slang and common phrases. Also, a random sample of anonymised Spanish quotes and their translations were checked by this colleague to detect possible mistakes and validate translations.

2. Transferability

Transferability parallels external validity. It entails providing sufficient descriptive data so other researchers can judge the possible transferability of findings to other contexts (Lincoln and Guba, 1985; Bryman, 2004). Thus, a thick description is necessary to ensure the transferability of findings (Creswell and Poth, 2018).

Accordingly, the main technique carried out to safeguard the transferability of this study has been developing a thick description of the cases and using extensive codebooks containing the data analysed in the original language of the participants (Spanish). Moreover, I kept notes taken during and after interviews in a dedicated notebook and records of the memos developed during the data analysis.

3. Dependability

Dependability parallels reliability and relates to the conduction of the research process ensuring that records are kept at all stages (Bryman, 2004). In this line, to safeguard

dependability, Lincoln and Guba (1985) suggest embracing an auditing approach to the research process (Bryman, 2004; Creswell and Poth, 2018).

Therefore, dependability for this study was safeguarded by keeping records of the messages sent to obtain access, data gathered, NVivo files and other documents used during data analysis. Moreover, in compliance with the data management regulations of the University of Glasgow, all digital data has been stored in password-protected files, and printed material is retained safe. However, it is worth mentioning that in compliance with the confidentiality agreed with participants, documents containing raw data cannot be revealed by the researcher or become available to third parties.

4. Confirmability

Confirmability parallels objectivity and is concerned with recognising that, despite complete objectivity may be impossible in social research, the researcher can show that he or she has not overtly permitted personal values to influence the research process and the study's findings (Bryman, 2004).

In this regard, confirmability was attempted by constantly reflecting on my interpretations and overall by holding discussions with my supervisory team concerning my assumptions, conducting interviews with knowledgeable individuals and, finally, the study's findings.

Also, initial ideas and study findings have been presented in seminars and conferences where I received comments and questions from other PhD researchers and experienced academics that helped me reflect and clarify assumptions and interpretations.

3.9 Chapter Summary

This chapter has presented the methodology adopted in this study. Accordingly, the research questions guiding this study on private-led SSCs in Chile were outlined, which are focused on two areas of interrogation: policy adoption and policy implementation.

Next, it was presented the analytical frameworks selected to guide the study further. First, it was argued that the cultural political economy approach was considered suitable for the study of policy adoption because it allows considering material and ideological factors to understand policy change. This was deemed essential for the study of SSCs, as they can be understood as a policy idea globally diffused by international organisations. Second, it was argued that a policy enactment focus combined with the principles of realist evaluation is a suitable analytical framework for this study to explain the implementation of SSCs from the perspective of key actors involved. In this regard, it was argued that employers and TVET

providers are key actors in the implementation of SSCs, and thus, to consider in this study. Likewise, it was discussed the critical realism philosophy embraced in this study.

Subsequently, it was explained why this study had been conducted according to a qualitative strategy based on a case study research design. It was argued that the relationship between context and the phenomenon studied and the possibility of observing many features operating simultaneously was an essential part of the decision. Likewise, a multiple-case study design was chosen to examine similarities and differences between sectors where private actors adopted SSCs. In the same vein, it was discussed why semi-structured interviews and documents were used as research methods to collect data.

In the following sections, it was presented how data was collected and analysed. Primary data was collected through semi-structured interviews with 50 informants within four relevant groups identified, including SSCs' adopters, context stakeholders, employers and TVET providers. In this regard, the strategies to gain access, ethical considerations, and challenges involved in conducting interviews were discussed. Secondary data was collected through two types of documents, reports and press articles. A total of 14 reports and nine press articles were considered for analysis. These documents were selected because they provide direct (factual content about events, dates, names) and indirect (ideas, discursive orientations) information relevant for the study. All the data were analysed qualitatively, for which it was conducted a coding template analysis informed by the study's analytical frameworks, followed by a case comparison.

Finally, a brief reflection was presented on the validity and reliability of the study considering the trustworthiness criterion.

The next chapter presents the findings concerning the adoption of private-led SSCs in Chile's mining, wine, and maintenance sectors.

CHAPTER 4: FINDINGS ADOPTION OF SSCs

4.1 Introduction

This chapter presents the findings concerning the research questions related to the adoption of private-led SSCs in Chile. Accordingly, this chapter addresses *why and how private actors in Chile have adopted Sector Skills Councils?* and the specific sub-research questions developed according to the cultural political economy analytical framework.

This findings chapter draws on documents and interviews data from the mining, wine and maintenance sectors. The main interviews informing these findings include those conducted with relevant sectoral actors involved in adopting each council (SSCs' adopters) and public sector stakeholders (context stakeholders).

The chapter begins with section 4.2, which presents a brief contextualisation of the three sectors to understand their differences and clarify particular aspects in some of the cases studied.

Next, section 4.3 is divided into three subsections and discusses the findings concerning the variation, selection, and retention mechanisms involved in the adoption of SSCs. Each subsection begins with a brief introduction, then a description of each case separately, and concludes with a cases comparison.

First, it presents the variation mechanisms originating the definition of the problem that motivated this adoption, offering the findings concerning the specific sub-research question: *how did ideas and material factors influence the emergence of the problem (variation) that SSCs supposedly attempt to solve in Chile?*

Following, it presents the findings concerning the selection of SSCs as the policy to address the previously identified problem. Thus, the specific sub-research question addressed is *how have ideas and material factors influenced the selection of private-led SSCs by employers and business associations in Chile?*

The last part of this section discusses the findings concerning the retention of SSCs once selected as a valid solution. Therefore, it addresses the specific sub-research question of *how private and public actors have retained SSCs in their regular practices in Chile?*

Finally, section 4.4 concludes by summarising the main findings presented in the chapter.

4.2 Description of the Sectors

This chapter presents the findings of the adoption process of SSCs in the mining, wine and maintenance sectors. These sectors were selected because they are the only sectors that have created SSCs that remain functioning to date. However, as will be noticed in the following sections, the three skills councils show significant differences in their final adopted form. For this reason, this section presents a brief contextualisation of the three sectors to provide a better understanding of their differences.

The first sector that created an SSC in Chile was mining. This sector has great economic importance for the country as its contribution accounts for 10% of the national GDP, and mining is one of the main economic activities in the country. Furthermore, Chile is the main producer of copper worldwide, and this mineral is the main product exported. Mining exports represent approximately 53.5% of total exports, and in the year 2018, they had a value of over US$ 40,000 million (Consejo Minero, 2018b, 2018a).

In contrast, the wine sector has a smaller economic impact in the country as its contribution accounts for 0.5% of the national GDP. However, wine exports play an essential role in the country's image, given that Chile is the fourth exporter country of wines in the world and first outside Europe. In this line, the wine exports account for 20% of the total agricultural exports, reaching in 2018 a value of US$ 2,000 million (VDC, 2018).

The third SSCs considered in this study is Maintenance 4.0. However, this skills council is not related to a specific formal economic sector, and a national business association has been the leading actor involved in its creation. This situation is because 'maintenance' entails a range of labour occupations related to mechanics, electricity, and electronics, which can be found in various industries. Accordingly, maintenance is considered essential for the industrial development of the country. However, there is no current data about its contribution to the economy (FCh, 2018).

Moreover, the economic differences between these sectors are reflected in their level of employment generation. In this line, it is estimated that the mining sector employs around 206 thousand direct workers (Consejo Minero, 2018b), while in the wine sector, this estimation is about 100 thousand (VDC, 2018). However, the estimates of indirect employment in both sectors are relatively similar, accounting for 566 thousand in mining and 500 thousand in the wine sector (Consejo Minero, 2018b; VDC, 2018). In the case of maintenance, there is no official data. Still, it is estimated that there are 45 thousand jobs related to these occupations only within the mining sector (FCh, 2018).

Likewise, a relevant factor to consider is the participation of companies of different sizes in the sector activity. For instance, while large-sized companies account for 97% of copper production (Consejo Minero, 2018a), it is estimated that large companies account for 44% of wine production (ChileValora, VDC and Interfase, 2017). Moreover, SMEs play a key role in the wine sector, representing 79% of total wineries at the national level (VDC, 2018). Once again, there is no specific estimation about the size of companies and their participation in maintenance. Nevertheless, maintenance occupations can be found in companies of all sizes, in sectors such as mining, construction, metal mechanics, manufacturing, forestry and energy (FCh, 2018).

Moreover, the characteristics previously mentioned also have effects on the different levels of organisation within these sectors. In this line, mining is a highly organised sector both by businesses and workers with significant political and negotiating power. For instance, there are nine associations between guilds and businesses (MINMINERIA, 2020a). The two main national ones are the National Society of Mining and the Mining Council. The National Society of Mining represents small, medium and large-scale private mining companies in metallic and non-metallic mining (SONAMI, 2020), and the Mining Council represents large-scale public and private mining companies in the business of metallic mining (Consejo Minero, 2018b). Also, contractor companies are organised through the Association of Industrial Providers for Mining, which represents mainly large-sized companies that deliver services and goods for the mining sector (APRIMIN, 2020).

Mining workers are organised through different single-company trade unions, reaching a level of unionisation of over 70% (Consejo Minero, 2018a). Moreover, two national associations unify the vast number of single-company unions and contractors workers. The Federation of Copper Workers brings together trade unions within mining companies, and the Confederation of Copper Workers represents contractors and sub-contractors[2] workers within the mining sector.

By contrast, the wine sector has six regional business associations and two national ones. Vinos de Chile, or Wines of Chile (WoC) by its English name, is the largest association and represents all-size companies. Also, the Movement of Independent Winegrowers represents independent small wine producers. In the case of workers, trade unions are established mainly at the company level or even at the vineyard level. Only recently, there have been

[2] A sub-contractor worker is a worker that fulfil labour duties within a company (main company) but he/she is contractually dependent of a different company (contractor company) (DT, 2020).

some efforts to create a sectoral organisation that unifies and represents workers within the sector. However, this initiative is still in its early stages and has not been formalised (Interferencia, 2019). In this sense, workers are significantly less organised in the wine sector and have less negotiating power than workers in the mining sector.

In the case of maintenance, given that it is not a formally established sector, no organisations represent businesses or workers. However, the Confederation of Production and Commerce (CPC by its acronym in Spanish), a national business association, decided to lead and reunite employers across different industries to discuss skill formation issues concerning maintenance. This organisation has significant power in the country as it formally represents the unified voice of businesses. Thus, they are an active participant in national discussions concerning different issues that may affect their activity.

Table 4.1 summarises some contextual differences between the three sectors previously discussed. Subsequently, the chapter presents the findings of the study.

Table 4.1 Overview of sectors

Feature	Mining	Wine	Maintenance
% of GDP	10%	0.5%	Not applicable
Exports value	US$ 40,000 million	US$ 2,000 million	Not applicable
% of exports	55% of the total country exports	20% of agricultural exports	Not applicable
Companies characteristics	• All size companies • Large-sized companies represent 97% of copper production	• All size companies • Large-sized companies represent 44% of wine production • 79% of wineries are SMEs	• All size companies in different sectors, including mining, construction, metal mechanics, manufacture, forestry and energy
Sectoral employment	• 206,000 direct workers (mining companies and contractors) • 526,000 indirect jobs • 8.6% of the country's employment	• 100,000 direct jobs • 500,000 indirect jobs • 13% of jobs in agroindustry	• Total numbers unknown • As a reference: 45,000 jobs (in the mining sector)

4.3 Description of Findings

This section presents the findings concerning the adoption of SSCs in three sectors in Chile. In line with the cultural political economy analytical framework guiding this part of the study, the findings are presented according to the three main mechanisms for policy change, variation, selection and retention.

Each subsection begins with a brief reminder of the mechanism analysed, followed by the description of findings for the Mining, Wine and Maintenance 4.0 Skills Councils separately. This order has been decided because of the year of establishment of each SSC. Moreover, as it will be noticed, this order allows understanding how the first skills councils established served as an example for the others.

4.3.1 Variation: economic challenges and recognising skill formation impact

Variation mechanisms emerge when a policy domain, in this case, skill formation, starts to be questioned due to particular circumstances, either of material or ideological nature (Jessop, 2010). Accordingly, this subsection presents the findings that explain how skill formation was problematised in the three cases studied. The subsection finalises with a comparison between the sectors, including the common factors identified that may have underpinned the variation mechanisms leading to the adoption of SSCs.

The mining sector

The first sector that decided to adopt a sectoral body was mining. The problem definition that explains the adoption of this skills council began in an unprecedented context of industry expansion. After several years of high investments within the sector, the mining industry was positively affected by a sustained historical period of high commodities prices. This period between 2003 and 2014, which is known as the *commodities supercycle,* strongly motivated the mining companies to increase their productive capacity (MINMINERIA, 2020b). Accordingly, during 2011 the high prices of commodities and the consolidation of mining projects enabled large-scale mining companies to reach the highest level of sales of the decade until that moment. Moreover, representing 15.2% of the country's GDP and 60% of total exports (Consejo Minero, 2012).

This situation produced a high demand for qualified people needed to work in the industry. Moreover, given the specialisation and technical knowledge required, mining companies struggled to find workers with adequate skills to fill their increasing vacancies. Particularly, technicians with the skills to operate different industrial equipment on the

mining sites and professionals within the maintenance areas, usually formed at the tertiary level (FCh, 2011).

As a result, each mining company tried to solve its recruitment problems of qualified people with different strategies. According to several interviewees, two of the most common strategies involved substantial investments in training for new non-qualified recruits and poaching trained workers from other companies by offering higher salaries. Thus, generating competition for qualified people that significantly increased industry salaries. Indeed, it is estimated that wages in the mining sector are 70% higher than the country average (Consejo Minero, 2018a). As the following quote from an HR professional within a mining company illustrates,

There were no [workers], imagine when there was the boom, the same thing I explained to you that relates to the price, when the price is high you have to extract the mineral fast to sell it at that price, because if the price goes down the same effort will pay less, right. So, that was the point, since the price was on the boom, you had to extract the mineral now, and now it is now! And the workers you needed weren't there, so you had to poach them from another company, and what was the result of that? That there was a pressure on labour costs because I was only able to recruit them [workers] by paying higher salaries, and if I pay more and the other [company] offers more again and pays more, but is the same person with the same qualification… so there was no sense, and it was generalised, not only for the operative positions, for managers it [the industry] ended up paying very expensive [salaries]. **[Participant 13 – Mining sector employer]**

Given these circumstances, an external actor, the Fundación Chile (FCh for its initials in Spanish), visualised the opportunity to influence mining sector employers to develop a coordinated solution to their skilled labour shortages problem. This is because this public-private organisation (co-owned by the Chilean state and BHP Billiton) provides consultancy and technical services for different sectors (Huss, 1991; MINMINERIA, 2021) and has long-term work in the skills policies arena. Moreover, this organisation had previously worked with the mining sector in a government pilot initiative to develop sectoral labour competencies frameworks (FCh, 2004). Thus, they had a deep understanding of the circumstances of the mining sector concerning labour competencies [Participant 3, Consultant working for the Mining Skills Council] and possibly of their willingness to continue developing this area.

Accordingly, the FCh managed to frame the skills shortages problem as a potential threat to the feasibility of future investment projects within the sector and, thus, to Chile's competitiveness as a mining country. For this purpose, in November 2010, the FCh co-organised a seminar where the idea of this problem was first discussed. This first-time event called 'HR Mining' was attended by top-level HR professionals working in the mining sector, academics from engineering schools and consultants. During the seminar, the FCh presented a prospective study of the sector's demand for people that showed alarming numbers about the potential shortages. Also, the HR Vice Presidents of leading large-scale mining companies in the country presented their projections of people demand considering the next five to ten years. This was a powerful exercise ideated by the FCh because it helped self-convince the mining HR executives that the increase in the demand for people and the recruitment difficulties was not only an issue affecting their companies but also the whole industry. As the following quote illustrates,

> *That seminar was very interesting because we all presented a very complex outlook regarding numbers [of demand for people]. I remember there were two peaks, one in 2014 and the other in 2018, 2019 in which clearly there was not, it was not going to be enough, and there we were three years before, three, four years before looking at that future that… for which we were not prepared at all!* **[Participant 1 – Mining sector employer and SSC's adopter]**

Moreover, this industry-wide problem's idea was further developed when the university deans of some of the most prestigious engineering faculties in the country discussed the issue and stated they could not offer a quick solution to the workforce problem affecting the sector. According to some interviewees, these scholars stressed how proud they were of their institutions' high academic standards and had no intention of increasing their numbers of students and potential graduates. In contrast, some tertiary TVET providers were more open to introducing changes for contributing to a possible solution. As one representative of a large national TVET provider at the tertiary level commented,

> *At that opportunity [HR Mining seminar 2010], I said, 'hey but, don't be sassy! You criticise the formative sector, that's ok. I am accountable for [name of the organisation] at least. But, you should organise the demand. In other parts of the world, there are Skills Councils and qualification frameworks, and the industry defines the profiles. Here we [TVET providers] have to be asking as a favour [to employers] to be listened to develop*

a profile. If you are really [worried]… then get organised!' **[Participant 8 – Tertiary TVET provider]**

In this line, the idea of a disconnect between TVET and the industry's, apparently, unknown needs began to appear like an issue to be addressed. Thus, the seminar presented several sources of evidence from different actors that were adding up to construct the problem.

At the same time, the seminar had the participation of an Australian consultant that presented their experience with the same problem of skills shortages and how they have managed to solve it by creating Industry Skills Councils. This coordination model seemed particularly interesting for the HR executives participating at the event which began to think about it as a possible way to address the now recognised industry-wide human capital problem. As one HR executive commented,

In practice, what happened was that in one of the seminar breaks, three or four mining companies HR managers we got together, in that time, we were called HR Vice Presidents. And we said, 'hey, we are with a common problem here, we could address it… keep addressing it individually, or we could see if there is an answer at industry level' **[Participant 2 – Mining sector employer and SSC's adopter]**

Moreover, some of these executives were particularly important to be convinced as they participated in the Human Capital commission of one business association. In this sense, they could play a more decisive role in bringing the idea of a human capital problem at the industry level to other companies through the business association.

In summary, the mining sector faced an economic expansion that increased their demand for skilled people, increasing the labour costs at the industry level. This situation was observed by a policy entrepreneur who used their technical expertise to show mining sector employers that a skill formation problem was affecting the sector's competitiveness. As a result, some mining sector employers began to hold the idea of a disconnect between TVET and the sector's skills needs that had to be addressed collectively. In this sense, it is possible to notice that material conditions alone were not enough to mobilise employers towards recognising a skills problem that needed to be addressed. Noticeably, the problem's construction required the framing strategies of an external actor, including the idea of a human capital crisis that was affecting the competitiveness of the sector.

However, the HR executives needed to have further information to be fully convinced that there was a real need to embark on a collaborative initiative. A few months after the seminar, there was a formal meeting between the FCh and the HR Vice Presidents of the five large-scale mining companies[3] that were first convinced about the problem. As a result of this meeting, the FCh persuaded these companies to pay for a study gathering information about the industry's skills demand and the estimated supply from the formal education sector. As will be discussed in the next section, the results and recommendations of this study were crucial for selecting an SSC as a policy solution.

The wine sector

The adoption of a skills council in the wine sector should be understood first by discussing the role and activities of its leading business association, Wines of Chile (WoC), concerning skills development. This association has the objective to represent and support the Chilean wine industry and comprises different work areas, including a Human Capital area. This area is responsible for supporting member companies with human capital-related issues. For this purpose, it administrates an Intermediate Technical Organisations for Training (OTIC by its acronym in Spanish). OTICs are organisations aimed to provide technical support to single companies concerning training. Thus, as established by the training and employment law, OTICs act as intermediary bodies between single companies and training providers.

In this context, variation mechanisms began in 2010 when WoC presented a Strategic Plan 2020 for the industry. The strategy established objectives based on a general vision, which was "to be the number one producer of premium, sustainable and diverse wines of the new world" (VDC, 2012, p. 10). However, this aspiration to grow in international markets was limited by the available people that the industry could attract. This is because the wine industry has an essential part of its production process in the countryside, and thus, it is highly dependent on the rural population as a source of workers. The demographic trends in Chile show that the rural population is continuously decreasing, representing 12.2% of the total country's population (INE, 2018). This situation is a challenge not only for the wine industry but also for the agricultural sector as a whole (Otero and Soto, 2013; Anriquez, 2016; ODEPA, 2017). In this line, labour shortages have been identified as one of the main challenges for the competitiveness of the Chilean wine sector (VDC and CCiV, 2014). As one interviewee commented,

[3] Namely: Anglo American Chile, Antofagasta Minerals, BHP Billiton, Codelco and Collahuasi.

The manpower, I think that also is one very important challenge because today at least in the countryside, in the agricultural sector, there is less manpower every time… there is a lot of competition. The wine sector has the fruit [sector] as a strong competitor, so it is more difficult every time. I would say this process started around the last six, seven years, and that has been progressively growing that every year is more difficult to find workers, especially for the vintage time when we need to have external workers as support. It is difficult, and that in the end has forced us to be more creative and to mechanise… there is a huge challenge there. **[Participant 21 – Wine sector employer]**

Moreover, the goal of sustainable production and competing in external markets entails complying with a series of regulations required by international markets, including those related to HRM. As a result, these aims triggered some considerations regarding training and certification for people working within the sector and the skills needed among potential new workers. As the following quote from a sectoral report illustrates,

The sector highlights the importance of the quality of wines it commercialises, for which it includes mechanisms for the traceability of products and standards of clean production. These procedures should be incorporated into the modules taught to TVET students at the secondary level. […] It is required better-qualified technicians with a good base of technical education and generic competencies. As well as with the capacity to learn and adapt to changes in the management systems, production and technology, and to have knowledge about certification and its protocols. **[Document 7, VDC and CCiV, 2015, p. 18]**

In this context, between 2010 and 2013, the WoC's Human Capital area paid greater attention to developing standards for the certification and training of labour competencies for workers within the sector. In this line, in 2010, a tripartite Sectoral Body of Labour Competencies[4] (OSCL by its acronym in Spanish) was established according to the labour competencies certification law. As a result, some sectoral occupational profiles for certification were established in 2012. Moreover, the emphasis of the business association in certifying workers took them to establish a second organisation dependant on the WoC's Human Capital area. Thus, *Certifica-Vino Ltda.* a certification agency established according to the certification law, was created and officially accredited by the National Certification

[4] Sectoral Bodies of Labour Competencies (OSCLs) are sectoral bodies that depend on the National Certification System for Labour Competencies (ChileValora). The aim of these bodies is to gather employers, workers and government for the development of competencies standards for certification of workers competences.

System for Labour Competencies (ChileValora) in 2013. As a result, 6,420 workers had their competencies certified according to sectoral standards by the year 2016 (VDC, 2016).

However, while certifying workers was one crucial goal of the business association's Human Capital area, attracting people to work in the industry was still challenging. Specifically, they claimed it was difficult to recruit people during the vintage season when most agricultural sectors needed people to work in the countryside. In this line, WoC's Human Capital area began to develop relationships with technical education institutions to attract youth to the sector. Because of this work, this area of the business association identified problems of relevance in education and training programmes. Specifically, they noticed a disconnect between the education and training offer and the skills requirements of the industry. As one interviewee commented,

> *We were—and before creating the Skills Council—developing work with tertiary education institutions, and we saw that actually TVET programmes not always responded to the needs [of the industry]. And this is a changing world where new technologies are being implemented, and there is more competitiveness. We have to be more productive.* **[Participant 20 – Wine business association representative and SSC's adopter and executive]**

Thus, labour shortages added to issues of relevance in education and training detected by the Human Capital area of WoC were perceived as a limitation to the expected development of the industry. In this sense, concerns about the quantity of potential workers and their skills became equally important for these actors. As one sectoral document highlights,

> *During the last years, the lack of qualified workforce arises as a factor that seems to limit the sustainable growth of the industry and the development of the territories where the production of wines is held.* **[Document 5, VDC and CCiV, 2014, p. 10]**

In this context, how to address skill formation to support the industry's expected growth became a source of problematisation inside the business association. Moreover, at that time, the professionals within the WoC's Human Capital area learned about SSCs and the mining sector example. Thus, they began to promote the idea that coordinated actions from the industry were needed to solve the labour and skills shortages problems affecting the sector.

In summary, the wine sector shared with the mining case the predominantly economic nature of the problem as issues with labour and skills shortages were regarded as a limitation for the sector's expansion plans. However, in this case, the reaction was more proactive than

reactive. This problem was recognised as a result of an industrial strategy and the work of the business association's Human Capital area. In this sense, the key actors raising the problem were the professionals within this dedicated area of the business association. Thus, unlike the mining sector, internal actors were able to relate the material conditions affecting the sector with the idea of a disconnect between TVET and the sector's skills needs. However, the idea of the need for coordinated action from the industry was taken from the external example of SSCs and the mining sector. This issue will be further discussed in the next section.

The maintenance multisector

Similarly to the mining and wine sector cases described above, mainly economic factors led to the adoption of an SSC for maintenance. The definition of the problem began in a context of concern within the Confederation of Production and Commerce (CPC by its acronym in Spanish) regarding the factors affecting the country's growth. In this context, one of the main worrying factors was the low level of productivity affecting the Chilean economy.

Because of this concern, the CPC established a Productivity Commission comprised of business sector representatives from different industries. As a first step, the commission appointed the consultancy company McKinsey to develop a study to identify critical areas affecting productivity and suggest possible work areas where the business sector could take action. Among the work areas identified by the study, the development of human capital was recognised as critical. As a business association representative explains,

> *It was assumed that productivity was a critical factor at that time because the growth was continually going up. However, the issue of productivity, especially all related to the productivity of factors. I forgot the name of the specific factor that involves human capital, that [labour productivity], was an area of opportunity to address the growth opportunities or enhance the issue of productivity in Chile.* **[Participant 33 – Business association representative and SSC's adopter and executive]**

From this point of departure, the CPC Productivity Commission established a discussion process involving private sector stakeholders from different industries, consultants and academics around nine areas of work. In the case of the human capital skills development area, the discussion group also included representatives from the two biggest private providers of tertiary technical education in the country and the executive manager of the Mining Skills Council. Additionally, a representative of the FCh was invited to collaborate in the discussion group occasionally.

The process resulted in an official document from the CPC Productivity Commission presented in April 2016. The report, *En Chile Sí Podemos* (In Chile Yes We Can), provided a diagnosis from the business sector's actors about productivity issues in different areas. Concerning human capital skills development, the document stated that,

The development of human capital increases productivity and competitiveness; it favours growth and allows reaching growing levels of well-being for all Chileans. However, even when our country has achieved great advancements in the last decades, labour productivity is yet far away from the one observed in developed countries and even from countries with similar income per capita like Portugal, Estonia and Greece. **[Document 9, CPC, 2016, p. 14]**

Likewise, with a clear policy tone, the document offered several proposals to address the productivity issues detected. In this line, clear delimitations for the scope of the recommendations concerning human capital development to enhance labour productivity were established. The document suggested that this area should be addressed with actions mainly directed to enhance TVET. Noticeably, the narrative began to be directed to the problems generated by the disconnect between the TVET system and the economy's skills needs, such as labour and skills gaps. Thus, it was perceived that skill formation issues were a barrier to productivity and a limitation for the economy's growth. Moreover, suggesting that actions should be taken from the private sector to address these limitations. As one interviewee commented,

Given the gaps that were discussed at a certain moment, that was maybe not a diagnosis so agreed at that time, perhaps it was not that publicly consented, but there was a starting diagnosis regarding the existent gaps in education, training, also in the recruitment of human capital for companies. So, given that conversation that finally emerged from there [HC board within CPC Productivity Commission], it was recognised as a country necessity to organise the productive sectors towards this seeking… this delivery of information as a way to be able to be linked with the world of formation and with the public world, particularly. **[Participant 33 – Business association representative and SSC's adopter and executive]**

Accordingly, the business association, particularly the area responsible for coordinating education and training initiatives and human capital discussions, embraced the idea of a generalised skill formation problem affecting the economy and decided to take action. Thus, as will be examined in the next section, from this moment began the development of an

agenda within the CPC aimed to seek possible solutions that could impact skill formation at the national level.

In summary, the case of Maintenance 4.0 Skills Council shares with the mining and wine cases the economic nature of the factors that originated the problematisation leading to adopting a skills council. However, in this case, a concern with low productivity and its effects on economic growth led to examining the role of skill formation in the problem. In this line, TVET was identified as an area where work could be focused, particularly to address labour and skills gaps in the economy. Noticeably, internal actors within the business association drove the process. Still, similar to the mining sector, an external actor, McKinsey company, first pointed to skill formation as one area of concern. Moreover, subsequent involvement of consultants from the FCh and the Mining Skills Council possibly reinforced the idea and began introducing the model of SSCs as a policy solution. In this line, possibly because of the involvement of external consultants with their own agendas and the top-down nature of the process, material and ideational factors interacted from the very beginning in the problematisation of skill formation as an area to be addressed.

Comparing variation across the three sectors

As noticed, the three cases discussed show some similarities concerning factors underpinning the problematisation of skill formation that lead to adopting private-led SSCs. However, it is possible to note that the specific sectoral circumstances, processes and key actors participating differ among sectors.

First, two common material factors identified refer to the *existence of economic challenges* and their relation with *labour shortages or skills shortages and gaps*. In the three SSCs, variation mechanisms were driven by economic challenges affecting their industries, directly associated with labour and skills issues. However, the specific circumstances for this situation differed among cases. In mining, an economic boom of the activity and a subsequent rise in the need for qualified labour turned into a situation where labour and skills shortages began an industry problem. For the wine sector, the plans for industrial expansion were seen limited by labour shortages, mainly of low skilled workers for the countryside production processes. Moreover, external pressures regarding certifications and standards required to improve the exporting position of the Chilean wine industry pushed for further attention to the skills of current and potential workers for the industry. Finally, in the case of maintenance, the decreasing economic growth of the Chilean economy pointed out the

insufficiency and inadequacy of people's skills as one of the causes of low productivity affecting the economy.

Second, in the three cases, SSCs' adopters realised that these *human capital issues threatened the sector (or economy) growth expectations*. Moreover, the main problem considered was related to the *disconnect between TVET and industry skills' needs*. In the three sectors, employers and business associations perceived that the different skill formation issues affecting their sectors were threatening their activity and began to review the importance of people's skills for the competitiveness and growth of their sectors. In doing so, these actors embraced a renewed discourse regarding the need for changes to the TVET system so skill formation could adequately respond to the economic challenges of their sectors. However, different actors in each sector triggered the connection between the material economic conditions and the idea of a relevant problem needing attention from industry stakeholders.

As noticed in mining, an external actor—the FCh—was the key actor influencing sectoral employers towards their awareness of an industry-level problem and the need to take coordinated actions to address it. The FCh's consultants used their knowledge about the sector's economic issues to present a compelling case of a sectoral problem and the consequences for competitiveness. Differently, in the case of wine, the key actor involved was internal. The professionals within the business association's Human Capital area were the main actors who acknowledged a problem with skill formation affecting the industry that could threaten the expansion aims of the sector. In this line, the idea of solving the disconnect between industry and TVET became a central issue to address. However, there was an indirect influence of the FCh. As will be further explained in the next section, the idea that the industry can lead a solution for this issue was taken from an SSCs' agenda influenced by the FCh. In this line, the example of the Mining Skills Council was seen as a national example of these bodies. In the case of maintenance, an internal process within the business association exposed the skill formation problem. However, this issue was initially signalled by an external actor, McKinsey consultants, whom the association commissioned to analyse the economy's productivity problem. In this line, the conceptualisation used pointed to a systemic problem of skill formation. Thus, the stakeholders involved in this case were more direct in arriving at the idea that changes to the TVET system were essential to respond to the economy's needs. Moreover, similar to the case of the mining sector, the participation of FCh's consultants and a Mining Skills Council's representative in initial discussions possibly contributed to the idea that action from the business sector was feasible and needed.

Thus, it is possible to notice that directly or indirectly and with different intensities, *SSCs' adopters in the three sectors were influenced by the FCh*.

Finally, from the above discussion is also evident that a common factor that may explain why these specific sectors adopted SSCs refers to the *existence of an internal person or group with interest in human capital issues within the business associations*. In the mining sector, HR Managers or Vice Presidents within mining companies were targeted by the FCh to become aware of the problem. Moreover, as the following section will further explain, these particular people were active Human Capital Commission participants within one of the central sectoral business associations. Thus, it can be noticed that these professionals were particularly interested in people-related issues affecting the industry. For the wine sector, the Human Capital area of the business association (WoC) was the leading actor. Noticeably, because it is part of their job, these actors may be particularly interested in highlighting the relevance of their area of work. Similarly, in the case of maintenance, the Human Capital Development discussion group within the CPC Productivity Commission of the business association and the permanent presence of professionals within the business association responsible for leading discussions about education and training have been essential actors to drive the process.

Accordingly, Figure 4.1 illustrates the common factors found in this study concerning the variation mechanisms involved in the adoption of private-led SSCs in the mining, wine and maintenance sectors in Chile.

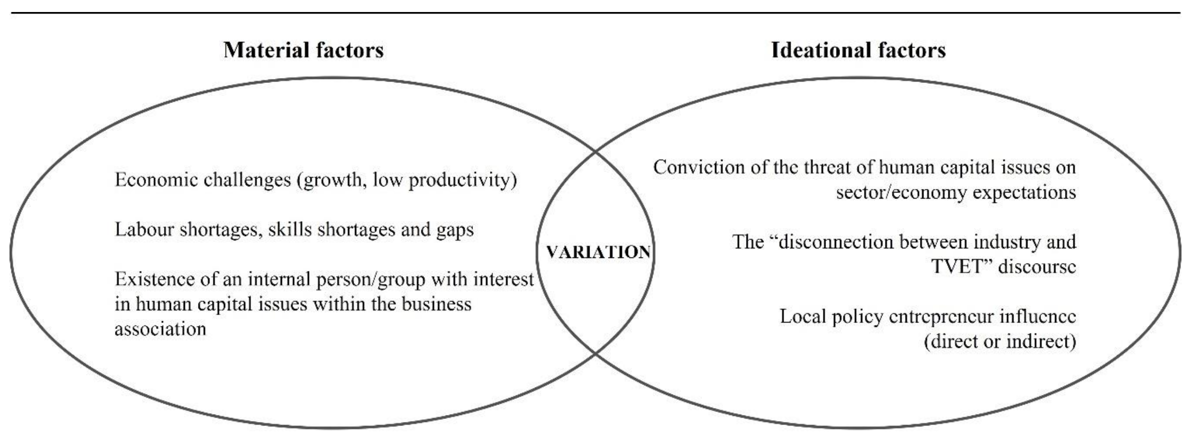

Figure 4.1 Variation: common factors identified in the private-led adoption of SSCs Chile

4.3.2 Selection: a market logic paradigm for TVET and the key role of business associations

The selection mechanisms involve the preference for particular ideas to explain events and legitimise actions (Jessop, 2010). Accordingly, this section will describe how private actors identified and explained the causes of the skill formation problem and proposed and selected the SSCs model as a valid policy solution. In doing so, this section presents the key events, processes, and actors involved in selecting SSCs in the mining, wine and maintenance sectors separately. The final part of the section compares the three sectors, highlighting the potential explanatory factors underpinning selection mechanisms.

The mining sector

In November 2011, one year after the seminar that initiated the concern among mining companies about a possible human capital crisis, the FCh issued the study analysing the labour force in the mining sector. The report had several messages that strongly influenced the discourses of HR executives towards the adoption of an SSC.

In this line, the report began reinforcing the idea that the lack of qualified people and its impact on labour costs should be regarded as a critical risk for the industry's sustainability. Moreover, it was emphasised that urgent actions to address this problem were needed. As the following quote exemplifies,

> *To ensure the sustainability of the large-scale mining during the next decade is essential to implement structural changes, both in human resource practices within the mining and contractor companies and in practices within the education and training system, to permanently ensure the availability of labour force required within the sector, in quality and quantity.* **[Document 1, FCh, 2011, p. 10]**

Also, the report deepened the idea of a disconnect between the skills developed through education and training and the ones the mining industry needed. Likewise, it pointed out the lack of organised information about quantity and profiles needed to work in the industry to deliver to education and training providers. This informational issue made greater sense among HR executives within mining companies as a logical explanation to understand the origin of the problem. Accordingly, terminologies such as market failure and information asymmetries became part of the common discourse used among SSC's adopters. To illustrate,

Back then, the idea was to pass the information [occupational profiles required] to educational organisations. So, they can participate in this chain because they are the ones who, let's say 'take' people, and then they train them. Then they are supposed to get them ready to enter into the mining industry. That was an important issue that was to address what was called information asymmetry, meaning that we had information the [technical] education organisations did not have. If we give them that [information] it would allow them to readjust vacancies, programmes, curriculum. **[Participant 1 – Mining sector employer and SSC's adopter]**

Thus, the influential report delivered by the FCh to mining sector employers successfully offered a compelling explanation about the causes of the problem. The idea of information asymmetries affecting the education and training *market* was enough to convince employers that action was needed. In this regard, it can be said that the natural intake of this reasoning to understand issues on education and training can be explained by the neoliberal model deeply established in Chile since the 1980s, which emphasises market practices in all aspects of economic and social life, including education and training. Moreover, this rationality could be backed by the fact that many education and training providers are private and, in some cases, for-profit.

Hence, following the same line of reasoning, the report contained several short and long-term recommendations emphasising that the industry is essential in providing valid information for education and training. In this line, one of the main recommendations pointed to joint action by adopting a 'centre for workforce development for the large-scale mining' formed by mining companies. The idea of coordination among employers to 'organise the demand' was already discussed among HR executives during the seminar where the problem definition began. However, the suggestions contained in the report offered a more detailed idea of how this coordination may work. Notably, the role of employers was stressed as it was proposed that they should take the lead in the initiative. To illustrate,

The large-scale mining is today facing an inflexion point in this issue [high demand of people, lack of qualified labour and rising salaries]. If the current tendencies remain, the graduates from the current education and training system will not be enough to satisfy the demand, which makes vital the proactive—and very fast—action from the main industry actors. **[Document 1, FCh, 2011, p. 16]**

This consideration meant a paradigm change in the role that industry, mainly business as employers, should play in skill formation. In particular, because it was suggested to move from a passive role to a more active one where resources should be assigned to develop and deliver organised information for TVET providers. In this line, part of the framing strategies of the FCh to convince employers about this paradigm change was pointing out the inability of the TVET system to solve the problem and the current state institutions concerning skill formation.

Indeed, interviews with SSC's adopters show their perception concerning the state's difficulties to undertake an initiative like the one required by the mining sector. They considered that the public sector could not act with the urgent speed needed by mining companies. Again, possibly a consideration that could be explained by the weak role of the state established in the Chilean neoliberal model. As one interviewee commented,

The thing is that in order to install a new entity in the government, you have to promulgate laws, you have to define a budget. I mean, it was a complexity that maybe went beyond what certain actors could manage. Besides, it was probably going to be more a lock. I mean, not a lock but a postponement, and it would not allow us to proceed quickly, which was what we wanted because we were seeing that 2014 was approaching, it was around the corner. And we had to progress [...] with the development of all the material and programmes to convince the formative organisations to participate. Thus, there was little time and a lot to do, so the truth is that we followed the most formal way possible but with speed. **[Participant 1 – Mining sector employer and SSC's adopter]**

Additionally, a final powerful message developed within the FCh's report was that developing coordinated action among industry actors towards skill formation will benefit multiple stakeholders. As several interviewees commented, sectoral actors involved in the adoption of the mining skills council tend to think that providing information about skills needs can positively impact the relevance and quality of education and training, which, according to them, is beneficial for all. In this line, the delivery of information to better inform decision-making was considered key. The industry could get better-skilled people, the education and training providers could adjust their offer according to relevant industry needs, and students could make better decisions on what to study considering better employability. This discourse is remarkably straightforward within this sector, both in SSC's documents that directly describe the primary beneficiaries of the initiative and how they can benefit from it and in stakeholders discourses. To illustrate,

I mean this [SSC] emerges from the industry because of real and valid interest of having more trained people but also has benefits for the people that in the end, they will be… they are going to improve their employability, their opportunities. The [Technical] Training Centres, in general, will see an alignment, or they will find it easier to be aligned with what requires the world of work. Thus, if there is a better conversation between formation and the world of work is something that is extremely beneficial not only for industry but also for the [Technical] Training Centres. Well, the students may be able to choose better [programmes] and the state too. The state invests a lot of resources in training. **[Participant 5 – Mining SSC’s former executive]**

Therefore, for the five large-scale mining companies involved, the evidence presented in the study prepared by the FCh was compelling in making a case for adopting an SSC. However, convincing more mining companies to join the initiative was key given the high levels of investment forecasted and the need for being as fully representative of the sector as possible. In this endeavour, the stakeholders involved considered that ensuring the support of a business association was essential. Given that the five mining companies were all members of the Mining Council, this specific business association was considered the most suitable to take the SSC as part of its structure. This decision meant undertaking a process of convincing key top-level executives within the Mining Council that creating this new structure was urgently needed for the sector. This process that took place around November 2011 and September 2012 involved several meetings and discussions with the president of the business association and the members of the Human Capital commission within the association. As one stakeholder involved in the process commented,

The other important challenge was finding where to park or place the Mining Skills Council because it could not be inside one mining company. In fact, in Australia they are government entities, and, here, the government would not take it as part of its structure. So we had long conversations and very rich conversations with the Mining Council of which we were, obviously, we were part. I was the Vice President of the Human Capital Commission, so we had a direct line with the chairman [of the business association]. And we managed to make him understand that this was a huge opportunity for the mining industry, and he helped us a lot to invite and get the participation of the rest of the Mining Council members to be part of this project. **[Participant 1 – Mining sector employer and SSC’s adopter]**

As stated in the Mining Council annual report of 2012, in January 2012, the study results were presented to the Human Capital commission of the business association for its analysis. Following, in March 2012, a technical visit to Australia and New Zealand was organised by the FCh to learn more about their training model where industry plays a vital role through a system of sectoral or industry bodies. This trip included members of the mining business association, authorities within the Ministry of Work and Social Security and other interested stakeholders. According to some interviewees, the visit was key for convincing the business association to support the idea of an SSC for the sector. Furthermore, referencing these councils as a good international practice became common discourse among sector stakeholders to legitimise the selection of this particular model to solve sectoral skills problems.

In this regard, the FCh's influence not only to introduce the idea but also to find ways to tailor it to the mining context seems to have been a crucial driver. Given that the action of the FCh to convince sectoral stakeholders was specially targeted to show the case of countries recognised for their mining operations, such as Australia and Canada. To illustrate,

> *So that was the first step of saying, 'let's see how this is being handled'. Well, the Fundación Chile was key, let's say in all this process of understanding, and studying, and inviting, and getting meetings in Australia, tours with authorities from the formative world, from the world of work, from companies, from human resources, from innovation centres.* **[Participant 4 – Mining SSC's former executive]**

Particularly Australia was conceived as an example of how the skills formation system was enhanced by creating SSCs and how the Australian mining sector managed to solve similar problems. Thus, it seems that this thoughtful selection of reference countries served as a powerful facilitator to motivate Chilean mining stakeholders to be in line with the human capital development practices of their global competitors. As one interviewee commented,

> *A few years before, Australia went through the same situation of an important deficit of workforce, of skilled people, and they have addressed it with a tripartite vision… businesses, training organisations and government. So the [SSC] model seemed extremely interesting for us, and from there, it started a number of reflections that ended up in creating the Mining Skills Council.* **[Participant 2 – Mining sector employer and SSC's adopter]**

At the same time, the FCh was careful in considering the differences between the Australian reference model and the Chilean situation. In this line, it was acknowledged that

the prevailing institutions of TVET would limit the action of an SSC created in Chile. However, possibly given the economic power of the mining sector, it was considered that adopting an SSC model of organisation could have the expected impact on TVET provision needed for the industry. As one representative from the FCh commented,

There is a no less important issue and has to do with being very conscious of the Chilean system of incentives. I mean, systems can be pulled in normative and incentives terms. In normative terms, we said we could do our own sectoral norms because it [mining sector] is a highly concentrated sector it is possible to pull from the demand. But, in terms of incentives, no, because the incentive is through vouchers in the Chilean formative system. You give a voucher to students so they can go to study and choose the programme they want. […] In Australia, the advantage they have is that the state says 'I pay everything, but for paying you have to adjust, you have to adjust to the framework, and the one it doesn't [adjust] will not be within the incentive system, and to be within the framework you have to be within the quality system'. Thus, they pull everything from incentives, which is not happening here [Chile]. So, we did a model, a sectoral qualifications framework, […] where we were able to influence, and how we could influence was constrained by the Chilean system of incentives and the regulatory framework of the formation system. **[Participant 3 – Consultant working for the Mining Skills Council]**

Based on these antecedents, between March and September 2012, the business association officially decided to support the SSC initiative. This support involved convincing more mining companies to be part of the SSC and hiring a manager to take exclusive responsibility for the skills council. As one interviewee commented,

There was much work from the Council [Mining Council] with the companies' presidents because of this thing of the investment. As I tell you, it was needed that they [companies presidents] get in and were convinced, and they understood at that level um… what it was, what were the risks, what was the country impact, what was the country benefits and not only the cost. And how this was forward-looking, how this was going to maintain in time. **[Participant 4 – Mining SSC's former executive]**

Finally, in September 2012, the newly appointed SSC manager began his work as an official staff member within the business association. During the same month, a formal agreement establishing the new employers-led Mining Skills Council (CCM by its acronym in Spanish) was signed between mining companies. At the same time, a work structure was defined, comprising two main areas of decision-making. First, an Executive Committee

responsible for taking strategic decisions, including the HR Vice Presidents of member companies and a Skills Council manager hired by the Mining Council. Second, a Technical Committee comprised of HRM professionals working at the operational level within mining companies. Besides, the FCh, specifically the team working at the Centre for Innovation in Human Capital (Innovum), was hired as a technical advisor and implementation agency to execute the skills council's initiatives. Accordingly, this legal step was the beginning of a formal structure to address skill formation within the sector.

In summary, the selection of an employer-led SSC model in the mining sector resulted from an almost one-year process of analysis and discussion among sector stakeholders. This process involved considering the national conditions of the TVET system and the state's role, and it was driven by the FCh, who worked with a group of employers and the sector business association to convince more employers to support the initiative. In this endeavour, ideas related to information asymmetries and the role of employers to solve this issue, among others, related to the benefits of this initiative, were decisive to convince private actors.

The wine sector

At the same time that the WoC's Human Capital area began to wonder how to best address the development of people with the skills needed within the sector, the Ministry of Work and Social Security (at that time) began to develop an agenda with a possible answer to the problem.

As a result of the trip to Australia and New Zealand and influenced by FCh and the mining sector, the Ministry of Work and Social Security began to promote an SSCs agenda. Notably, the development of SSCs was encouraged to provide information about the skills needs of different industrial sectors. Also, in January 2013, the Ministry announced a cooperation agreement with the New Zealand government to promote an agenda of human capital development for the agri-food sector, which included creating an SSC. Later, in June 2013, the Ministry announced a law proposal to establish skills councils as part of the training system.

Consequently, the model of SSCs promoted by the Ministry of Work and Social Security and the example of the Mining Skills Council was attractive to WoC's Human Capital area. Particularly considering the leading role given to the industry in the definition of what is required of the education and training programmes. This is because this idea was aligned with the consideration among professionals within the Human Capital area that the disconnect between TVET and the sector's skills needs was due to informational issues and

the lack of an institutional structure to pass information from industry to TVET providers. Moreover, they considered that the current formal institutions established by the state to address skill formation were not suitable to support a more active informational role from employers. To illustrate,

> *The thing is that the other alternatives were already in place. There was the OTIC. There was Certifica*[5]*. There was the Ministry of Work. There was the Ministry of Education. There was SENCE, ChileValora, etc. But we felt that it was necessary, or we believe that it was very important that the industry define the requirements and pass that information to the people responsible for education and training. If the mining industry, agriculture, etc., can provide these guidelines, that information, the investment that is done in training, [and] certification will be more pertinent, and there will be a better use of resources. And the educational organisations will have better… greater clarity regarding, what professions, what occupations [are required by industry] and how to really give opportunities to youths to develop a career that, will enable them to find a pathway […] and no this [situation] that we have, sometimes, in Chile [where] there have been created professions that do not, no… they are not useful for anyone, they have no recognition, so there is a commercial thing here that is complex.* **[Participant 20 – Wine business association representative and SSC's adopter and executive]**

Likewise, as noticed in the quotation above, it was considered that adopting an initiative that allowed the flow of information from industry to TVET providers was beneficial for multiple stakeholders. It was expected that TVET providers could define their education and training offer according to industry needs. Thus, students would have real employment opportunities and resources would be best invested. In this sense, information about industry needs was considered vital for better decision-making about skill formation for multiple actors. Moreover, as the above quotation shows, the commercial aims of some TVET providers and the consequences for youths was also a source of worry. In this sense, it was recognised the problems of a highly marketized education and training system.

In this line, the public announcements made by the Ministry of Work and Social Security helped to back up the potential of the SSCs initiative as it was thought that the public sector was developing an institutional structure to support them. As a result, the WoC's Human Capital area considered that adopting an SSC could be an appropriate way to develop an

[5] Certifica is the certification agency for labour competencies established by the wine business association according to the certification law.

industry-led coordinated response to address the sector's skills issues. Moreover, they managed to convince the directive board of the business association that leading the creation of an SSC for the industry was a good initiative to develop a human capital strategy that supported the sector's expansion plans. Particularly to help develop a strategy focused on addressing external skilled labour supply issues and current workers' internal certification and training issues. As a sectoral document states,

> *It is a priority within the institutional strategy to establish a virtuous relationship between the identification of needs and formation of new competencies and skills of human resources [...] because this also contributes to the industry and workers aspirations to turn Chile and its regions in the main producer of premium and sustainable wines of the new world by the year 2020.* **[Document 6, VDC and CCiV, 2014, p. 4]**

Consequently, in April 2013, a first meeting was held with various stakeholders invited by WoC, including representatives from the public sector and other guilds related to the wine industry. During this meeting, the particular envisioned SSC's model and its operation for the wine sector was explained to the participants. This model is based on the wine business association's particular interpretation of the general ideas promoted by the Ministry of Work and Social Security and international examples. Thus, an SSC is interpreted as a coordination initiative where different stakeholders—selected by the business association—can give their perspective of the human capital issues affecting the sector and agree on concrete actions to tackle these problems. According to this model, the skills council is comprised of a Council Board (all stakeholders), an Executive Committee (business association internal executives) and an Executive Director (Human Capital area manager of the business association).

Moreover, the SSC's actions are executed by the Human Capital area of WoC and its related organisations (Intermediate Technical Organisation for Training, Certification Agency and Sector Body for Labour Competencies). Hence, these actors used the current institutional structure of the training and certification systems to perform SSC's initiatives. In this sense, the skills council is conceived as a method of coordination to guide the work of the business association concerning skills development. As the following quotation illustrates,

> *The [Sector Skills] Council is not something legally constituted. It is like an initiative but is not legal. It is not that there is a document with a statute. No, it is an industry agreement to develop this and to understand that here what is needed are strategic views, and move forward in a way where there are [considered] the opinions of all [...], so we are all*

thinking the same. And when a task is defined, we are all coordinated, and we all know why we are going in that direction. That is why an expert in education is required, a person who knows what we are talking about and how to assemble this thing. Hence, that is the idea of this [sector skills] council. It is some kind of strategic thinking group and not a legal structure where accounts must be given to a manager. No, there is no manager, here we do it, we do the job here [WoC's Human Capital area]. **[Participant 20 – Wine business association representative and SSC's adopter and executive]**

As a result of the first meeting of the skills council board, the participants defined that an labour market intelligence study was needed to better understand the sector's current situation and identify further actions. Thus, aligned with the approach of using the institutional structure in place, the study was financed with training funds administered by the WoC's OTIC[6]. In this regard, the Wine Skills Council activities have not entailed funding mechanisms other than the already available, which also means that members are not required a financial commitment to be part of the council.

The labour market intelligence study was conducted by the department of studies of FCh, a different group of professionals than the one advising the mining sector. Possibly, because of this, it can be noticed that the final report was straightforward in presenting the findings with no further ideological messages. The study considered a survey of wine companies, interviews with training providers and secondary data. As a result, the report presented a characterisation of the labour force within the industry, an analysis of human capital gaps and general recommendations. Moreover, the overall conclusions focused on three main points.

First, the findings indicated that most of the labour shortages within the industry involved occupational profiles of low and middle-level qualifications. In this regard, the study suggested that skills shortages might only partially explain this problem since unattractive salaries—compared with other industries—seem to be one of the main determinants of the difficulties to attract workers. To illustrate,

The lack of staff in the vineyard operative profiles forklift operator and oenological machinery operator is explained in 70% and 90% because the salaries offered in other

[6] The Training and Employment Law in Chile establishes that the National Director of SENCE can authorize an Intermediate Technical Organisation for Training (OTIC) for the use of maximum 5% of the companies contributions and surplus for the execution of specific projects properly justified, such as labour market studies. The OTICs should present a formal request to SENCE together with a technical report that justifies it.

industries are more attractive. In a few cases, the lack of qualified staff may be a result of a low educational offer [...]. **[Document 5, FCH, 2014, p. 12]**

Second, the study detected a lack of coherence between the training activities within wine companies and the occupational profiles considered as critical in terms of skills shortages. In this regard, the recommendations indicated to focus training activities on a list of profiles explicitly detailed in the report. In this sense, the recommendations centred on re-skilling current workers to fulfil occupations that became critical in terms of shortages.

Third, the study estimated a decrease in the demand for workers in the next five years—particularly those working in seasonal occupations—possibly explained as a response to the increasing labour costs and the implementation of new technologies. In this line, the report suggested focusing on the training demands arising from mechanisation and automatization processes. Thus, it required developing workers with the skills needed to operate equipment correctly and perform essential maintenance.

The report concluded by pointing out that increasing production levels in a scenario that involves fewer people working in the industry represents a challenge for the sectoral growth plans outlined by the business association. In this line, it was suggested that coordination to direct skill formation efforts towards implementing new technologies should be the way forward.

Consequently, in June 2014, the business association developed a sectoral human capital strategy. The strategy published in the document *Plan Estratégico para la Innovación y el Desarrollo de Capital Humano en la Industria del Vino Chileno* (Strategic Plan for the Innovation and Development of Human Capital in the Chilean Wine Industry) presented the Wine Sector Skills Council (CCiV by its acronym in Spanish) as one of its main actions to address the issues affecting the development of human capital for the sector.

Moreover, the document presented a combination of figures and ideas that justify the importance for the wine industry of having an active approach to get involved in skill formation. It begins by citing international organisations to explain the role of education and skills for economic and social outcomes. Next, the document reviews the projections of the Chilean wine industry and the challenges affecting its competitiveness, amongst which is the shortages of qualified labour. In this context, the idea of SSCs is presented as an international best practice that the business association has adopted to enhance the institutional actions to address kill formation for the sector. Thus, this document was used as a formal presentation of the SSC as a new WoC's initiative. To illustrate,

THE WINE SECTOR SKILLS COUNCIL (CCiV) is an initiative led by Wines of Chile that seeks to contribute to generate and deliver public goods—studies and labour intelligence information—with the purpose of contributing to close gaps between labour market demand and the formative offer (education and training), in terms of job positions and/or labour competences. In doing so, it follows a functional model that responds to the principles of governance and operation of Skills Councils in developed countries. **[Document 6, VDC and CCiV, 2014, p. 11]**

Moreover, the strategy was publicly presented at a seminar involving public and private stakeholders. During the event, consolidating the work of the Wine Skills Council with public sector support was emphasised. In this line, even when the SSC is an industry-led initiative, it was stressed that a public institutional structure recognising and funding these types of initiatives was needed. In a sense, the sector was pushing the state to reconsider the passive role played to develop solutions to address the issues detected concerning TVET. Moreover, as the next section will explain, this dependence on state support has been characteristic of this particular skills council.

In summary, selecting an SSC model in the wine sector resulted from an internal process of analysis and persuasion within the business association driven by the Human Capital area. It is noticeable that similar ideas as the one considered in the selection of the Mining Skills Council were also present in the selection of the Wine Skills Council. For instance, the informational issues as causes of the problem, the informational role of industry, and the multiple beneficial outcomes expected of SSCs. Differently, the SSCs model envisioned by wine sector actors considered the participation of different types of stakeholders and not only employers. In this sense, possibly because of this sector's weaker economic and political power compared with the mining sector, the Wine Skills Council has been selected with the expectation of further support from the public sector.

The maintenance multisector

The development of the CPC agenda concerning skill formation began with a long diagnosis process about the current initiatives held by the private sector in this regard. Between 2016 and 2017, this process was driven by the Human Capital area staff within the business association (CPC) and involved several meetings with people within different industries to inquire into the success and failure of private sector initiatives to address skill formation issues. As one interviewee involved in the process commented,

All those criticisms [to other initiatives] are the ones I mapped out when I met with all…[…] In the end, when I went to the street. When I met with a lot of people, and I asked what they had done [with regards to skill formation]. And I made sure to understand how they have solved their problem, there were common factors that all of them had remained as limited initiatives, none of those has had… none of these [initiatives] had reached a systemic scope. **[Participant 33 – Business association representative and SSC's adopter and executive]**

Also, during this stage, the CPC commissioned the FCh to systematise this information and develop a report with recommendations to move forward. Accordingly, the document *Hacia un Sistema de Formación para el Trabajo en Chile: Rol de los Sectores Productivos* (Towards a System of Formation for Work in Chile: The Role of the Productive Sectors) was published in August 2017. The document comprised a review of some experiences among different sectors about initiatives to address skill formation issues, including the cases of the mining and wine sectors. Subsequently, the document presented ideas about the current problems affecting skill formation in Chile and recommended solutions. It started by pointing out that relevance, quality and articulation are critical challenges of the Chilean TVET system. Further, it followed by stressing the essential role of understanding the demand of employers to guide the formative system effectively. In this line, the report directed the discussion towards the urgent need for employer's information and the key role that the private sector should play to coordinate and organise this information.

Accordingly, the document was emphatic in establishing the strong position of the CPC to become a key actor for organising the private sector towards its involvement in skill formation, particularly to coordinate the development and delivery of information for the TVET system. As the following abstract from the document illustrates,

The CPC must assume a leading role in the coordination of sectoral efforts, articulating the productive sectors to deliver the right signs to the formative system. **[Document 10, Araneda *et al.*, 2017, p. 108]**

In practical terms, the report proposed the private sector involvement in skill formation by creating human capital councils or committees to address common agendas in different industries. This recommendation is backed by the idea that developed countries with institutional systems to capture information from the demand can be considered a good reference in achieving effective skill formation. Accordingly, the document reviewed international experiences of sectoral coordination through similar bodies in Australia, New

Zealand, Germany and South Korea. Moreover, it can be noticed that using international examples as a reference had the intention to address some apprehensions about similar national initiatives detected in the stage of consultation. This is because the case of the Mining Skills Council was considered expensive and potentially not replicable for other industries. As one interviewee commented,

The Mining Skills Council arose in 2012 as an initiative to organise the mining world, which has its own characteristics and thus were not necessarily agreed by everyone because it [mining sector] has characteristics that were not shared with other sectors. So, there was an issue that they [HC development group within the CPC productivity commission] thought mining structure was not transferable. However, the same commission had raised as a proposal this possibility that in the end, it [SSCs] probably was what had better results in other countries, so it was said 'well, let's investigate, let's see what has been done outside, how this issue is being solved outside' **[Participant 33 – Business association representative and SSC's adopter and executive]**

In the same line, the report used international examples to highlight the importance of an active approach of the state to provide a structure for the systematic flow of information from industry to TVET organisations. This situation was contrasted with the case of Chile, where it is argued that an information system is absent and a low capacity of the state to promote the use of information. In this line, the idea of mismanagement of the state in skill formation was installed by showing what other countries seem to be doing better. Despite this notion, the recommendations included the need for public-private cooperation for skill formation as it is considered an essential element for an effective skill formation system. To illustrate,

The above [CPC's new coordinating role] must go together with a public institutional structure that gives suitable guidelines, promotes and organises the horizontal and vertical articulation of the skill formation system. **[Document 10, Araneda *et al.*, 2017, p. 108]**

Furthermore, a critical process during this period was the development of a strong relationship between the CPC Human Capital area with the Innovum[7] team in FCh. In this line, these actors carried out internal processes to convince top-level executives about possible joint actions. This process resulted in the approval of a partnership to implement a

[7] The Innovum team is the people working at the Centre for Innovation in Human Capital of the FCh, which is the same time involved in the adoption of the Mining Skills Council.

new human capital agenda together where the CPC acted as the leading organisation and FCh as the technical support body. Moreover, this partnership was further enhanced when these actors involved the JP Morgan Chase Foundation as a funding partner, given this organisation objective to improve the human capital in Chile as part of their corporate philanthropy activities. This new partnership meant negotiating and deciding on the specific actions that the funding from this organisation would cover. As the following quote illustrates,

> *JP Morgan wanted to do something specific and very tangible, and we said [let´s do] the same that you want to do [but] let's do it as a system and let's pack a pilot that somehow shows, hopefully, the whole route of this eco… mini-ecosystem, to show that this [SSC and related initiatives] is reasonable for the country at the moment.* **[Participant 33 – Business association representative and SSC's adopter and executive]**

As a result, at this stage, the decision to focus on a multisectoral initiative was taken. This decision responded to the aim of developing a pilot of coordination that could have a broader reach in terms of industries and become the basis of a national system. In this line, the focus on maintenance occupations was taken at this point. However, as discussed later, the final agreement on this specific focus was reached once all stakeholders from the different industries were involved. As one interviewee from the FCh commented,

> *So, the Maintenance 4.0 Skills Council is a council that we developed the CPC with the Fundación Chile with a lot of effort. The sectors were not asking for it. We realised that there was a market need because maintenance doesn't have an owner.* **[Participant 3 – Consultant working for the Maintenance 4.0 Skills Council]**

Moreover, it can be noticed that behind this decision was a market logic consideration regarding the demand from employers and the supply side. Given that an essential outcome of the initiative is to influence the supply of skills, the assumption of commercial rationality from TVET providers was carefully taken into account for the initiative's success. This assumption is not surprising given the highly privatised provision of TVET in Chile, particularly at the tertiary level. To illustrate,

> *This country, because of its labour market, because of the structure of its productive matrix, is a country that has a limited [labour] market. Therefore the sectoral forms have to have at some point a multisectoral translation so that it can be… in some way a more reasonable investment for this market, for the market of formation, for the market of training, for the market of certification… sorry, of education. I mean all this market of*

human capital formation, the formation of people that, in the end, involved these four aspects at least. **[Participant 33 – Business association representative and SSC's adopter and executive]**

Accordingly, once those specific definitions were decided, the partnership was publicly announced during a seminar in October 2017. This seminar, co-organised by the CPC and FCh, was aimed to present the diagnosis and recommendations developed in the last report. Moreover, at least two crucial messages were disseminated during the seminar. First, concerning why this initiative was important, it was stressed that it is expected to positively impact economic and social outcomes, thus benefiting multiple stakeholders. As public declarations from JP Morgan's President in Chile illustrate,

Training people to compete in the labour market is an efficient strategy to enhance economic activity. Despite global economic growth, more vulnerable people continue lagging behind. Our objective is that, on one side, the companies can find the talent they need, and on the other, that through good quality formation people can access job positions that allowed them to improve their socioeconomic position. **[Document 20, CPC press release, 20 October 2017]**

Second, concerning how positive outcomes could be achieved, the seminar served as a public occasion to emphasise the discourse about the vital role of the private sector involvement in skill formation. Accordingly, the activity was finalised with a discussion panel about the role of the industrial sectors in skill formation. This panel involved private and public sector stakeholders mainly selected by the active participation of their organisations in skill formation initiatives. For instance, the president of the mining business association was part of this discussion. As expected, the panel concluded that employers must be involved in skill formation to achieve TVET relevance with labour market needs.

Consequently, the CPC began its work of defining and inviting members to the new multisectoral skills council. The decision about who should be invited to participate was highly selective. Moreover, the political power held by this association was crucial for convincing stakeholders from different industrial sectors to be part of the initiative. As an interviewee commented,

This [coordination among actors] was very complex… because it was with people that did not understand. So we seated here [SSC] people who had no idea of what we were doing, so in some way, they did an act of faith. They did an act of faith because the CPC invited them, and that is very important to understand. We had six sectors represented by

someone that we selected with tweezers together with the president of the CPC. We selected them [SSC's members] with tweezers, someone who could have some level of information or in some way have some knowledge about this. **[Participant 33 – Business association representative and SSC's adopter and executive]**

As a result, the Maintenance 4.0 Skills Council (CM4.0 by its acronym in Spanish) was created in June 2018 as the pilot initiative to test the development of a national initiative. The skills council is comprised of members representing the six industrial sectors where maintenance and technological change is a relevant part of the business. These sectors are mining, construction, metal mechanics, manufacturing, forestry and energy. Specifically, the skills council members are representatives from industrial business associations, industrial equipment companies, two large private tertiary TVET providers and one representative of the funding organisation. Notably, public sector actors were not invited to the skills council. This exclusion is because previous collaborative work initiatives concerning education issues between the business association and state agencies did not result as expected. Moreover, the constant changes in the government coalitions running the state were considered to hinder developing long-term agendas in skill formation initiatives. As one interviewee that participated in the selection process of the skills council commented,

I think that there is a problem of origin in the public sector that is that with the government times, with the government timings you risk the continuity of a project. I mean, a government last two and a half effective years, let's say. Thus, if you say 'let the government lead', the initiative falls in two years. I… for that, I think that the CPC is the one to do it. Overall because today there is an important sense of urgency among businessmen and they have different timing to the education system, the education system is slow, the education system will not lead this. **[Participant 35 – Maintenance 4.0 SSC's member representative]**

In terms of operation, the Maintenance 4.0 Skills Council is organised into two areas. First, an Executive Committee led by the CPC and comprised of all members, which is the decision-making and coordination instance of the skills council. Second, a Technical Secretariat comprised of FCh consultants, which act as the operative arm of the initiative.

Accordingly, as expected, the Executive Committee agreed to focus the skills council on maintenance occupations. This is because the market logic considerations previously mentioned made natural sense to the appointed council members. Moreover, a view of actors as rational decision-makers played an essential role in convincing them. It was thought that

TVET providers could prefer delivering programmes that give students a wider range of labour opportunities. At the same time, that was assumed that students would select programmes based on employability criteria. Thus, given that maintenance occupations exist within different sectors, it was the perfect area to fulfil a multisectoral requirement appealing to rational decision-makers in skill formation choices. As one member of the council commented,

First, we were different industries sat on the table, there was construction, energy […] so, together, we defined an occupation that was transversal to all these industries. In this case, the occupation defined was maintenance […]. Well, we said given that this occupation is transversal, it requires certain basic competencies […]. So, we said all these competencies are the basic, no matter where this person works, in which sub-sector, it requires these [competencies] […]. Hence, that gives you that if you look at an occupation from a transversal point of view, you can go to the TVET organisations, in this case, the Technical Training Centres, to explain this, and they can adjust their curriculum. In this way, the people who study this occupation will graduate and have better employability than those who do not study under these conditions. **[Participant 34 – Maintenance 4.0 SSC's board member]**

In this line, members were asked to support the operation of the skills council by attending meetings and securing access to workplaces so the FCh could gather information. Also, no direct investment of money was requested from them because initial discussions showed that businesses within different industries had little intention to finance this type of initiative. Additionally, it was expected that the public sector would respond to the initiative by assigning public funds for training according to the standards developed by the skills council. In this sense, the funding approach taken by the CPC focused on not placing this issue in the way of getting the commitment of members to the skills council initiative and its retention in time. Thus, similar to the wine sector, this skills council was selected expecting state support, at least financially.

In summary, selecting a multi-sector skills council focused on maintenance occupations resulted from an almost two-year process of analysis, negotiations, and persuasion among different actors. Similar to the mining sector, the technical support of the FCh was predominant in the process. Possibly because of this, the general ideological factors involved are similar to those considered in the mining sector. However, a market logic paradigm and

the consideration of rational decision-makers in skill formation played a more decisive role in selecting a multi-sectoral skills council. The following section further discusses this issue.

Comparing selection across the three sectors

The previous section discussed the key processes, events, and actors involved in selecting SSCs to address skill formation in the mining and wine sectors and maintenance multi-sector. It can be noticed that in each sector, the events and key actors involved differ according to the particular conditions of each sector. However, overall, the three sectors went through similar processes in selecting SSCs as a policy solution.

For instance, in the three cases, the key actors involved went through a process of *acknowledging the possible causes of the problem detected*, concluding that informational issues were affecting the education and training market and the labour market. However, in each sector, different events and actors were involved in driving the process. For the mining sector, the process was driven by the FCh, who managed to influence key employers about the informational causes of the problem, first through a seminar and then by reinforcing this idea with data presented in a sectoral report. Conversely, in the case of the wine sector, the process was driven by internal actors. This is because the Human Capital area of the business association recognised this informational issue due to their observations in daily activities related to training and certification and the external influence of the SSCs' agenda promoted by the Ministry of Work and Social Security. Lastly, for the Maintenance 4.0 Skill Council, the interpretation of the problem causes resulted from previous consultation processes with the business sector. Also, the influence of the FCh through meetings and the development of a report played an important role. Moreover, it can be said that while the FCh first introduced the idea of information asymmetries in the mining sector, stakeholders in the three sectors considered it equally valid. Notably, they all faced the same national contextual circumstances in their interaction with the TVET system.

Similarly, a common process between the three sectors *was identifying a possible solution*, SSCs. This process followed the same logic described above since it was affected by the same events and the main relevant actors in each case.

Additionally, it can be noticed that in the three sectors, there was a common process of *convincing relevant stakeholders* that adopting SSCs was a good initiative for the sector, particularly within their business associations. The initial group of employers interested in creating an SSC for the mining sector and the FCh convinced the business association to support the initiative and attach it to the association. For this purpose, these actors focused

on convincing top-level executives (mainly the president) and the Human Capital commission within the association. Notably, an essential tool used was the first labour market intelligence report developed by the FCh, which was reinforced by referencing international examples and a technical visit to Australia and New Zealand. Likewise, the relevant stakeholders to convince were top-level executives within the business association in the wine sector. However, the process was more straightforward as the WoC's Human Capital area used internal evidence to indicate what was missing and stressed the capacity of the area to manage the creation of an SSC. Likewise, the strategy of referencing the SSCs' agenda of the Ministry of Work and Social Security and external examples was crucial to convincing top-level executives within the association. Lastly, in the case of maintenance, specific teams within the business association and FCh went through the process of convincing top-level executives in these two organisations. After that, a process of convincing stakeholders from different industries within the business sector to be part of the skills council involved several meetings, a few seminars and the publication of an official report with core ideas.

Finally, the last process identified as common between the three sectors was *defining a feasible functioning model*. However, the outcomes of this process differ significantly between the three cases. Notably, the three sectors have selected the general idea of SSCs, but they differ in terms of the type of actors involved, funding and operation.

For instance, in the mining sector, defining a feasible SSC model was highly influenced by FCh. This organisation assessed the contextual circumstances and expected results, which the sectoral employers gaged under financial and administrative criteria. As a result, the skills council was conceived as a new organisational structure attached to the business association but not as an area inside the association. Accordingly, the Mining Skills Council has its board, budget obtained from member's fees and one permanent member of staff (SSC manager). Moreover, the skills council has a permanent contract with the FCh for the operationalisation of initiatives. In this line, the Mining Skills Council was defined as a private initiative aimed to organise the sectoral demand for skills and thus to raise the voice of employers. Thus, it has was established that only employers or representatives of industrial associations could be members. Therefore, leaving outside workers, public sector representatives and TVET providers. Moreover, members should commit financially by paying a fee to fund the operation of the SSC and allocating time from their people to executive and technical meetings. In this sense, the commitment expected from the members is permanent and involves being in frequent contact during the year.

Differently, in the wine sector, the process of definition was entirely undertaken by the business association. Accordingly, the organisational structure of the Wine Skills Council and the operationalisation of initiatives is strongly linked to the business association daily activities. The SSC is embedded in the business association as an initiative that guides training and certification decisions. In doing so, the WoC's Human Capital area uses the institutional structure currently in place to implement the actions decided at the SSC board level. In this line, the SSC was conceived as an initiative to join stakeholders from different public and private organisations to discuss skill formation issues affecting the industry and, more importantly, to agree on a common strategy to address it. Thus, although the business association leads the initiative, it is considered that the SSC should involve a broad group of stakeholders. Also, members are not requested to pay a fee as the SSC has no specific funding. Hence, the WoC's Human Capital area is in charge to seek public funds options to implement the SSC's activities. Likewise, members are not required to commit to several meetings during the year as the SSCs board only convenes when a new human capital strategy for the sector has to be discussed. Thus, the general expectation that WoC has of board members relates to obtaining general guidance and agreement to guide this strategy.

Lastly, for the Maintenance 4.0 Skills Council, defining the functioning model responded to an assessment of the national context and international examples conducted by the CPC and FCh. As a result, the organisational structure and operationalisation of initiatives seem to be a simplified model of the Mining Skills Council. As previously mentioned, this skills council's structure was considered expensive and not applicable for other sectors in Chile. In this line, the Maintenance 4.0 Skills Council was established as a new organisation linked to the CPC but not part of its organisational structure (similar to mining). Also, the SSC does not have exclusive staff, and in practice, it is led by the council president—who is a member of the board—and the person responsible for the Human Capital commission within the CPC. Also, similar to mining, the operationalisation of initiatives are executed by the FCh. Furthermore, possibly as a middle point between mining and wine, in the Maintenance 4.0 Skills Council case, the approach to defining members considered employers and private tertiary TVET representatives and public sector stakeholders were not invited to participate. Likewise, the commitment required from members seems to be a mix between mining and wine. On one side, it shares with the Wine Skills Council that members are not requested to pay a fee as funds have been obtained from other sources (i.e. JP Morgan). On the other side, it shares with the Mining Skills Council that members are expected to have a higher level of commitment concerning meetings and participation in the skills council's activities.

Accordingly, as the paragraphs above discussed, the three sectors went through common processes to select SSCs as a policy initiative. However, the events, key actors and strategies used by these actors differed between them. Notably, the two first processes (acknowledging the causes of the problem and identifying a possible solution) led to similar outcomes (information asymmetries as a cause and SSCs as a solution) in the three sectors. Differently, the outcomes of the two last processes (convincing relevant stakeholders and defining a feasible functioning model) differ significantly among sectors. Thus, it is possible to notice that while the reasons why an SSCs model was selected is shared between the three sectors, how this model was recontextualized by each sector SSC's adopters differ significantly. In this line, it has been identified that five material factors and four ideational factors underpinning these processes could be explaining these similarities and differences in the selection of SSCs among sectors. The following paragraphs discuss these factors.

First, it is possible to notice that two national contextual conditions have been considered and influenced SSCs' adopters towards selecting private-led SSCs. The *existence of a highly marketized TVET system* and the *reduced responsibility of the state in education* have served as a base for the development and intake of particular ideas among SSCs' adopters to interpret the causes of the skill formation problem affecting the country and their particular sectors. For instance, the high marketisation of the TVET system and the generalised *market logic paradigm to understand TVET* among SSCs' adopters may explain why information asymmetries and market failure have been naturally considered the cause of the problem. In this logic, the 'TVET market' has an offer of TVET programmes that students demand. Given that there is a demand for skilled workers (students on the TVET system) in the labour market, the main assumption is that information from employers can influence TVET organisations to adapt their educational offer, which can solve the failure on the labour market. In this sense, understanding skill formation under a market dynamic may explain why SSC's adopters tend to place greater importance on the lack of information as a critical element to understand the cause of the problem. In the same line, the assumption that employers, TVET providers and students act as rational decision-makers in skill formation choices also helped to give greater importance to information as an element for decision.

Likewise, the national condition of a reduced responsibility of the state in education validated the idea, notably promoted by the FCh, that other actors—particularly the state—*were unable to solve the problem*. Thus, supporting the idea that the industry (private actors) were adequate actors to drive the adoption of SSCs. Moreover, it was perceived that public policy is not focused on establishing a general mechanism to pass information from industry

to the education system, thus addressing the disconnect between TVET and the world of work. Although this general discourse can be identified in the three sectors, each sector considered a different angle in using it as a justification to select a private-led SSCs model. For instance, mining sector stakeholders thought that the public sector could not develop a public structure to create SSCs with the speed required by mining companies. From a different perspective, wine sector stakeholders criticised the public sector for not supporting the creation of what they considered a missing piece to the effective functioning of the skill formation system. In the case of stakeholders involved in selecting the Maintenance 4.0 Skills Council, the idea of a state unable to develop the conditions for industry coordination concerning skill formation was related to political reasons. These actors concurred that short government administrations—usually rotating in terms of political position—as has been during the last years in the country, had difficulties developing long-term agendas like the one needed to implement changes to the skill formation system.

An additional ideational factor identified in the three sectors relates to the *naturalisation of the informational role of employers in skill formation*. Possibly, also linked to the market logic described above, a shared discourse found among SSCs' adopters relates to recognising that the industry has to fulfil an informational or guiding role in skill formation. In this line, a strong part of this discursive orientation is that employers—usually conceived for these purposes as the industry—can best define what is required in the labour market, and consequently, what is needed from the TVET system.

Moreover, a final ideational factor identified in the selection of SSCs relates to using *pro-SSCs arguments rooted in a conception of rational actors with employability and economic objectives as their main interest*. This discourse is remarkably straightforward in the mining sector, as sectoral documents directly describe the primary beneficiaries of the initiative and how they can benefit from it. In the wine and maintenance sectors, the emphasis has been on the positive outcomes for industry and individuals. However, in all cases, it can be noticed that a better-targeted investment in education and training is considered part of the beneficial effects of adopting an SSC. Thus, showing the efficiency-oriented thinking of the stakeholders involved in the adoption of these skills councils. Accordingly, SSCs' adopters tend to assume that actions like those carried out by SSCs are considered beneficial for employers as they could influence the external supply of more people trained according to industry needs. TVET providers would benefit from having more precise information to enhance their education and training offer according to the actual needs of employers while at the same time improving their students' employment opportunities. Lastly, in the case of

public bodies that oversee training funds, it is considered that the action of SSCs may help to more effective use of public resources for training.

In addition to the material and ideational factors discussed, it can be identified that three additional sectoral material factors have underpinned the selection of SSCs in the three sectors. However, some of these factors seem to affect the different approaches chosen to adopt an SSC.

As noticed, a common factor in the selection of SSCs in the three cases is the presence of *strong business associations with the power to organise and influence their members* driving the process. Also, in the three sectors, the selection of SSCs had *political support at the top level of the business associations*. Indeed, in the Wine and Maintenance 4.0 Skills Councils cases, the idea of active industry involvement in TVET started within the business associations, particularly within their respective Human Capital areas. In the case of the mining sector, the idea of coordination started with four mining companies. Still, the support and subsequent ownership of the initiative by one mining business association within the country was key to the final adoption of the SSC. However, while the presence of these business organisations is a common factor in the selection of SSCs, the particular circumstances and preferences of each association, and their top-level executives, may also explain the differences among SSCs.

For instance, the Mining Council is a business association that presents particular circumstances regarding its political power as a single sector. This association gathers large-scale mining companies whose activity represents approximately 10% of Chile's GDP (Consejo Minero, 2018b). Thus, their voice and influence tend to be highly considered in national discussions. Moreover, the economic circumstances of the sector also allow them to have more resources to implement initiatives without financial support from the state. In this sense, the crucial role of the business association to convince more mining companies to be part of the SSC and pay the membership fee was vital. At the same time, this possibly required to guarantee greater control of the initiative, first to ensure the correct use of the investment made by companies. Second, to secure that this initiative will not negatively impact industrial relationships with workers. In this sense, this possibly explains the preference to establish the SSC completely employer-owned.

On a different position, the wine business association (WoC) gathers wine companies of various sizes in a sector representing 0.5% of national GDP (VDC, 2018). In this sense, this sector differs significantly from the mining sector in terms of power in national discussions

and the sectoral economic situation. Accordingly, the sector seems to be more reliant on the public sector's support for the development of the industry. As noticed in sectoral documents, collaboration with public bodies is generally considered a must when an initiative involves funding. Thus, including the public sector and other external stakeholders is possibly a natural preference of the business association in every aspect of their activity.

Lastly, the Maintenance 4.0 Skills Council case is particularly special regarding the business association involved in its adoption. First, as previously noted, the CPC is a national business association with strong political power. Second, this association does not represent a sector in particular but various sectors of the economy. In this sense, including members from various industries and two of the largest private TVET providers at the tertiary level seems a political decision that expects to pressure the state to implement changes. Additionally, leading an initiative as an SSC is intended to demonstrate the capacity of private sector actors to increase their influence in the skill formation system.

Finally, the last factor common among the three sectors that may explain the selection of SSCs in these particular sectors is having *technical support/knowledge available to adopt SSCs*. It can be noticed that the FCh has acted as a policy entrepreneur in the case of the Mining and Maintenance 4.0 Skills Councils by influencing most of the decisions. In the wine sector, the Human Capital area of the business association used their knowledge and expertise to drive the process. Moreover, although less determinant, the FCh has participated in developing labour market intelligence studies and indirectly influenced the selection of an SSC through the Ministry of Work and Social Security. Accordingly, the FCh acted as technical support for these SSCs at some or all stages of their adoption. In this role, this organisation has been key in disseminating supportive evidence to reinforce the need for SSCs to enhance skill formation in Chile.

To summarise, it can be said that ideational factors are common to the three sectors and may help explain why SSCs have been considered an attractive idea for private actors and finally selected. These factors seem to be backed by national material conditions that affect the three sectors equally, possibly explaining their credibility among SSCs' adopters. Differently, sectoral material conditions seem to affect the differences among sectors, particularly in the definition of how SSCs are finally adopted. Figure 4.2 shows the underlying material and ideational factors involved in the selection of SSCs previously discussed.

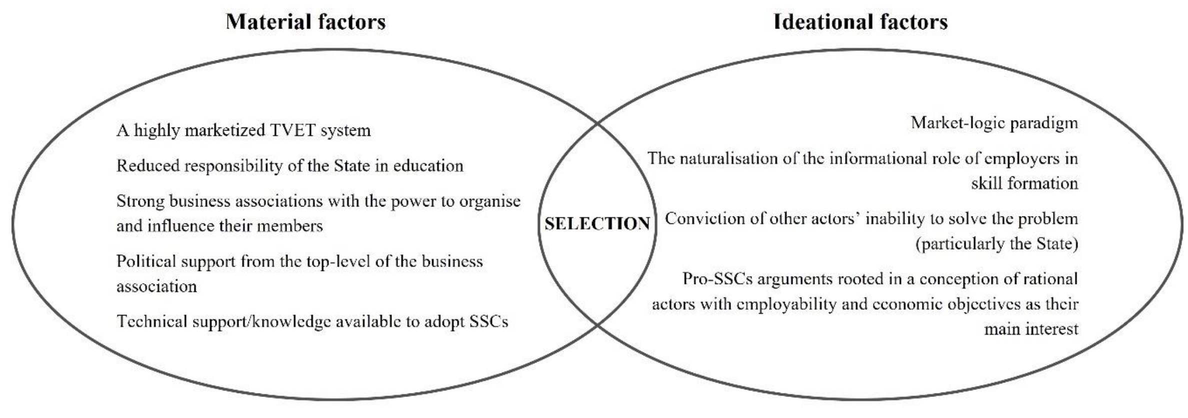

Figure 4.2 Selection: common factors identified in the private-led adoption of SSCs in Chile

4.3.3 Retention: a permanent leader and access to public funds for TVET

The retention mechanisms account for the institutionalisation of the select policy by including changes, for instance, in regulatory frameworks and regular practices (Verger, Fontdevila and Zancajo, 2017; Zancajo and Valiente, 2018). Accordingly, this section presents the findings concerning the processes, events and actors that account for the retention of SSCs in the three sectors. The following paragraphs describe each sector separately, and the final part of this subsection compares sectors and potential explanatory factors.

The mining sector

In the case of the mining sector, the retention of the material practices related to the adoption of the Mining Skills Council can be reviewed according to three main periods in the lifecycle of this body. These periods are delimited by the signature of new agreements among members, which have been decisive for the SSC continuity. Table 4.2 shows a summary of these periods and their primary focus.

The first period (2012 to 2015) began with the first four-year agreement to establish and develop the SSC. Most of the work was within the industry by working with mining companies to develop common standards. Therefore, with the technical guidance of the FCh, this period comprised several meetings and workshops with HR professionals to develop labour competency profiles. This process resulted in an intense period of products development, including a Mining Qualifications Framework, a Quality Framework for Training and three labour market intelligence studies, among others (more details in Table 4.2 below).

Table 4.2 Retention: Mining Sector Skills Council's periods

Period	Focus	Main activities	Main products
2012-2015	Development of standards	▪ Periodic committees to develop profiles ▪ Creation of Communities of Practice (tripartite) ▪ Launch of serminero.cl website (mining careers information for youth) ▪ Cooperation agreements with other business associations ▪ Seminars	▪ Labour Market Intelligence reports 2nd (2013-2022); 3rd (2014-2023); 4th (2015-2024) ▪ Mining Qualifications Framework ▪ Training Packages ▪ Quality Framework for Training ▪ Quality Accreditation Scheme for Training Providers (Sello CCM)
2016-2017	Implementation of standards	▪ Change of SSC Manager ▪ Addition of new members (i.e. regional business associations) ▪ Launch ELEVA project	▪ Labour market intelligence report 5th (2017-2026) ▪ Mining Qualifications Framework (updated version)
2018-2019	Implementation of standards and review of new challenges	▪ Regional Technical Committees ▪ Workshops (for HR professionals) ▪ Internship Pilots CCM-ELEVA ▪ Change of SSC Manager	▪ HC demand study for Projects Construction in Large-Scale Mining (2018-2022) ▪ Study: Impact of New Technologies in the skills needs within the Mining Industry ▪ Labour market intelligence report 6th (2019-2028)

Moreover, an important result of this process was developing a sense of community among HR professionals within mining companies. This outcome contributed to generating a broader awareness of the existence of the SSC and enhancing the retention of the discourse that the industry has to fulfil a role in skill formation. As one interviewee commented,

> *We used to meet at the board, and if suddenly you had a doubt, you could call someone within your competitor to say it in some way and ask, how did you do it? And the person would probably generously tell you how. In fact, in the CCM's [Mining Skills Council] intranet, we used to share experiences, and in the HR mining congresses, every two years, [some] companies that had developed something presented it for the whole HR mining community. So there was a very nice thing there, of generosity and understanding that this was a country issue and not only within my company.* **[Participant 13 – Mining sector employer]**

At the same time, an essential focus of this period was convincing HR practitioners within mining companies that standards should be used as much as possible within their HR processes. However, the use of this information—particularly standards—seems to be uneven as each organisation is free to implement them. Thus, the enactment of the SSC's intended objectives in the organisational routines of businesses within the sector appears to be varied. As the following quote illustrates,

> *The process with companies… one thing is convincing. It is not that we had to 'sell' the [idea of joining the SSC]… but it was a thing of collective conviction that was generated because the truth is that it is a paradigm change. So that conviction to generate that collaboration, that is done. And then concerning the use [of standards] is different, because one thing that we have seen during this time is that even when you have developed… it may be the best products, the best standards, that is no reason… and not because they are available for everyone, that is not a reason to be used. I mean, that is not a reason to be known, understood and used, both from the point of view of companies and from the point of view of the world of education. So with companies, we have been doing work like quite individual. One-to-one to see how they can use the CCM's [Mining Skills Council] products in their human resource management practices in career development, tenders, organisational issues in general… during this time is something that we have been trying to reinforce.* **[Participant 5 – Mining SSC's former executive]**

The second focus of this first period was to convince the public sector to invest in training according to the standards developed by the SSC. In this line, the Mining Skills Council began establishing links with the Ministry of Work and Social Security, particularly with SENCE (National Service of Training and Employment), to access public funds to have more people trained according to industry needs. This strategy was vital to obtain funding and validate the SSC's work as an initiative to bring positive outcomes for multiple stakeholders. As one interviewee from the public sector commented,

> *I arrived at SENCE when they [Mining Skills Council] had recently updated the Australian training packages to the Chilean context. And well, it comes the Fundación Chile, it comes the Mining Skills Council and tells me 'look this is the solution, what we have to do is that SENCE should allocate funds to train people on skills for the mining sector and we will hire them'. And I said 'very well, happy! But you have to assure that you will hire them because you are proposing courses or formation processes that last one year, that are expensive, 3, 4 million pesos, and well it is public resources and on the other side the time of people. If they are going to be trained in that area, well let's ensure that there is going to be vacancies to work' and well that is when the picture gets complicated because they said 'no we cannot guarantee [job vacancies]'* **[Participant 36 – Government agency representative]**

However, even when the relationship of the Mining Skills Council with the public sector was initially tense, the SSC eventually found a way to interact with the public sector and address their concerns. As a result, the national training agency assigned grants for people undertaking training courses according to the sector standards, which in 2013 benefited 2,107 people (CCM, 2013). Also, the profiles developed by the SSC were validated for certification and included in the national certification catalogue of the National Certification System for Labour Competencies (ChileValora).

By the end of the first four-year period of funding, the sector's economic situation challenged the continuation of the SSC. The decrease in the price of the commodities and a slow down in the sector's activity pressed SSC's stakeholders to re-think the initiative and find new ways to sustain it. In 2015, the Mining Skills Council's board decided to increase its base of members to distribute the operational costs among a more significant number of members and include different sectoral voices. Thus, the Mining Skills Council offered memberships to non-members of the Mining Council (business association), such as other industry associations related to the mining sector and large-scale contractor

companies. However, this process of inviting new members did not include education, workers or public sector organisations. In this sense, the exclusive employers-base membership remained unchanged. At the same time, with the sustained support of top-level executives within the business association, the leadership over the initiative stayed in the hands of the Mining Council. As one interviewee explained,

> *It [SSC] continues being under the Mining Council […] as it said Juaquin Villarino that is the president of the Mining Council 'make no mistake here, this continues being managed… it is ours, our baby! The thing is that we are inviting [other industry associations] to be part of the initiative, but it is still under the Mining Council'* **[Participant 4 – Mining SSC's former executive]**

An important result of this decision is that the voice of contractor companies, in particular, acquired a participation in the SSC. Given that these actors are an essential part of the industry, this helped increase the intake of the standards previously developed by large-scale mining companies. However, not all contractors displayed the same level of engagement with the initiative, being large-scale contractor companies showing more motivation. As one interviewee working at the contractors association at that time commented,

> *This association [contractors association] comprises, at least at that time, 120 companies that are like the leaders' contractors in mining. Still, I would say that not more than 20% of them, at that time, actually showed an active interest in participating in this [Mining Skills Council]. I mean, and generally subject to companies that have international reach. I mean, you used to see that, actually, companies like Finning and Komatsu, that type of companies assumed that it was part of their role to commit to the development of human capital and to support these sectoral initiatives* **[Participant 7 – Mining SSC's former member representative]**

Consequently, in 2016 the Mining Skills Council began a two-year funding second stage with six new members and the continued technical guidance of the FCh. The focus of this stage was on the implementation of the sectoral standards developed during the past four years. Hence, the SSC's efforts were mainly to convince TVET providers to align their education and training programmes according to these standards. For this aim, in 2017, the

SSC participated as one of the main partners of the public-private collaboration 'ELEVA'[8]. The main objective of ELEVA is to contribute to the mining sector's productivity by enhancing TVET providers' capacity to develop people's skills. The initiative supports TVET organisations to align their programmes with the mining standards by providing training to teachers and instructors and performing assessments of their programmes. Although the final results of this project are still unknown, this initiative seems to be contributing to the integration of the skills council standards in the organisational processes of TVET providers. As an interviewee commented,

> *The ELEVA project is more involved at that level of technical schools, to be a link on that way, and yes, there is a space where we can actually intervene much more.* **[Participant 6 – Mining sector employer and Mining SSC's executive]**

Moreover, this collaboration aims to serve as a pilot to evaluate its implementation in other sectors. In this sense, it is in line with the expectation of the Mining Skills Council of becoming an example for other industries and impact public policy. As one interviewee commented,

> *With the investment that is doing, for instance, in the ELEVA programme, the state acknowledges the value of the work that has been done and gives a strong backing and support [to the Mining Skills Council]. Here, there is a lot of space to impact public policy. I mean, we expect… our ambition is not that the CCM [Mining Skills Council] always remains like an isolated island of mining, and that's it. Hopefully, this has like a… it can also pour to other industries and positively impact public policy.* **[Participant 5 – Mining SSC's former executive]**

Noticeably, the ELEVA project fits with the new agenda of the public sector to enhance the level of collaboration on TVET by involving different actors. This agenda initiated with the Bachelet (2014 – 2018) government's educational reform established new rules for TVET, including the gradual implementation of a qualifications framework. As one interviewee working at the Ministry of Education during that period commented,

> *What the educational reform does, which I think is very significant, is first establishing by law in the MINEDUC structure the idea that in higher education there are two subsystems, the University [subsystem] and the TVET [subsystem] […] also established*

[8] ELEVA: Public-private collaboration involving Fundación Chile, the Mining Skills Council, the Mining Council, Ministry of Economy, Ministry of Education, Ministry of Work and Social Security, SENCE and CORFO.

that TVET will have its own quality criteria and creates the TVET Advisory Council […] the law specifies that it is a tripartite Council, so the law establishes who at least must participate […] and [the law] says that the Council should discuss the Qualifications Framework […] the Ministry builds the framework with the FCh and now is looking to do the pilot […] we started the [qualifications] framework taking the Mining framework and the Logistics and Informatics framework. **[Participant 40 – Government agency representative]**

Next, a third agreement was signed for two additional years of funding (2018-2019). During this period, the SSC continued its work with the ELEVA project, which was until 2019. Also, in recognition of technological changes and new challenges within the sector, regional technical committees and workshops with HR professionals within members organisations were established to continue reviewing standards and their use. In this sense, the SSC's work seems to be balancing between evangelising the implementation of standards and keeping updated with the changes that could impact the skills required within the mining industry.

The wine sector

In the wine sector, the retention of the SSC as a permanent initiative seems to be weak as no more board meetings have been reported after 2013 to review the development of actions. However, the business association maintained referring to the Wine Skills Council as an umbrella structure when reporting its Human Capital area actions. In this sense, it may be said that the retention of the SSC's initiatives has gone as far as the work of the WoC's Human Capital area can reach. This situation means the training managed by their Intermediate Technical Body for Training (OTIC) for wine companies members, the certification of competencies by their certification agency, and the work with some technical education providers to adjust TVET programmes. This situation aligns with the small impact that the business association can achieve with the resources available. In this line, this organisation has worked with the current institutional structure to implement SSC's initiatives. Thus, trying to link more effectively the education, training and certification efforts for the sector.

From 2014, the Human Capital area continued working according to the objectives outlined in the sectoral Human Capital strategy 2020. For instance, during 2014 and 2015, this area executed a project funded by the Ministry of Education to analyse and update TVET programmes related to the agricultural sector at the secondary level. The project

presented a proposal for the development of a sub-specialisation in viticulture for the Agricultural programme. Likewise, an essential aim of the project was to prepare teachers within secondary technical schools to provide competency-based training to students. Accordingly, the project involved several workshops with teachers and the delivery of a document with guidelines for competency-based training. However, as some representatives from the public sector acknowledged, these activities had a small scale compared to the mining sector's initiatives. To illustrate,

> *The experience of Wines of Chile has been more like 'boutique', in the sense that by not wanting to have a bigger scale, they have developed concrete tools. Such as formative routes, profiles, formative plans, didactic materials, internships. I think that Wines of Chile has also managed to better understand the education sector, not to tell them what they need but to reach an equilibrium between what they need and what the students, the people, will need in their labour trajectories.* **[Participant 40 – Government agency representative]**

In this line, the project generated some awareness among secondary technical schools about the industry recognition of its role in skill formation. Accordingly, agreements with 13 technical secondary schools were signed for a second stage involving students. The idea was to send students from these schools for internships in wine companies to receive training in specific areas defined according to industry needs. Moreover, funds from the National Service of Training and Employment (SENCE) were secured to implement this second part. However, focus differences between the association representatives and the school directors have resulted in difficulties to implement the initiative. As the following quotation illustrates,

> *There is no information because the school directors are very passive, so we have offered scholarships. As Wines of Chile, we have directly offered scholarships, not even with the +Capaz [SENCE scheme], directly from us because we have some resources. It would be fantastic that if we detect, for instance, that is needed, as I told you, technicians in automatic water irrigation, give them [secondary TVET students] the specialisation… and then [quoting school directors] 'no because'… ok let's do it while they study, 'no because they will have exams and no because during holidays they get distracted and they all want to go out, and then in March they are looking for a job', and at the end is very difficult.* **[Participant 20 – Wine business association representative and SSC's adopter and executive]**

After leaving the work with secondary technical schools on hold, in 2016, the focus of the Human Capital area of WoC was on updating the catalogue of labour competencies for certification and training. Accordingly, this year, the business association presented a blueprint to the National Certification System for Labour Competencies (ChileValora) to convene the wine Sectoral Body of Labour Competencies (OSCL) to review and update the information for certification in the sector. The process entailed developing technical boards, conducting interviews with employers and workers, and analysing secondary data, which was executed by a consultancy company with the support of the business association. As a result, 11 new competencies profiles were developed, 21 were updated, and 32 formative plans related to these profiles were developed. Moreover, it was defined a qualifications framework for the wine industry (VDC, 2016). In this regard, it is worth mentioning that even when the business association considers the umbrella of the SSC in the development of this initiative, this is not actually perceived by external actors. As one representative from the public agency ChileValora commented,

> *We never had a problem coexisting with the Wine Skills Council because I communicated with the sectoral body [Sectoral Body of Labour Competences, OSCL], which was my channel to talk with the business association and the sector. Thus, I never needed to articulate with the Wines Skills Council.* **[Participant 38 – Government agency representative]**

Accordingly, based on the new competencies catalogue, during 2017 and 2018, WoC's Human Capital area continued its work concerning training and certification. By the end of 2018, this organisation reached 7,779 workers certified according to industry standards (VDC, 2018). Moreover, during 2018 the Human Capital area received the support and approval of top-level executives of WoC to increase the association involvement in training activities. Accordingly, the association began the legal steps to establish a Technical Training Organisation (OTEC by its acronym in Spanish), a private body that can provide training courses recognised by the national training system. In this sense, WoC has adopted most institutional options that business associations can manage to involve in skill formation for a sector.

At the same time, considering the technological changes observed within the industry in 2018, WoC's Human Capital area considered it was time to establish a new human capital strategy to guide its work. Thus, it was required to re-convene the SSC's board comprised of public and private stakeholders external to the business association. In doing so, an

important step was convincing the top-level management of the association about the need for these actions. As one member of the HC area commented,

> *Nowadays, as I told you, it is the current president [of the business association] […] who loves the initiative and who has… I mean, right away that I asked, I made a proposal to the directives last year, I said this is what I want to do, this is the organisation chart, and this is what I want to build, this is what we have, this is what I want later, and I want this development, and these are the objectives, and they say yes to all! So, yes, it is not difficult because the industry knows that it [SSC's work] is necessary, knows that we will do serious work, and have to have results, concrete results.* **[Participant 20 – Wine business association representative and SSC's adopter and executive]**

Accordingly, the SSC executive committee—comprised of internal staff of the business association—decided that a new labour market intelligence study was needed before convening the SSC's board members. Hence, in December 2018, the National Service of Training and Employment (SENCE) authorised the use of training funds managed by the OTIC Chile Vinos (Intermediate Technical Body for Training manged by WoC) to finance the study, which was again commissioned to the studies department of the FCh. Thus, once the study was ready, the second stage of work for the Wine Skills Council was planned to start in 2019. In doing so, it was expected to define a human capital strategy to guide the work of the business association concerning skill formation for the next five years.

The maintenance multisector

The Maintenance 4.0 Skills Council was created in June 2018. Thus it seems to be early times to assess its retention. However, some actions taken by its adopters may be discussed to explore this process.

During the second semester of 2018, the skills council was very active in meetings to define occupational profiles. Also, the members collaborated by securing access to single companies within their sectors for technical visits and data gathering executed by FCh. As one interviewee commented,

> *For us, the construction sector, [the involvement in the SSC] was more participative, in the end, to help develop the profiles. When the profiles were being developed, the technical team led by the Fundación Chile needed to go to construction companies. Well, there we were obtaining access to the companies so they could visit them, understand what type of work was needed in the companies within the construction sector […] I*

mean, to facilitate the work and to ensure that what was resulting from the [skills] council was useful for everyone. **[Participant 34 – Maintenance 4.0 SSC's board member]**

Thus, during this development process, the board members of the skills council were highly involved in supporting the operational activities of the skills council for a specific aim. Moreover, in October 2018, all skills council members signed an agreement committing to continue working to develop the human capital for these industries. This action was a strategy carefully devised by the FCh and the CPC to reinforce the idea that employers have an essential role in skill formation. In this line, beyond committing with the Maintenance 4.0 Skills Council, the commitment was to boost the private sector's role in skill formation by creating more skills councils.

In addition to the agreement, a seminar was organised in November 2018, presenting the new maintenance qualifications framework. At the same time, the CPC publicly announced its aim to incentivise the creation of skills councils and to continue leading the private sector towards a significant involvement in skill formation. As the CPC's managing director mentioned in its speech during the seminar,

We are boosting the creation of multisectoral skills councils that seek to develop and delivery information regarding the labour skills the market requires; and also that inspire the industrial sectors, formative and the public world to seek collaborative solutions for the problems of pertinence, quality and articulation that affects the current skill formation system in the context of the fourth industrial revolution. **[Document 22, CPC press release, 28 November 2018]**

Moreover, during the seminar, a collaboration agreement was announced with the public sector—specifically with the National Service of Training and Employment (SENCE)—to establish a work agenda for skill formation. This included identifying the demand for skills at the national level, capacity building of training providers according to industry standards, training courses and employment intermediation.

Likewise, launching the maintenance qualifications framework was timely aligned for its consideration in the discussions about the TVET qualifications framework (TVET-QF) within the Ministry of Education. This alignment is not surprising as the CPC is highly involved in national discussions about TVET through its participation within the TVET Advisory Council and ChileValora's board. Accordingly, during the same month, representatives of the Maintenance 4.0 Skills Council presented their qualifications

framework in a workshop organised by the curriculum unit of the Ministry of Education. The event was intended to generate links between public and private actors to begin a curriculum development policy for technical education based on the qualifications framework. Again, this relates to the new public sector agenda on TVET, which considers the participation of different stakeholders and the implementation of a qualifications framework. As the following abstract from the new education law illustrates,

Within a period of one year from the publication of this law, the Ministry of Education will implement a pilot of Qualifications Framework, as a reference, associated to technical and vocational education […] This design should consider the participation of higher education organisations, the productive sector, workers and experts. **[Law 21.091 about Higher Education, MINEDUC, 2018, p. Article 5th]**

Next, in May 2019, the Ministry of Education launched the TVET-QF by announcing the beginning of a pilot for its implementation, which considered the standards developed by the Maintenance 4.0 Skills Council. As one interviewee commented,

We continue moving this forward [Maintenance 4.0 Skills Council], but today is on a ground that people already understand. I mean, they have heard about it, you see. I mean, is such the level of impact that this [SSC] has had, that the [Ministry of Education's] Qualifications Framework took maintenance as a pilot. Maintenance will essentially be the pilot of the Qualifications Framework to implement the Qualifications Framework in the country! **[Participant 33 – Business association representative and SSC's adopter and executive]**

Thus, the fact that state agencies considered the standards developed by the skills council seems to show that its work is in progress to be integrated into state projects. Nevertheless, the pilot results and final implementation of the standards established by the council in TVET programmes are yet to be seen.

Likewise, the National Certification System for Labour Competencies (ChileValora) has also recognised the work undertaken by this skills council and has committed to developing a multisectoral tripartite Sectoral Body of Labour Competencies (OSCL) to review and integrate the competency standards developed by the Maintenance 4.0 Skills Council to the national catalogue. As one professional working at ChileValora commented,

ChileValora has the challenge and the commitment to bring all that work [Maintenance 4.0 Skills Council] to ChileValora. So, we are with a methodological challenge but also

strategic of how to create a transversal sectoral body of maintenance attached to ChileValora. **[Participant 38 – Government agency representative]**

In the same line of work, in June 2019, a specific agreement was officialised between the CPC, FCh and the National Service of Training and Employment (SENCE). This agreement entails implementing a training and employment intermediation plan financed by SENCE and executed according to the standards developed by the skills council. Accordingly, free training courses related to maintenance occupations were offered for a maximum of 1,000 participants across five regions. The FCh oversaw these courses through its *Vetas de Talento (Veins of Talent)* programme, which designed the courses and selected training providers. Accordingly, this action has reinforced the idea of the private sector's vital role in defining skill formation. As the following abstract from the National Director of SENCE speech at the launch event illustrates,

With this initiative, we position at the side of actual jobs, taking advantage in the best possible way of the tendency of increase and larger sophistication of maintenance. Moreover, we are doing it together with the private sector, that it has organised to identify how many people they need, what competencies they need and the best practices to train them. **[Document 23, Maintenance 4.0 Skills Council press release, 14 June 2019]**

Thus, it can be seen that the retention of the material practices for which the skills council was adopted seem to be in early stages but progressing as long as the CPC, and particularly the Human Capital area continues pushing it.

Comparing retention across the three councils

The previous section discussed the actions and events involved in the retention of SSCs within the mining, wine and maintenance sectors and within the public sector structure. Accordingly, it can be identified that the three sectors have in common at least three main processes aimed to retain the initiative.

First, the three SSCs embarked on *developing labour market information* about the sector. Second, they undertook a process of *developing standards for skill formation*, such as labour competency profiles and qualifications frameworks. Finally, the three SSCs focused on *fostering the use of information and standards* by key actors in skill formation. However, due to the different functioning models selected in each sector, the actions and

strategies differ significantly among SSCs. Thus, it can be noticed that each SSC has been retained differently by the sector and public actors.

First, one of the main similarities between the three sectors is that an essential process for retaining SSCs concerns developing information about the sector skills needs. Accordingly, one of the main actions taken—or expected to be taken—is *developing labour market intelligence* about the sector. However, each sector has carried a different approach to gather and disseminate this information. For instance, the Mining Skills Council has developed six labour market intelligence reports in eight years of functioning. They are publicly available and contain detailed information about the number of workers demanded according to occupational profiles and their estimated gaps. Conversely, the Wine Skills Council has developed two labour market intelligence studies in six years, which are not publicly available and contain general information about the demand for workers in the industry. Besides the different resources involved in developing these studies, these differences may also indicate which stakeholders these studies are expected to inform more directly. In this sense, the mining sector aims to influence a broader audience for their skill formation decisions. In contrast, the wine sector mainly seeks to inform internal decisions to guide their actions. In the case of maintenance, the skills council has not developed an labour market intelligence study yet but is a crucial objective established for the middle-term.

The second similarity refers to *developing sectoral standards for skill formation*. In doing so, each SSC has focused on gathering and analysing information from employers to develop labour competencies profiles and sectoral qualifications frameworks. Once again, the approach taken by each SSC has varied according to their functioning model. For instance, the Mining and Maintenance 4.0 Skills Councils have focused on developing these standards as a private initiative exclusively and independent of the system established by the public sector. Thus, the FCh has technically driven the process, and the resulting standards have been validated through national systems afterwards. By contrast, the wine sector has developed these standards through the National Certification System for Labour Competences (ChileValora) and its respective tripartite sectoral body. Therefore, using a more direct approach in their interaction with the current public structure. However, possibly more due to the actors' political strategies, the mining and maintenance qualifications frameworks have had more consideration in the implementation of the TVET qualifications framework (TVET-QF) by the Ministry of Education. Likewise, the close relationship of the FCh with these SSCs may be contributing to this level of retention by

the public sector. This is because the Ministry of Education has commissioned the FCh to deliver technical assistance on developing the TVET-QF and the related pilots for implementation (FCh, 2021).

A final common process for the retention of SSCs is related to *fostering the use of information and standards by key stakeholders in skill formation*. However, the emphasis on this process and the targeted actors differs significantly between the SSCs. The SSC that has shown a more comprehensive approach has been the mining one by developing permanent work with employers, TVET providers and the public sector. In doing so, it is the only SSC that has focused part of its work on encouraging employers to use the standards developed in their internal HR practices. In contrast, in the Wine and Maintenance 4.0 Skills Councils, employers contributed to developing competencies profiles. Still, efforts to encourage employers to use these profiles in their organisational practices seem weak in the case of wine and unknown in maintenance.

Moreover, while the three SSCs have directed efforts to implement sectoral standards in TVET organisations, the strategies differed. For instance, the Mining Skills Council has used the ELEVA project to reach technical education providers. The Wine Skills Council has developed a project involving secondary technical schools and has direct relationships with training providers through its Intermediate Technical Body for Training (OTIC). Finally, the Maintenance 4.0 Skills Council has included representatives of tertiary TVET providers in the Executive Committee and managed to be considered in the pilot to implement the TVET-QF by the Ministry of Education.

Accordingly, the retention of the main initiatives carried out by the SSCs by TVET providers seems to be uneven among the three sectors. In particular, the use of information and standards developed through the SSCs by TVET providers appears to be a continuous process for which the three SSCs remain working with different strategies and resources. Moreover, it seems to be the mining sector that has worked more extensively to promote the SSCs with a broader group of stakeholders. Hence, this SSC has more extensive public recognition, which may contribute to incorporating its standards not only by TVET providers but also by employers and public actors.

Despite the different retention levels among the three SSCs, at least five common factors have been identified that may be underpinning the retention of these bodies by sectoral actors and three common factors by public sector actors (Figure 4.3).

First, a material factor that could explain the retention of these bodies by sectoral actors relates to *the presence of a leader or group of leaders sustaining the initiative*. It can be noticed that a distinctive characteristic of the three cases is the existence of particular people within the sector or business association that has been committed to maintaining the SSCs functioning. These leaders have reinforced the idea that the industry should be involved in skill formation and mobilise the necessary resources to achieve the SSCs' objectives.

Similarly, a factor that may be involved in retaining SSCs by sectoral actors relates to having *continuing technical support/knowledge available or capacity built*. This factor is probably more relevant in the case of the Mining Skills Council that has the FCh as a permanent organisation supporting the operation of the skills council and guiding its development. Although the capacity of independent operation is low, the working groups and sense of community among HR professionals within the sector seem to contribute to its retention. Likewise, the Maintenance 4.0 Skills Council has the technical support of the FCh. Although it seems early to assess its retention, the interest of FCh in turning the CPC into some kind of private structure to group all SSCs in Chile may suggest that their support could play a vital role in the retention process. In the case of the wine sector, technical support is less dominant for its retention. However, the business association has worked with different consultancy companies to develop the SSC initiatives, including the FCh for labour market intelligence studies. On the other side, the capacity previously built by the Human Capital area of the business association (e.g. Intermediate Technical Organisation for Training, Technical Training Organisation, Certification agency, agreements) has served as a structure through which the skills council's strategy had been applied.

Additionally, a further factor that may be involved in the retention of SSCs by sector stakeholders is the *favourable conditions of the national training system to allow some level of employers' influence on training*. Notably, the public funds for training managed by National Service of Training and Employment (SENCE) have been a target of the three SSCs to widening the number of people taking training courses according to the standards developed. Furthermore, each sector has obtained public funds to develop specific projects to connect with the TVET sector. In this sense, the different levels of the political power of each SSC, and their respective business associations, may also explain the level of resources that had been able to obtain from different public sources to fund SSCs' projects.

Moreover, it can be noticed that the material factor previously identified could be related to an ideational factor, which relates to the *intention to influence or change skill formation*

policy and the direction of public spending on TVET. This factor is probably more substantial for the SSC's adopters in the Maintenance 4.0 and Mining Skills Councils, as the stakeholders involved have strong political power. In the wine sector, it may be noticed that while not expecting to be a loud voice to influence change, they are direct in expressing that changes in public policy are urgently needed.

Finally, an emergent ideational factor identified in the three skills councils related to their retention by sectoral actors refers to the *perception of new challenges for the sector due to technological changes*. Thus, sectoral actors recognise the need to continue working through the SSC to identify new skills needs. While this idea has incentivised further studies and rethinking standards and profiles in the mining sector, for the wine sector, it has helped to reactivate the skills council and plan a new SSCs' board meeting for reconsidering the sector's human capital strategy. In the Maintenance 4.0 Skills Council case, the discourse related to technological change and the fourth industrial revolution has been a powerful idea used to promote and justify the work of the skills council with internal and external stakeholders.

Moreover, the interviews with context stakeholders revealed that at least two material factors and one ideational might explain the retention of SSCs by public sector stakeholders, particularly the inclusion of the standards developed by these bodies in state projects, such as the TVET-QF.

First, the *establishment of a TVET agenda, including the development of a TVET-QF* has fostered the idea of *TVET policy reforms framed in terms of further coordination needed*. The educational policy reforms initiated in the Bachelet's government (2014 – 2018) have fostered further collaboration among different stakeholders, including employers, in the TVET policy. Thus, this situation has facilitated the acceptance of SSCs' initiatives among public sector agencies and actors.

Moreover, as has already been mentioned, *the economic and political power of the sector* seems to be a factor contributing to the retention of SSCs by public actors and explaining the different retention levels of these bodies initiatives. Notably, the mining sector's economic and political power has given more weight to the SSC and some of its main actors in public policy discussions on TVET. Likewise, the political power of the CPC and its representativeness of the business sector has acted in the Maintenance 4.0 Skills Councils favour. On the contrary, the Wine Skills Council and its main actors have been less influential and considered by the public sector. Figure 4.3 shows the factors here discussed.

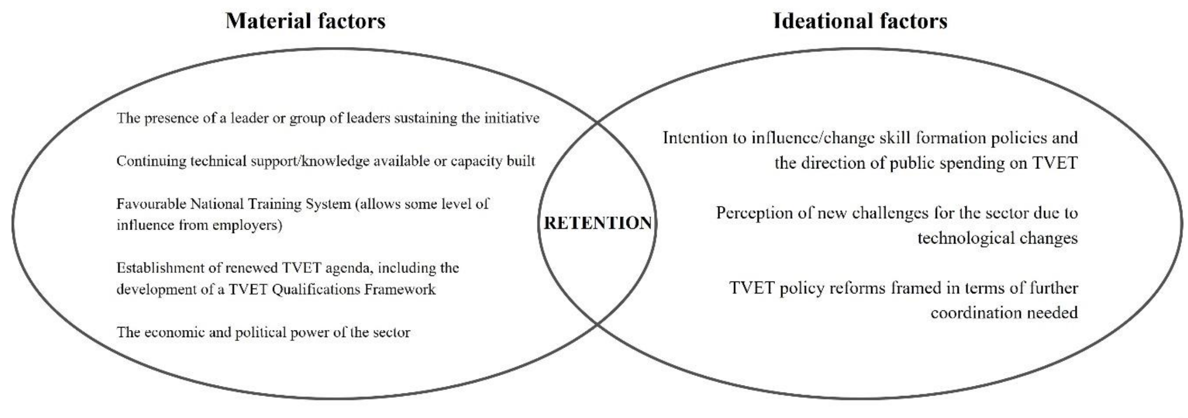

Figure 4.3 Retention: common factors identified in the private-led adoption of SSCs in Chile

4.4 Chapter Summary

This chapter has presented the findings concerning the adoption of private-led SSCs in three sectors in Chile. It showed the relevant processes, events, and actors identified within documents and interviews for the three sectors studied. Additionally, it has discussed the material and ideational factors identified that might underpin the adoption process.

First, it was described how economic factors drove variation mechanisms. The three sectors studied were affected by different economic challenges that directly related to labour and skill shortages. Accordingly, sectoral actors perceived that skill formation issues threatened the growth expectations of their sectors. This process was underpinned by the direct or indirect actions from the FCh, whose influence has been a critical factor in the adoption of SSCs in Chile.

Second, the processes involved in the selection of SSCs and the material and ideational drivers underpinning these processes were discussed. Notably, a market logic paradigm regarding TVET by SSC's adopters has been one of the main drivers for selecting SSCs as a valid approach to address TVET issues. Possibly, underpinned on the existence of a highly marketized TVET system in the country. Also, strong business associations have been found critical in explaining the adoption of SSCs by these particular sectors. Moreover, the perception that, for different reasons, the state could not address the skills problem affecting their sectors has been a factor that influenced private actors to be the main stakeholders in the adoption of these bodies.

Finally, the retention of SSCs has been discussed, pointing out that all of them have three main processes in common to foster the retention of these bodies by sectoral and public

sector actors. However, the retention of these bodies has differed significantly between sectors. While the Mining and Maintenance 4.0 Skills Council have received greater recognition among public sector actors, the Wine Skills Council has had a lower profile. Notably, each SSC has used different strategies to motivate the use of its standards by TVET providers and other stakeholders. Despite the differences, some common factors that may explain the retention of SSCs have been found. Among these, two crucial factors for the survival of the SSCs may be the presence of leaders sustaining its operation and the favourable conditions of the national training system to allow some level of employers' influence on training. Moreover, the public sector establishment of a new TVET agenda, including the development of a TVET-QF, has acted as a relevant factor underpinning the retention of SSCs' initiatives by public sector actors.

Finally, Table 4.3 below presents a summary of the findings discussed in this chapter.

Table 4.3 Summary of findings: the adoption of private-led SSCs in Chile's mining, wine and maintenance sectors

Mechanisms	Main processes	Material factors identified	Ideational factors identified
Variation	▪ Acknowledging a sectoral problem concerning skills formation	▪ Economic challenges (growth, low productivity) ▪ Labour shortages, skills shortages and gaps ▪ Existence of internal person/group with interest in human capital issues within business associations	▪ Influence of national policy entrepreneur (direct or indirect) ▪ Conviction of the threat of human capital issues on sector/economy growth expectations ▪ The "disconnect between industry and TVET" discourse
Selection	▪ Acknowledging the causes of the problem ▪ Identifying a possible solution: coordination through SSCs ▪ Convincing relevant stakeholders ▪ Defining a feasible model of functioning	▪ A highly marketized TVET system ▪ Reduced responsibility of the state in education ▪ Strong business associations with the power to organise and influence their members ▪ Political support from top-level executives within the business association ▪ Technical support/knowledge available to adopt SSCs	**(to interpret the cause of the problem)** ▪ Market-logic paradigm (market-failure, information asymmetries) **(to legitimise actions)** ▪ The naturalisation of the informational role of employers in skill formation ▪ Conviction of other actors' inability to solve the problem (particularly the state) ▪ Pro-SSCs arguments rooted in a conception of rational actors with employability and economic objectives as their main interests.
Retention	▪ Developing labour market intelligence ▪ Developing standards for skill formation ▪ Fostering the use of information and standards by key stakeholders in skill formation	**(among employers/business associations)** ▪ The presence of a leader/group of leaders sustaining the initiative ▪ Continuing technical support/knowledge available or capacity built ▪ Favourable National Training System (allows some level of influence from employers) **(among public sector actors)** ▪ Establishment of renewed TVET agenda, including the development of a TVET-QF ▪ The economic and political power of the sector	**(among employers/business associations)** ▪ Intention to influence/change skill formation policies and the direction of public spending on TVET ▪ Perception of new challenges for the sector due to technological changes **(among public sector actors)** ▪ TVET policy reforms framed in terms of further coordination needed

CHAPTER 5: FINDINGS IMPLEMENTATION OF SSCs

5.1 Introduction

This chapter presents the findings concerning the implementation of SSCs in the mining and wine sectors. This part of the study does not consider the maintenance case because the implementation of this SSC's initiatives had not started when the fieldwork for this research was conducted. Considering that the main aim of adopting SSCs was to close the gaps between sector skills needs and education and training, the second part of this study focuses on understanding the interpretations and reactions of employers and TVET providers to SSCs. Accordingly, this chapter addresses the research question: *how have different employers and TVET providers implemented Sector Skills Councils' initiatives in Chile?*

First, following the principles of realist evaluation, subsection 5.2.1 outlines the central assumptions from SSCs' adopters related to implementing SSCs. Particularly those assumptions involving employers and TVET providers.

Subsequently, subsection 5.2.2 presents the findings concerning the reactions and interpretations of these stakeholders separately by each case. This subsection presents the evidence found to answer two specific sub-research questions: *how employers and TVET providers have interpreted and reacted to SSCs?*, and *how do the different reactions of employers and TVET providers to SSCs (M) and their diverse contextual circumstances (C) explain the implementation of SSCs (O) in Chile?*

Finally, in light of the findings discussed, subsection 5.2.3 presents a comparison of the two cases based on the assumptions outlined at the beginning of the chapter. In doing so, this last subsection addresses the sub-research question, *how do employers and TVET providers CMO configurations align with the policy expectations?*

This findings chapter draws on interviews with employers and TVET providers involved in implementing SSCs' initiatives in the mining and wine sectors. Additionally, data from external sources, such as sectoral documents and databases from the Ministry of Education, have been used when necessary to support the findings.

The chapter concludes with section 5.3, which presents a summary of the findings presented in this chapter.

5.2 Description of Findings

This section presents the findings concerning the implementation of SSCs in the mining and wine sectors in Chile. The section is divided into three main subsections. The first subsection presents SSCs' adopters' main assumptions about the reactions from employers and TVET providers to SSCs. The following subsection presents the findings from interviews with these actors about their interpretations and reactions to these bodies or related business associations. Finally, the last subsection compares the two sectors according to the fulfilment of the assumptions identified in the first part of this section.

5.2.1 Policy expectations: SSCs' adopters' assumptions

As discussed in the previous chapter, employers and business associations within the mining and wine sectors decided to adopt SSCs after embracing the idea that changes to skill formation were needed to respond to the economic challenges affecting their sectors. Specifically, they considered that there was a disconnect between the skills developed through the TVET system and the skills demanded within their sectors. As a result, a common interpretation was that information asymmetries might explain this disconnect.

In this line, business associations representatives considered that employers should undertake an informational role in skill formation since they can best define what is required in the labour market and what is needed from the TVET system. Hence, by following international examples, SSCs were adopted as a policy solution to function as coordination bodies to gather, systematise and deliver information to the skill formation system, and TVET providers in particular. This policy solution entailed several assumptions about the preferences and behaviour of employers and TVET providers.

First, the success in the implementation of SSCs depended on employers' willingness to share internal information to develop SSCs' deliverables (e.g. labour market intelligence reports, competency-based profiles, training standards). SSCs' adopters assumed that it was in the best interest of single employers to share information about their skills needs because this would increase the supply of qualified people available and facilitate their recruitment and training practices. To illustrate,

> *Well, we reached an agreement that it was important to develop this information and as a part of the 'selling' process to each of the [mining companies] headquarters, that they should be willing to pass this information, opened by people, profiles, years [...] So, it was a huge work, but an agreement was reached that this was necessary because what really happened was that they [mining companies] started to poach people [...] So, it*

was a thing of 'I am not retaining enough people, I am not finding enough people, and on the top of that I will grow' **[Participant 4, Mining SSC's former executive]**

Second, a crucial part of the success in implementing SSCs depends on the response of TVET providers. SSCs' adopters expected that TVET providers could react to the provision of coordinated information from employers by adjusting their programmes according to industry requirements. As discussed in the previous chapter, SSCs' adopters assumed that TVET providers are interested in delivering an education and training offer relevant to the labour market with the expectation to provide better employability for the students. As the following quote from a wine SSC's adopter illustrates,

The educational organisations will have better… greater clarity regarding what professions, what occupations [are required by industry] and how to really give opportunities to youths to develop a career that will enable them to find a pathway. **[Participant 20, Wine business association representative and SSC's adopter and executive]**

Moreover, the main aim established for SSCs entails assumptions about their capacity to articulate information between employers and TVET providers. In this sense, to achieve the expected outcome of connecting these stakeholders, it is assumed that, operatively, SSCs' staff—or the designated organisation—can capture and systematise information from employers and communicate this information to TVET providers. The following quote from an interview with one stakeholder directly involved in the adoption of the SSC for the mining sector illustrates this assumption,

What Sector Skills Councils do is that they give [information], from the point of view of what is needed in the job position, the real competencies not theoretical, real. Thus, it is a natural articulator between the world of work and the world of education. So, now the [TVET] institutes have a very, very clear map of what needs to be done, what it has to be taught and they can use that [information] and later the world of work is nourished by trained people. In that way, it [overall system] gets more fluid, and it responds to the real needs of companies. Plus, the advantage with the Skills Councils is that they look forward, use studies that are forecasts, and look for the competencies that will be needed in the future. Hence, we will not be only training for today's needs but also the future ones. **[Participant 2, Mining sector employer and SSC's adopter]**

Accordingly, considering the principles of the realist evaluation approach, all these assumptions can be considered mini theories that can be unpacked and tested. For instance,

when SSCs' adopters assumed that employers are willing to share information about their skills needs, they implicitly assumed they have a good understanding of their current needs. Likewise, as the SSCs are aimed to forecast future needs, the assumption goes further when considering that employers also have a good understanding of their potential skills needs. In the same vein, when it is expected that TVET providers could adjust their TVET offer to suit industry needs, it is implicitly assumed that they are first open to hearing the industry's voice. Second, they will consider the information valid, and finally that they will have the means to implement adjustments to their offer.

Furthermore, it is worth mentioning that in the particular case of the SSCs studied, besides the assumptions involving the flow of information between employers and TVET providers, there are additional expectations about employers based on some extra assumptions. In both cases, it is expected that employers could also consider the information developed through the SSCs to implement some internal changes to their organisational practices. For instance, a common expectation among SSCs' executives in the two sectors is that employers certify current workers' competencies according to Competencies Labour Profiles (CLPs). It is expected that the standardisation of job profiles based on CLPs within the sectors could facilitate the articulation with the TVET system. The following quote illustrates this point,

The big issue first was 'well, we will work in these standards, but these standards are to be used' […]. So we went exclusively to mining companies, this group of fifteen, expecting that this agreement and these standards were the ones to be used in the industry as a whole […]. I mean, ok, here the mining sector was making a big effort to provide these standards with no public funds to put them at the country's service so that people can be certified. In the case of the education world, to be able to explain and work with them and achieve that, they could develop these competencies in their students to give them greater employability. And on the side of companies, so they can use these standards and won't be asking for, I don't know, for 'risen Jesus Christ' as a requirement to fulfil a position and they could do it according to these standards. **[Participant 4, Mining SSC's former executive]**

However, the emphasis on these expectations and the initiatives to influence employers varies significantly in each case. For instance, SSC's executives in the mining sector actively communicate their expectations about using standards to employers. In contrast, in the wine sector, the approach with employers is more subtle and takes the form of support

in case they need it. Likewise, the Mining Skills Council has developed projects to encourage employers to implement sectoral standards in their recruitment, training, and development practices. In the wine sector, the business association implementing the SSC's strategy has used the established structure to mainly foster certification and training according to sectoral standards. It is worth mentioning that, in both cases, these expectations about the use of standards among employers are not part of any mandatory requirement from the SSCs. Therefore, it does not condition their participation in SSCs' initiatives.

To summarise, Table 5.1 presents the unpacked assumptions from SSCs' adopters about employers, TVET providers, and SSCs' staff in Chile's mining and wine sectors. These assumptions are organised according to how the flow of information is supposed to occur.

Table 5.1 SSCs' adopters' assumptions about employers, TVET providers, and SSCs' staff

Stakeholder	Assumptions
Employers	1. Employers have a good understanding of the skills/competencies currently needed and future ones. 2. Employers are willing to share private information about the skills/job profiles needed. 3. Employers will consider the information and standards from SSCs as a useful instrument to use in their internal processes. 4. Employers will adjust/change their organisational practices according to sectoral standards.
SSCs' staff (or designated organisation)	5. SSCs' staff (or designated organisation) can capture and systematise employers' data. 6. SSCs' staff (or designated organisation) can communicate and deliver information to TVET providers.
TVET Providers	7. TVET providers are open to hearing information about sectors' skills needs to ensure better employability for students. 8. TVET providers will consider the information received from the SSCs as valid. 9. TVET providers will be able/have the resources to implement changes to their education and training offer according to information from the sectors. 10. TVET providers will adjust their education and training offers to suit the skills needs of the sectors.

5.2.2 Employers and TVET providers interpretation and reactions to SSCs

This section presents the findings concerning employers and TVET providers that have been involved in the implementation of initiatives from SSCs. Accordingly, this section draws on interviews conducted with 21 participants, divided into 11 employers (6 for mining and 5 for wine) and 10 TVET providers (4 for mining and 6 for wine). Employers interviewed comprised HR managers, L&D managers and HR practitioners in mining, contractor (mining) and wine companies. TVET providers interviewed included a principal, program directors, school directors and TVET teachers working at secondary and tertiary TVET organisations.

Given the differences in the strategies carried out between the Mining and Wine Sector Skills Councils, each case is presented separately. Also, for each case, first is presented the findings of employers, followed by TVET providers. The following subsection will compare cases based on the findings discussed in this section and the previously outlined assumptions.

Mining sector

Employers in the mining sector

As discussed in the previous chapter, employers have had a leading role in adopting the Mining Skills Council (CCM by its acronym in Spanish) and to date, they are the main type of members accepted in the SSC. This skills council is comprised of twenty organisations, including fourteen mining companies, two large-sized contractor companies and four business associations (CCM, 2019). Thus, the Mining Skills Council is comprised only of representatives of the demand for skills.

It is not surprising that all employers interviewed for this study consider the main aim of the SSC to communicate the skills needs of employers to TVET providers to close the skills gaps affecting the sector. In this sense, the SSC is seen as a mechanism that allows to collectively influence TVET provision to fit the skills needs of companies within the industry. As an HR representative of one mining company commented,

> *I mean, I think that within this group [SSC], in the end, what is looking for is to try to influence in some way on the educational sector of our country, so it trains professionals, technicians overall with… that are useful for the industry.* **[Participant 15, Mining sector employer]**

Likewise, employers consider the SSC as a coordination platform. In this line, several employers commented that the Mining Skills Council is seen as a place to discuss skills issues, agree on common strategies to address them and share good practices. Thus, the SSC has also acted as a mechanism to overcome some cooperation barriers among employers on issues they usually compete. For instance, these bodies foster internal training according to common sectoral standards that could ease workers' movement between companies, which could be considered a negative effect. However, these standards also help to facilitate communication with the TVET system. To illustrate this point,

In mining, as all [jobs] are very specialised, it was "how I am going to train these people […] they are going to be poached". So, to manage all those barriers of trust, the sector did this work of the Skills Council and seated all at the same table, it was incredible how we achieved, first agreements. Second, that in some way was… is never selfless, but with a country interest that is the beauty of these councils, that if we didn't come to an agreement the country would not solve the problem of the lack of qualified workforce. So I think that was well understood. **[Participant 13, Mining sector employer]**

In this line, employers seem well assimilated that their active participation in developing information about skills requirements is essential to achieve SSC's objectives. All interviewees recognised that their primary role within the Mining Skills Council is sharing information and participating in technical and strategic meetings convened by the SSC. In this line, although some employers mentioned that this role entails a high requirement of time and resources, they are eager to comply with these requests as part of a collective effort to develop information. As a representative from a mining company noted when explaining their role as an SSC's member,

It entails assigning resources. Why? For us implies a double allocation of resources. First, to develop the content [e.g. standards, labour competency profiles], we have to send our experts to validate what is being developed, so imagine! I have to bring someone from Iquique [mining site city], I have to get it here [Santiago] to be one week at the Fundación Chile or the CCM [Mining Skills Council] discussing the matter. So, that means that this person is not producing for one week, which is the first cost. The second cost is that as a company, we have to put money so the external company [Fundación Chile] can develop the final product because it is two expenses that we have to assume for that. Alone, we could not do it because it is costly. That is why the idea is that we can pay as a sector. **[Participant 12, Mining sector employer]**

The above is because employers face direct and indirect costs as members of the Mining Skills Council. Indirectly, they have to allocate time from people working at the production sites or their HR departments to meet and discuss skills needs and workers competency profiles. Directly, they have to pay a fee to fund the SSC. This budget is used to pay for the development of information and standards, which the FCh executes. To illustrate,

> *It costed 'an eye from the face' (sic), a huge investment [...] it was extremely expensive to put this system going, and the Fundación Chile is not precisely a cheap organisation, they formed a team to develop this, and they were the ones that pushed the initiative, they were guiding us how to address the thing [SSC].* **[Participant 4, Mining SSC's former executive]**

Thus, it can be said that, in general, employers have reacted positively to the expectations over them concerning information sharing about their skills needs. Moreover, it can be noticed that they consider it important to contribute with accurate information to definition processes about skills needs. Several employers interviewed emphasised the care taken to assign people from their organisations that work directly in mining sites (i.e. production managers, supervisors or engineers) or have specific knowledge about skills issues (i.e. HR professionals). To illustrate,

> *Generally, we go [to SSC's meetings] with people specialised in the matters that will be discussed, so we try to contribute and give our perspective on these activities.* **[Participant 15, Mining sector employer]**

Furthermore, SSC's adopters expect employers to implement sectoral skills standards in their organisational practices. This requirement is not mandatory for SSC's members, but it has been emphasised as a vital aspect to naturally connect the sector's skills needs with TVET provision. For instance, it has been argued that if employers begin to train workers according to sectoral standards, training providers will have to offer courses aligned with these standards. Simultaneously, if employers prioritise recruiting people from TVET institutions accredited by the SSC, TVET providers will be incentivised to obtain this accreditation.

However, interviews with employers suggest that not all of them consider using sectoral standards as part of their role to achieve SSC's objectives. Moreover, among those employers that consider using standards as part of their role, some recognise certain difficulties implementing them in their organisations. In this regard, it has been identified

that the prevalence of internal company standards or partial adoption of sectoral standards, in some cases, might be responding to ideational factors and in others to material ones.

For instance, in some cases, employers' non-use of sector skills standards responds to ideational factors related to their conception of the final addressee of these standards. In these cases, standards are considered a valuable instrument to influence external stakeholders and not necessarily for internal use. Thus, generating certain reluctance to implement internal changes. This concern among some mining companies for improving external stakeholders skills base, such as contractors, may respond to the high dependence on an external workforce that characterises the sector. Indeed, according to Consejo Minero (2020), around 73% of workers within the industry are directly employed by contractor companies. To illustrate the point of view of these mining companies,

> *[use of SSC's standards?] I would say that in the daily activities, no, ok. We are quite structured. We also have corporate guidelines that come from our headquarters. I think that companies like us, which are one of the biggest in the market…is not much [use of standards]. But I think that our eagerness for participating [of the SSC] somehow is that we benefited by improving the characteristics or the knowledge conditions of the contractors, ok. There is also a direct benefit for us, but it is minimal. We benefit more by improving the standard of third parties […] We don't have qualifications framework, of course, the other [SSC's standards] is there and in some way we don't multiply it for zero because we also have contributed to that. But, it is not our cornerstone. It is not our cornerstone. But, yes, as I said, we participate [of the SSC] thinking on our providers, our contractors. There are SMEs that give us services, so of course, we are interested in this matter.* **[Participant 15, Mining sector employer]**

As the quote above partially suggests, this situation can be found mainly in large-scale mining companies with strong corporate guidelines. Moreover, as some interviewees suggested when comparing the willingness among different employers to implement sectoral standards, the company's time in operation may affect their possibilities to change. In this line, they argue that mining companies with long-term operations may have more difficulties changing people's minds to accept sectoral standards. Thus, showing some conditions where SSCs' adopters' assumptions may not be realised. To illustrate,

> *We are lucky that today we have space to use them [sectoral standards] without any questions because we started with this from the beginning. But it is different when you have an operation running. I mean, we are almost starting a project from zero. That's*

why it is easier to apply [the sectoral standards], but if today I go to [other mining company's name] and tell them to change the way they have been doing things all these years and do it in this way is more difficult. **[Participant 12, Mining sector employer]**

On the other side, interviews with some employers showed that some of them consider sectoral standards as a valuable framework to implement internal changes. Still, they recognise different material constraints that finally end up limiting their use.

For instance, some employers consider it impossible to implement sectoral standards without adjustments to suit the particular context of the operation. Moreover, some of them suggest that not making adjustments could lead to the rejection of standards by workers and operation managers and subsequently to the failure of the initiative. In these cases, aspects such as the organisation of work in different mining sites or production processes related to extracting various minerals (e.g. copper vs gold or iron) might make the straightforward implementation of sectoral standards difficult. As the following comment from a representative of a mining company illustrates,

I would say that it is useful as a reference, ok, it is not the panacea in terms of what the skills council gives you is what you exactly need. It may be like a jacket that you have to trim. It is basically a reference framework. It is a reference framework, but you have to translate it to your reality, adapt it necessarily. Something that you cannot disregard, you cannot overlook, is that this has to consider the experience within each operation. It has to be localised. […] If you don't do it is something that will not fit and it ends up making no sense to the operation, and when what you are doing doesn't make sense to the operation, they [people working at mining sites] see it as an alien, you end up wasting time and money. **[Participant 14, Mining sector employer]**

Likewise, a common material difficulty discussed by interviewees to implement sectoral standards in training and certification of current workers is related to the costs involved in removing them from the operation. Time restrictions and difficulties in convincing production managers working at the mining sites have been identified as typical constraints to implement practices according to the SSC's standards. Thus, even when HR departments value SSC's standards and want to implement them, the dynamics of work organisation within mining sites (e.g. based on shifts such as the '7x7') and the organisational structure of mining companies, in general, restricts the application of changes to organisational practices. As one HR executive within a mining company commented,

I think it makes much sense to work with competencies. However, it is complex. I mean is wide. When you have people you need to train based on competencies, the people are full on the operation. Therefore, it is difficult to take them away to train them. So, when people are working, it is difficult to give them competency-based training as the one created in the qualifications framework because you don't have the time. And maybe you get, I don't know, one competency, one UCL [Labour Competency Unit], a small part and you can do it in a programme. **[Participant 13, Mining sector employer]**

In contrast, some companies have been able to implement and use sectoral standards to a great extent. As mentioned, these types of companies are characterised by having new or upcoming operations in place. Moreover, the HR managers within these companies are highly convinced about the usefulness of managing their practices according to sectoral standards. To illustrate this response from one employer in this situation,

We are using CCM's [Mining Skills Council] products 100%. In fact, all the career development model that we are doing for the new operation complies with [SSC's standards]. I mean, we took the Qualifications Framework, and we use it as it is, ok. As a result, we will recruit according to the framework, we will train according to the framework, and we will do career plans according to the framework. So, today we are fully using it. **[Participant 12, Mining sector employer]**

In the same line, large-sized contractor companies interviewed showed a greater acceptance of SSCs' standards and their use within their organisational practices. All representatives from large-sized contractor companies interviewed showed a significant commitment to using SSC's standards in their internal training and development practices. Moreover, they use these standards as a strategy to demonstrate to mining companies that their employees have the right skills to work at the mining sites and validate the training provided at their training centres. As the following large-sized contractor representative commented when explaining why they decided to use SSCs' standards,

So, how can we do it to be able [to provide services]? Because there are no people, there are not qualified people. Then, we can train them, but if we train them, how these people will be accepted at the mining sites? We said, ok, there is a quality accreditation [from the SSC], and if we apply this to our [training] programme clearly these people will be able [to work in mining sites] because they comply with all the standards that the industry demands. **[Participant 17, Mining sector employer]**

However, as these companies provide services to different mining companies, they are the first to notice the inconsistency in using common standards within the industry. Thus, this situation is possibly showing the partial failure of the Mining Skills Council to achieve an increased validity of these standards for some stakeholders. As a representative from a large-sized contractor company commented,

We have asked to be more disciplined on that aspect [use of standards], in the sense of being the first to use what they [mining companies] developed. In a way that for us [contractors] to follow, ok, if the clients or the mining companies use it and can demand it to their providers, we will have to be all aligned. But I would say that today is not a generalised thing, although we ourselves promoted it. We are the same companies [company name], us, four, five more that we talk about this, but it is difficult, it is very… they call it 'usability' how much of this is used? The truth is that it should be used more. **[Participant 16, Mining sector employer]**

To summarise, all employers interviewed are members of the Mining Skills Council, as such, they seem well convinced of their role within this body concerning delivering information. Moreover, as some employers commented, they consider it crucial to involve their experts in SSC's meetings to develop accurate information and standards. On the other hand, their reactions are varied concerning the use of sectoral standards. As noticed, all employers interviewed recognise that the qualifications framework, labour competency profiles and training standards provided by the SSC are a useful guide to be considered. Nevertheless, only some of them have used these standards within their organisational practices. In this sense, it can be noticed that differences regarding the time mining companies have been operating and the company's size may account for these differences and the difficulties to implement the standards. Also, large-sized contractor companies show more significant commitment to using sectoral standards. They consider them a useful way to ensure the quality of their services and signal that their workers comply with the skills standards required within mining companies.

Therefore, using the concepts of the realist evaluation approach (Context-Mechanism-Outcomes (CMO) configurations), Table 5.2 summarises the findings concerning employers' decisions to share information about their skills demands. Similarly, Table 5.3 summarises the findings concerning the employers' use of SSC's standards identified through interviews.

Table 5.2 CMO configurations identified in mining sector employers concerning sharing information about their skills needs

Context	Mechanism	Outcome
Large-scale mining companies with long-term operations; Active SSC's member.	Provision of information about skills demands is seen as important to influence external stakeholders such as contractors and TVET providers.	Frequent sharing of information about skills demand and participation in SSC's meetings.
Large-scale mining companies with new or upcoming operations; Active SSC's member.	Provision of information about skills demands is seen as important to generate mutual understanding between employers and TVET providers.	Frequent sharing of information about skills demand and participation in SSC's meetings.

Table 5.3 CMO configurations identified in mining sector employers concerning using SSCs' standards in their organisational practices

Context	Mechanism	Outcome
Large-scale mining companies with long-term operations; Partially convinced HR executives.	SSC's industry standards are seen as a referential guide and mainly aimed at external stakeholders.	Expressed low level of use of industry standards in organisational practices.
Large-scale mining companies with long-term operations; Fully convinced HR executives.	SSCs' industry standards are seen as a valid instrument to implement.	Expressed middle level of use of industry standards in organisational practices.
Large-scale mining companies with new or upcoming operations; Fully convinced HR executives.	SSC's industry standards are seen as a valid instrument to implement.	Expressed high level of use of industry standards.
Large-sized contractor companies; Fully convinced executives.	The provision of industry standards is seen as a valid instrument to implement.	Expressed high level of use of industry standards.

TVET Providers for the mining sector

As commented in the previous section, the main objective for adopting an SSC in the mining sector concerns closing gaps between the sector's skills needs and the skills developed through the skill formation system. Thus, during its eight years of functioning, the Mining Skills Council has tried to employ different strategies to get closer to the TVET sector and deliver information to influence their offer.

One of the main strategies to fulfil the objective mentioned above has been creating the public-private project ELEVA, which aims to guide and provide tools to different TVET providers to implement education and training standards established by the mining sector. In this line, TVET providers who successfully implement these standards could obtain an SSC's accreditation named *Sello CCM* (Mining SSC's seal) (Consejo Minero, 2018b). This accreditation allows to formally signal accredited providers, ideally positioning them in a situation of advantage compared to other TVET providers. Thus, the *Sello CCM* has been

one of the main instruments created by the Mining Skills Council for incentivising TVET providers to implement changes aligned with sectoral standards.

The ELEVA project has involved the participation of 54 TVET providers (ELEVA, 2020), of which 21 (equivalent to 39%) had obtained the SSC's accreditation for at least one of its programmes (CCM, 2020). All the TVET providers interviewed for this study have been participants of the ELEVA project with one of their TVET programmes. Thus, they are familiar with the Mining Skills Council and have shown positively receptive to its initiatives. In this sense, a common aspect among interviewees is that they all consider the Mining Skills Council as an organisation aimed to close the gaps between the education and training sector and the needs of qualified people from the industry. Moreover, all of them mention the underlying SSCs' objective of fostering an increasing provision of people trained according to the standards required by the sector. As one of the interviewed commented,

I think that the expectation of the CCM [Mining SSC] is big, despite the current situation [Chilean social crisis] because some [mining] projects are on hold, etc. But what is expected is that from here to ten years, a decade, there could be trained six thousand electromechanical maintainers, which is lacking in the mining sector. **[Participant 10, Secondary TVET Provider]**

To achieve this aim, the Mining Skills Council is understood as an organisation that has provided relevant information to communicate the skills needs of the industry and guide the TVET sector. At the same time, the ELEVA project is considered by the TVET providers involved as an essential support to achieve the implementation of changes aligned with SSC's standards. In this sense, it is interesting to note that participating in this project is perceived as a significant opportunity for them to enhance their TVET offer and, in so doing, the employment opportunities for their students. To illustrate,

In the year 2017, it arose a big opportunity for the school and the organisation, coming from the Fundación Chile […] the Mining Skills Council, Fundación Chile they created this project that is called ELEVA, have you heard of it?, well, the ELEVA project is supposed to… its basic definition is 'it rises the competencies of the higher education institutions to directly align them with what is required in the market' (sic) **[Participant 9, Tertiary TVET Provider]**

Furthermore, it has been possible to identify that the information provided by the Mining Skills Council has generated in TVET providers a feeling of certainty about the relevance

of their programmes that they did not have before. As some of the interviewees commented, in the absence of this information, they have had to employ different methodologies to understand the needs of employers, which is not always representative enough. Thus, the data delivered by the Mining Skills Council is highly valued and positively received by TVET providers. As one representative from a secondary technical school commented,

> *I think that the main contribution [of the Mining Skills Council] is of relevance, of having the certainty that what you teach makes sense […]. This [SSC's information] is a very powerful resource, very powerful to say 'look if you want to give good training to these students, this route, this qualifications framework gives you the guarantee that what you will teach to your students will be useful, will be relevant'. That has been one of the biggest challenges of technical education, that what you teach is useful for the lad (sic) as a tool.* **[Participant 11, Secondary TVET Provider]**

In the same line, it is worth noting the image that TVET providers have of the main stakeholders involved in the ELEVA project, such as the FCh, whose consultants are considered highly professional. These stakeholders have generated considerable trust in their methodologies and guidelines, apparently without much questioning from TVET providers. Besides, some TVET providers consider these stakeholders and their initiatives more reliable than similar initiatives of the Ministry of Education. To illustrate,

> *So you find yourself with people from the Ministry [of Education], from the regional department, and you see that they are incredibly lost or wondering. They are using something they do not even understand because if that [initiative] were taken by someone from the Fundación Chile or someone who is 100% on this matter, you would notice the difference immediately […]. That is one of the biggest problems it [Ministry of Education's initiatives] has today. I think that is why we do not progress. So what ELEVA is doing is an island, and that is why it is expected to grow.* **[Participant 10, Secondary TVET Provider]**

Thus, it can be noticed that TVET providers in Chile have been in a context where at least two main issues may have contributed to a greater welcoming of initiatives from the private sector, such as SSCs. First, TVET providers have experienced difficulties in obtaining information about the skills demands of employers. Second, some of them have developed certain suspicion about the guidelines from the Ministry of Education. As the following comment about SSCs from a representative from a tertiary TVET provider partially illustrates,

> *When the industry does not tell me [about its skills demand] in an organised way, I have to go and knock on some doors to ask for favours [...]. The person in charge of the academic area has to go and ask their friends as a favour 'hey please help me', a thing completely unprofessional! And naturally that the likelihood of having a defective product is high. So, obviously that, for us, it [the SSCs] facilitate our life, it reduces our costs, and it enhances our quality.* **[Participant 8, Tertiary TVET Provider]**

In this line, the TVET providers interviewed recognised that their role in the objectives of the SSCs is related to being able to educate and train people—technicians in particular—with the skills required to work in the mining sector. This situation suggests that TVET providers are open to implementing internal changes to meet the standards expected by the mining industry. Thus, as has been previously mentioned, this open approach to receiving information from SSCs seems to respond to the motivation of giving better employment opportunities to their students. Moreover, TVET providers consider ensuring students' employability a necessary commitment to them and their families, particularly given their socioeconomic background. As the following comment illustrates,

> *There is a situation behind [the relevance problems of TVET] that is extremely powerful concerning what it means to play with the expectations of the more vulnerable sectors [of society]. It is extremely painful when you see the expectations of vulnerable families that seek in education a possibility to enhance their living conditions, but then they are disappointed because they find that they received bad education, and later that with that bad education received they are unable to enter the world of work.* **[Participant 11, Secondary TVET Provider]**

Furthermore, it is worth mentioning that in some cases, the open approach to implementing changes according to SSC's standards may relate to the motivation to enhance the image of the organisation and programmes so it can attract more students. This type of motivation can be mainly noticed in private tertiary TVET providers. However, representatives of public secondary technical schools interviewed have also mentioned concern for the image and attractiveness of their educational offer. To illustrate this motivation,

> *When I go to recruit students, that even there are people that talk about capturing students, I'm not too fond of that word. But, basically when I do my marketing to tell them 'hey study with me', there is nothing better than telling them 'study my programme,*

would you like to study in the area of mining?, look I have my programmes designed according to what industry needs' **[Participant 8, Tertiary TVET Provider]**

All interviewees for this study are representatives of TVET providers that have been accredited or are in the process of accreditation by the Mining Skills Council, which demonstrates a positive reaction to the SSC's objectives. Thus, once these organisations have decided to begin the adjustment process, this decision has meant satisfying changes mainly concerning teachers training, adding new technology and adjustments to the curricular contents of the programme under revision.

From the interviews, it has been possible to identify that both secondary and tertiary TVET providers have faced mainly two types of difficulties implementing the required adjustments in this process. On one side, TVET providers have been challenged to obtain or receive approval to allocate new resources to implement the necessary technological adjustments. On the other side, a common challenge relates to developing the internal capacities of the people involved. However, these difficulties have had a different intensity for the different types of TVET providers. Moreover, it has been noticeable that secondary technical schools may face institutional challenges to adjust their curricular content, which is not a significant issue for tertiary TVET providers.

Regarding obtaining resources for implementing technology, it is possible to identify that secondary technical schools—which function under the public education system—strongly depend on their capacity to obtain financial donations. In this sense, it seems that a previous condition to consider implementing adjustments to their programmes in line with SSC's requirements depends on the feasibility and capacity of these schools to apply for public or private funds. For instance, in some cases, the schools that have achieved accreditation have obtained funds from the same ELEVA project or other organisations, such as charities and mining companies.

Comparably, tertiary TVET providers have had to obtain management permission to invest additional resources to implement the required technology. In this sense, given that most of these providers are for-profit private organisations, these decisions have implied going through cost-benefit evaluations that may involve actions such as increasing students' fees. Thus, it may include decisions that affect their business model as technical education providers. As the following comment illustrates,

That [process of adjustment to SSC's standards] meant months and months of study, of looking for alternatives to reach, let's say, an efficient product, not only in costs but also

in physical space. For instance, to install a simulation room is a lot of money, a great deal of money and sometimes you, let's see. These [changes] will take you to increase prices, such as matriculation fees. I don't know. So, for us, we cannot bet on that because we are not a university. We are a higher education organisation that basically receives students from D and E backgrounds [the two more deprived tiers in the Chilean sociodemographic scheme]. So, they are the first generation studying, and they have kids, I don't know, the first in the family that undertake tertiary studies, a lot of responsibilities for them. Hence, we have an institutional ethos, and we have to follow that, a mission and a vision. Because our mission says 'we train people in technical and professional aspects', but we are educating people, and with it, we assume certain responsibilities. I mean, we have to consider not our context but the context of the students that choose us. **[Participant 9, Tertiary TVET Provider]**

Concerning teachers, the required changes involved taking training courses related to the mining sector defined by the ELEVA project. In this regard, it has been identified that the contractual conditions of teachers in the different types of TVET providers are one of the main factors that differentiate the need to commit teachers with the initiative. For instance, teachers are usually permanent employees in secondary technical schools and work with the students during the two years of the programme. In this sense, teachers' commitment is fundamental to achieving the SSCs' accreditation. They must take training courses and support other activities such as devising and installing new technological equipment. As such, directors at secondary technical schools have been challenged to sustain teachers' motivation with the additional duties that impose changes to fulfil SSC's standards. As one director of a secondary technical school commented when referring to the process of adjustment to obtain the SSC's accreditation,

It was difficult at the beginning. We had certain downs in the sense that I saw that the people [teachers' team] were not, were not 100% [...]. Because it was much work, I insist, it was a lot, very overwhelming and everything simultaneously [...]. So, there was a moment when I felt that the people couldn't stand it anymore, besides with all their academic responsibilities because there was no extra time to do it [training courses and other requirements]. So, I called them, talked, and said we can stop here and we do not continue [process of adjustment] because I don't like things half-done. From there, there was a change, and in the end, we overcame everything. We are all ok. We did everything and achieved everything we had to accomplish. **[Participant 10, Secondary TVET Provider]**

In contrast, for tertiary TVET providers that usually maintain external instructors, the requirement of training standards for teachers are considered part of the contractual conditions for the person that will teach the specific course. In this sense, for this type of TVET provider, there is no need to carry internal work to sustain teachers' motivation. Thus, the main change they have to consider is to include further mandatory training as a condition to hire a temporal instructor. To illustrate,

We hire teachers each year. We do not have permanent teachers [...] So, we already created these courses [following ELEVA example], and we are going to teach these courses at the beginning of every semester to new teachers. So, our organisation have induction courses that are Active Methodology, Educative Project, Educative Model, which are the three basics. Besides, for the mining teachers, there will be these two courses I was telling you, the one of Curricular Knowledge and Innovation in the Mining Industry. So, it is like 'ok, I will hire you, but you must take these five courses', and that is part of the contractual condition. **[Participant 9, Tertiary TVET Provider]**

Finally, concerning curricular changes, it has been identified that the institutional flexibility to implement adjustments to the curriculum is an aspect that could cause particular difficulty to secondary technical schools. In contrast with tertiary TVET providers, who have the freedom to define and change their programmes and contents, secondary technical schools must follow the guidelines provided by the Ministry of Education (MINEDUC). Thus, they can only deliver programmes defined by the MINEDUC and apply changes to some modules. However, some secondary technical schools have *Especial Singularidad* (special singularity), a condition that gives them further freedom to implement curricular changes to their programmes. This is a condition granted to those secondary technical schools that can demonstrate their professionals' quality and the school's prestige based on the academic and institutional capacity to implement their own programmes, physical infrastructure and links with the industry (MINEDUC, 1998). In this sense, the expertise for adjusting programmes to contextual needs and the flexibility to do it favours these particular schools when implementing the changes required by the SSC. As one representative of a school that holds this specific condition explained,

We have experience [adjusting programmes] because we have Especial Singularidad, so for us, it is not complicated to design programmes, we have done it all our life. For many secondary technical schools, it is easy to add the programme given by MINEDUC with no intervention. You use it as it is. For us, no, we fix it. So, we work with the base

of the MINEDUC, but we move it, change things, add [things] because we have Especial Singularidad we can do it, so that is beneficial for us. **[Participant 10, Secondary TVET Provider]**

From a different perspective, in the case of tertiary TVET providers, the changes to their programmes and curricular content will depend on internal evaluations about the need to do so. For instance, based on considerations about the employability of their students. In this sense, for example, in some large organisations, not all changes requested by the Mining Skills Council have been successfully accepted. As a representative from one of the largest tertiary TVET providers in the country commented,

What I can say is that [TVET provider name] aligned its programmes [to Mining SSC's standards], we even accredited one of our programmes with them [Mining SSC], I think that a training course too [...]. Other things no, for instance, we have a very important programme of Industrial Maintenance that they wanted to be aligned completely to their standards. But, it turns out that my students do not only work in mining. So, we will not be doing all the specificity that mining requires because that person will also work in other industries. So, they [Mining Skills Council] could perceive that we did not hear them in that programme, we did not align, but well, we have a reason! **[Participant 8, Tertiary TVET Provider]**

To summarise, the interviews with TVET providers that have participated in the Mining Skills Council's initiatives show that these stakeholders are open to hearing employers through this type of sectoral organisation and implementing changes according to their requirements when necessary. Among the main motivations to implement changes is the possibility of giving their students better employability and enhancing their organisation's image. Also, all the TVET providers interviewed have tried to adjust at least one of their programmes to the mining sector requirements. In particular, these actors have implemented changes regarding teachers' training, adopted new technologies and updated their curriculums. In this line, the response capacity of each organisation has depended on their chances to obtain additional resources, and in the case of secondary technical schools, the leadership of their directors to internally motivate teachers. In this sense, the particular context of each type of organisation has meant facing different difficulties for the implementation of the standards required by the Mining Skills Council. Thus, considering the concepts of the realist evaluation approach, the results concerning TVET providers may be summarised according to the CMO configurations presented in Tables 5.4 and 5.5 below.

Table 5.4. CMO configurations identified in TVET providers concerning receiving information from the Mining Skills Council

Context	Mechanism	Outcome
Secondary Technical School with low certainty about the relevance of its programmes; Low trust in MINEDUC's initiatives/guidelines.	The provision of information and guidelines from the SSC is considered valuable to enhance their programmes' relevance and students' employability.	An open approach to hearing organised employers to adjust their TVET offer.
Tertiary TVET providers with difficulties to obtain representative information from employers about their skills demands.	The provision of information and guidelines from the SSC is considered valuable to enhance their programmes' relevance and students' employability.	An open approach to hearing organised employers to adjust some of their TVET programmes.

Table 5.5 CMO configurations identified in TVET providers concerning adjusting their programmes according to the Mining Skills Council's information

Context	Mechanism	Outcome
Secondary Technical School with leaders able to obtain resources and motivate commitment from teaches; Flexibility to implement curricular changes.	The conditions established by the SSC for TVET programmes are considered needed and feasible to implement.	Relevant programmes adjusted according to SSC's standards.
Tertiary TVET providers with financial capacity to allocate resources to programme changes; Positive evaluation about adjustments needed to specific programmes.	The conditions established by the SSC for TVET programmes are considered needed and feasible to implement.	Relevant programmes adjusted according to SSC's standards.

Wine sector

Employers in the wine sector

As commented in the previous chapter, the Wine Skills Council was adopted to join the voices of different stakeholders involved in skill formation for the industry. In this sense, even when employers play an important role, they are not necessarily the main participants in this initiative. Moreover, according to the data collected for this study, employers are represented at the SSC's board by the same business association that decided to adopt the skills council. Possibly because of this situation, according to interviews conducted with HR professionals within wine companies, there is little awareness about the SSC, its objectives or initiatives. Furthermore, when asked about it, all interviewees mention the business association Wines of Chile (WoC) and its Human Capital area as the organisation that manages skill formation related issues within the industry.

In particular, the interviewees tend to relate WoC's Huma Capital area to the certification of labour competencies and training activities. Only a few mentioned WoC's delivery of information about people-related issues. In this sense, some interviewees mentioned that it would be desirable that WoC's Human Capital area could have a more active role in developing information about HR issues and fostering instances to exchange experiences between sectoral employers.

For instance, representatives from small wine companies mentioned that it would be helpful to have reports that provide information about job profiles, salaries and HRM practices that could support their work. It is worth noting that, in general, HR departments in these companies are small (1 to 3 people), and they are mainly oriented to administrative issues related to payroll, recruitment and managing mandatory training to comply with legal health and safety requirements. Thus, according to these interviewees, all kinds of information supporting these practices are highly valued. As one interviewee in this situation commented,

> *What I see weak, that I told you before, is that I needed [information about] the figure of a salary […] So, they [HC area of WoC] could have as an initiative a market study of all the job positions at wine companies. That would be good not only for me but for all vineyards because on several occasions we have to appeal to calling and introducing our self 'hello, I am the Head of HR, would you help me with this?'. And as they [HC area of WoC] have all the contacts, I think it would be easier if they could, I don't know*

if selling a study, maybe, I don't know […] But, it would be very useful for all, I think that's missing. **[Participant 25, Wine sector employer]**

Additionally, large-sized companies mentioned it would also be desirable that WoC's Human Capital area could foster collaboration among employers to share experiences concerning human capital issues affecting the sector. This is particularly important for larger companies that have experienced changes to their skills needs due to the adoption of new technologies in some of their production processes. As the following comment partially illustrates,

I think that they [Human Capital area of WoC] started a little as a training body and nothing more, and I think that has to go beyond that, in my opinion. In terms of not only being a training body but also being a body for exchange [among employers] **[Participant 23, Wine sector employer]**

Moreover, according to the interviews conducted, it is possible to identify that wine companies are currently in the process of understanding changes to the job profiles of the sector, skills needs and the development of HRM practices in these aspects. For instance, in some small companies, its representatives mentioned the challenge of how to train workers who have learned to do their work through experience to develop skills for supervisory roles. Thus, these companies have used methodologies established by law in some cases, such as establishing bipartite committees to define training needs. However, it can be noticed that these committees have been established with a legal compliance focus rather than career development. As the following comment from an HR representative of a small wine company,

We established a bipartite training committee where there were representatives from workers and the company. Once we created this committee, we did an annual training plan for 2017, 2018 and 2019. So we go checking the compliance of this plan, and we seek to comply as much as possible with the training needs detected. **[Participant 26, Wine sector employer]**

In the case of large-sized companies characterised for having vineyards in different regions and HR teams at various branches, it has been noticed that they are currently defining career plans that consider information about competencies profiles. In this sense, these companies are more advanced in using sectoral profiles based on the certification of labour competencies established as a sector. As one interviewee from one of these companies commented,

> *Today we are working as a holding in how to do it or how we can link the knowledge of people with their career development. Before, we didn't have it defined that way, but today we are actually walking through a process that will take us to that, so the idea is that both things are linked. I mean, if a person is qualified, he/she should be potentially able to assume positions of more responsibility.* **[Participant 24, Wine sector employer]**

Despite the above, according to the interviews conducted for this study, it is possible to note that in general, employers of all sizes are available to share information and collaborate with the initiatives of the Human Capital area of WoC. Indeed, most of the companies interviewed have participated or are currently participating in some of the initiatives organised by this area to develop sectoral information about skills needs. To illustrate,

> *We are participating. I have a meeting on Thursday. We actively participate in the labour market intelligence study, ok. Like all the other vineyards, we give data, complete forms, and participate in work dynamics where… I have been in meetings, I have been with flip charts, with post-it doing brainstorming, teamwork, and now we are in [the stage of] the presentation to deliver results. For us, it is very useful the thing of Wines of Chile. It is the only way to find out more information at the level of the wine sector.* **[Participant 25 Wine sector employer]**

On the other side, concerning the use of information and standards provided by the Human Capital area of WoC, it is possible to note that certification of labour competencies has been one of the initiatives more extensively considered among sectoral employers. WoC has encouraged certifying workers' labour competencies through its certification unit to formally recognise their experience and support their development. As a result, by 2020, 109 wine companies have participated in certification processes for some of their workers (WoC, 2020), which resulted in 7,000 workers with labour competencies certified within the industry (VDC, 2018).

All companies interviewed for this study have participated in certification processes for some of their workers. However, it is possible to notice that the reasons to certify workers' labour competencies are diverse, and do not always respond to development objectives. For instance, in some small companies with fewer hierarchical levels, the certification of labour competencies has been used with motivational aims. Thus, workers are encouraged to go through the certification process to recognise that the person has the competencies needed

to do his/her work. Still, not necessarily this is considered to define training needs or future promotions. As the following comment illustrates,

We use every year the certification of labour competencies because the people value it a lot. They value the issue very much. They feel like 'Oh, I have a diploma that says that I do it [work] well, this certificate says that I do it well' Is like they feel proud of having the competencies certification [...]. We encourage it because for us is like our motivational tool for them [workers] [...] The certification here in [company name] does not have the role of internal mobility, development, or career development to move to a different area or a different place. No, the truth is that we don't see it from that point of view. We see it as a 'degree', to call it in some way, that basically certifies that you have the competencies to do, to work in [your job]. **[Participant 25 Wine sector employer]**

From a different perspective, in the case of large companies, it is possible to identify that even when there is awareness about the use of labour competencies certification for development aims, these companies are still developing practices in this direction. Moreover, as some interviewees mentioned, the certification of labour competencies has been seen as a vital issue to comply with social responsibility standards and requirements to export. To illustrate,

In the job description of a position, one of the requisites, for instance, to be a Qualified Operator of Vineyard Warehouse is that this person has to have technical studies at a secondary school, Agricultural Technician. So, I have been in a situation where people have worked as Qualified Operator and have not necessarily studied at a secondary technical school. So, in the case of an audit, the labour certification allows me to show that this person has gone through a process that let him/her achieve a certain qualification level, even if this wasn't in a secondary technical school. [...] All the ISO social responsibility certifications have a strong human resource component. So, generally, these are initiatives that have arise when we want to export our wines, some countries ask some requests, specific audits, and those audits force you to take some decisions that obviously benefit us all. **[Participant 24, Wine sector employer]**

Despite the above, it is interesting to note that in some cases, there is significant unawareness among HR professionals within wine companies about the formative-labour routes established by the sector through the National Certification System for Labour Competencies (ChileValora). This situation suggests a lack of clear communication from

WoC's Human Capital area as the leading actor executing the initiatives established through the SSC. To illustrate this situation,

I mean, it does not allow [the worker] to have that [certification] to go up. It is just what he/she is doing [...] But neither there is, at least in what has been presented to us, there is no framework, there is no sequence, and what is there is what is certified. I mean, there is not like, that it helps you in how I can progress. I mean, in that sense, I don't know if it would be their [HCA of WoC] job, let's say. **[Participant 22, Wine sector employer]**

Finally, it is worth mentioning that employers also associate the Human Capital area of WoC with specific training services for the sector. In this sense, some of the interviewees point out that WoC provides training courses that are well aligned with the wine companies needs, particularly with courses that are difficult to find with other training providers. As the following comment illustrates,

We have, well, first our budget to use in SENCE [national training system] is managed by the OTIC Chile Vinos [organisation managed by WoC's Human Capital area]. We work with them. They manage all our funds, the registration in training courses, all the coordination is done by them through human resources. But, they also have an OTEC [Technical Training Organisation] that give specific courses in viticulture, and today we are decided to take all our courses with them because these are courses that you cannot find with other OTECs. Those are very specific courses. I don't know, enotourism, wine testing for people that work in the sales stores, so specific that you cannot find them in other places, so we are working with them. That initiative is excellent because I remember in 2017 I was looking for those courses and couldn't find them anywhere, and now they [WoC's Technical Training Organisation] have it. **[Participant 25, Wine sector employer]**

To summarise, through the interviews conducted with wine sector employers, it has been possible to identify the lack of awareness about the Wine Skills Council. However, all of them recognise the Human Capital area of the business association WoC as the organisation aimed to support wine companies in skills-related issues.

Moreover, the companies interviewed show they are open to collaborate with WoC's Human Capital to develop sector skills needs information. Simultaneously, they have expressed that it would be desirable that this area perform a more active role in coordinating employers to share experiences about skills and HR issues affecting the sector.

Also, all these companies have worked with WoC's Human Capital area to certify their workers' labour competencies. Expanding the certification of labour competencies has been one of the objectives of the Wine Skills Council as it is thought to identify skills gaps and guide training activities. However, according to the interviews conducted, it has been noticeable that employers have not always carried out certification processes with this aim.

Thus, considering the concepts of the realist evaluation approach, the results concerning employers in the wine sector may be summarised according to the CMO configurations presented in Tables 5.6 and 5.7 below.

Table 5.6 CMO configurations identified in wine sector employers concerning sharing information about their skills needs

Context	Mechanism	Outcome
Small-sized wine company in the process of understanding training needs and practices.	Sectoral information about profiles, salaries and training issues is seen as valuable to support HR practices.	Eagerness to participate in sectoral initiatives to develop information.
Large-sized wine company in the process of technologisation of production processes.	Sectoral information sharing about skills challenges and new technologies is seen as valuable to support employers within the sector.	Eagerness to participate in sectoral initiatives to develop information.

Table 5.7 CMO configurations identified in wine sector employers concerning using the certification of labour competencies in their organisational practices

Context	Mechanism	Outcome
Small-sized wine company with a flat structure.	The certification of labour competencies is perceived as a motivational instrument.	Expressed non-use of certification to inform HR practices or development processes.
Large-sized wine company with operations across different geographical areas.	The certification of labour competencies is considered as an element to support development processes and other legal processes.	Expressed growing use of certification to inform HR practices or development processes.

TVET Providers for the wine sector

As mentioned throughout both findings chapters, the actions defined through the Wine Skills Council are executed by the Human Capital area of the business association WoC.

In this sense, the main initiative aimed to work directly with TVET providers carried out by the WoC's Human Capital area was a project funded by the Ministry of Education (MINEDUC) during 2014 and 2015. This is because WoC was granted funds related to MINEDUC's public call for projects oriented to enhance the relevance of TVET to the labour market. Accordingly, the project presented by WoC was intended to link the wine industry with secondary technical schools offering programmes in the agricultural area. Specifically, the project's main objective was to generate more relevance of the programmes taught in TVET schools located in two crucial regions for wine production (Maule and Libertador Bernardo O'Higgins). For this aim, the project involved two main sets of actions directly affecting TVET providers. First, activities related to adjustments to the curriculum, and second, workshops for TVET teachers in competency-based training.

Fourteen secondary technical schools and twelve wine companies participated in the project (VDC and CCiV, 2015). As a result, the project's team developed recommendations for adjusting curricular bases from the Ministry of Education for the viticulture sub-speciality and guide books for TVET teachers and company tutors (internships supervisors). Also, eleven agreements between secondary technical schools and wine companies were signed to facilitate internships for TVET students (VDC and CCiV, 2015).

By 2020, only three secondary technical schools of the fourteen participants in the project have implemented the viticulture sub-speciality (MINEDUC, 2020a). Based on this information, it is possible to note that not all schools responded equally to the project concerning implementing the sub-speciality focused in the wine sector. Moreover, from interviews conducted with representatives from schools that participated in the project, it is possible to note that their perception of the project objectives and usefulness varies considerably, notably between schools with and without the viticulture sub-speciality. For instance, some schools' representatives who did not implement the sub-speciality understood that the initiative was mainly focused on generating linkages between schools and wine companies. Also, they perceived that an underlying aim of WoC was to motivate secondary TVET schools to include the viticulture sub-speciality in their educational offer. As the following comment illustrates,

> *In this initiative, we participated mainly in the [TVET teachers] training stage. I think we managed to participate until the dissemination of this first stage, where it was presented a very ambitious programme from Wines of Chile and very linked with companies, overall to train tutors within companies that could receive our students […]. I think that the fundamental objective was generating, taking advantage of the curricular bases and sub-specialisations so that one of the eleven schools [within the region] would have that sub-speciality in particular [viticulture].* **[Participant 31, Secondary TVET provider]**

In contrast, according to an interviewee from a school that decided to offer the viticulture sub-speciality, the WoC's initiative is remembered as a helpful experience. In particular, the workshops for TVET teachers are considered a valuable training initiative that helped teachers enhance their pedagogical practices. To illustrate,

> *We participated three teachers, and there were different areas where we could go more in-depth. Um, problem-based learning, I remember that a colleague enjoyed the issue of technological updates […] it was very interesting. Overall, I remember that it helped us a lot in didactic matters because we are all professionals. We are not teachers. We are professionals that ended up teaching, and that [WoC's project] allowed us to, I don't know, plan better and deliver our knowledge in a better way.* **[Participant 32, Secondary TVET provider]**

However, it is relevant to note that, despite only three schools implemented the sub-speciality, some schools decided to add modules related to viticulture as part of their

elective hours. This situation is possible because the Ministry of Education mandates that each TVET school with the Agricultural programme must choose a sub-speciality to focus on during the last year (Farming, Livestock or Viticulture). However, the schools are also allowed to have some elective hours (*horas de libre disposición*) to teach topics non-related to the sub-speciality chosen. As one interviewee working in a school in this situation commented,

> *This school does not have a viticultural sub-speciality. [but] Yes, we took [from the MINEDUC curricular bases] some modules to help students understand the winemaking process and warehouse in wine as a value-added to our specialisation. But, we should one day have that our students could get, let's say, that competency of generating their own wine.* **[Participant 31, Secondary TVET provider]**

Additionally, given that all schools are located in rural areas, it is possible to notice that they all have space and the basic infrastructure to teach winemaking processes, even if they do not have the sub-specialisation. As the following comment illustrates,

> *I work in the [school name], where we produce wines even without the viticulture sub-speciality. There is a whole infrastructure, a project of winemaking where we have the certification and all the necessary authorisations and legalities to work as such.* **[Participant 29, Secondary TVET provider]**

Moreover, it is possible to identify that the secondary technical schools in these regions generally have a fluid relationship with wine companies around them. Thus, they do not seem to have problems finding internship spaces for their students in these companies. This situation may be showing that even when a school does not have the viticulture sub-speciality, their students can work without problems in the wine sector. As the comment from a representative of a school in this situation illustrates,

> *Luckily here we have, we are in a clearly grape-based zone, to say it in some way, where there are big extensions of vine arbours and vineyards, vine arbours of both grapes for consumption and grapes for wine, besides of traditional vineyards. So, at least we have the ease that four vineyards offer us internships for the lads (sic). Then, the one [student] that gets excited, the one that goes well, the one that has a good performance, generally, can stay working there in the vineyard. That has been the case of several students that have remained working where they did their internship. From the point of view of companies for internships for students keen on the viticulture area or the oenology area, we are very advantaged.* **[Participant 29, Secondary TVET provider]**

Likewise, it is possible to notice that some TVET schools consider that teaching very specific subjects may not be as crucial for students' employability as, in their own words, 'soft skills'. As these actors explained, this perception is because employers themselves tell them that technical knowledge may be learned at the workplace. As the following comment from a school that did not decide to offer the viticulture sub-speciality illustrates,

I have been working in this school for three years, and one of the things that I have seen is that when I meet with managers or employers, the people that work or lead the estates or vineyards, what do they ask? In general, they ask, obviously, more than technical competencies. They put a lot of emphasis on soft skills in behavioural competencies. Namely, students leave the school being responsible, obeying rules, that do not skive using their mobile phones, and have the capacity to learn from others. So, because in general, you teach [something] in school, but the jobs are diverse. I mean, what they have to perform [at work] is something different, specific maybe to that vineyard, and sometimes the people from companies feel that students are not prepared to accept something they don't know how to do, that is difficult for the lads (sic). Now, during the last years, we have been emphasising a lot in soft skills, but we haven't been able to reach the panacea. **[Participant 27, Secondary TVET provider]**

In that sense, based on the interviewees conducted for this study, it has been possible to notice that secondary technical schools offering Agricultural programmes are open to hearing employers. However, this does not mean that they are always available to adjust their programmes completely to a sub-sector in specific. Moreover, these schools have seen that their students can effectively work in companies within that sub-sector or that the essential contents can be taught in short modules.

Additionally, it is possible to notice that TVET providers' expectations about employers and their role in skill formation are not necessarily related to the delivery of information to update or adjust TVET programmes. For instance, some interviewees mentioned that access to technology is one of the main weaknesses of schools where employers are expected to play a more active role. As the following comment from a representative of a TVET school illustrates,

That they [employers] sponsor us, that they lend us the technology because it is mainly the technology that we lack, beyond the transfer of information is the technology where we are failing. So if companies could sponsor us, I think that we could reach what we

need and have the added plus for our students. **[Participant 30, Secondary TVET provider]**

In the same line, it is also possible to note that representatives of some TVET schools consider that, rather than unidirectional information from employers to schools, there should be an exchange of information in both directions. In particular, some interviewees refer to traditional practices seen between employers and workers in the Chilean countryside, which involves TVET students. In this sense, some interviewees consider that there should be more communication from schools to companies to clarify the learning objectives of internships. Thus, students should be considered apprentices and not workers that can be asked for results, or as an interviewee mentioned, *cheap labour* [Participant 27, Secondary TVET provider]. To illustrate this point,

I think that obviously, we should improve our link with companies so companies can also understand that the practices from 20 years ago are not the same as today. Because we are under the curricular basis and a vision about the students under the Qualifications Framework that exists now, that is what it rules in Chile and is a different vision about education. That manual was made in 2013, was presented in 2018, and this is the first year of implementation. Therefore, we have a different view of TVET education than what existed before, and that [view], obviously, has to be passed to companies. **[Participant 27, Secondary TVET provider]**

However, as some interviewees commented, the expectation of considering internships as learning processes becomes more difficult in the agricultural sector as the salaries offered to students that assume responsibilities as workers are far superior to the internship pay offered to students considered purely as learners. In that sense, as an interviewee mentioned, the challenge for schools is how to work with employers to deal with the trade-off between students' access to good internship pay and having a suitable learning process. As the following comment illustrates,

I think that the student can receive a payment, and it can be good pay and also can be a good apprentice. For instance, here [school name], my colleague goes and supervise, and there are cases where the student has been treated as a worker, and we, as supervisors, have said to some companies that we are removing the student because the student perceives an abuse. Ok, when we receive that information, what we do is that we remove the student from that company and look for another company. I think that the idea of Wines of Chile was to prepare companies so that equilibrium could be reached

with the tutors where, maybe, they [students] could have a good salary accompanied by good tutors for students' learning process. **[Participant 31, Secondary TVET provider]**

Finally, it is worth pointing out that some interviewees mentioned systemic restrictions to implement changes to respond to employers' needs. Given that most TVET schools depend on municipalities or business associations, changing programmes or selecting a specific sub-speciality are usually conditioned to the sustainer organisation's political and economic conditions. Thus, school directors have little power to react as expected to employers needs. As the following comment illustrates,

There is another element that stops municipal schools like us, and it is that the funder, the DAE Officer, is the person that finally approves or not the projects. So we can be very up-to-date on what is required in the specialisation, but if the DAE Officer or the funder has their focus on another part is very difficult to have their support. Thus, the speciality has to be nurtured with technology that involves investment, and if there is no money to invest, it cut our wings and to the students on what they can learn. **[Participant 27, Secondary TVET provider]**

To summarise, all secondary technical schools interviewed belong to schools that participated in the project from Wines of Chile to link the wine industry with TVET schools. However, most of these interviewees do not consider the business association a strong voice in skill formation issues. Some TVET schools explained that their geographical closeness to wine sector employers allows them to understand which skills employers need and value. In this line, some interviewees commented that soft skills seem more important for employers than specific technical knowledge. Moreover, representatives from TVET schools interviewed seem to be open to hearing the employers' skills needs. However, some of them consider that there should be an exchange of information in both directions to better communicate to employers their expected role in the educational process of students.

Also, it was noted that some TVET schools decided to implement the viticulture sub-speciality and some of them only some related modules as part of the elective hours. In this regard, some schools explained that their excellent relationship with wine companies in their zone allows their students to have internships and work at these companies even if they do not have the sub-speciality.

Finally, it was mentioned that institutional and economic conditions limit some TVET schools' possibilities to implement changes to respond to the skills needs of the labour

market. In this sense, there seem to be contextual conditions for this type of TVET provider that may limit the SSC's opportunities to affect TVET provision. Accordingly, the results concerning TVET providers oriented to the agricultural sector may be summarised in the CMO configurations presented in Tables 5.8 and 5.9 below.

Table 5.8 CMO configurations identified in TVET providers concerning receiving information from wine sector employers

Context	Mechanism	Outcome
Secondary TVET school geographically near wine companies.	Wine companies are considered approachable to obtain information and internships for students.	Regular flow of direct information from employers.
Secondary TVET school with long-term experience of students doing internships in the agricultural sector.	Practices concerning TVET students in the agricultural sector are considered outdated and non-oriented to learning.	Increasing need for bidirectional flow of information between companies and TVET schools.

Table 5.9 CMO configurations identified in TVET providers concerning adjusting their programmes due to Wines of Chile/employers influence

Context	Mechanism	Outcome
Secondary TVET school located in a primary winegrowing zone.	Wine of Chile initiative is considered relevant for the context of the school and its surrounding employers.	Implementation of viticultural sub-specialisation.
Secondary TVET school located in an agricultural zone including some wine companies among others; Students have access to internships in wine companies.	Wine of Chile initiative is considered partially relevant for the context of the school and the considerations of employers.	Implementation of farming or livestock sub-specialisation and extra viticultural modules.

On the whole, this section has presented the findings concerning the implementation of SSCs' initiatives in the mining and wine sectors separately. It has discussed the findings related to the interpretation and reactions from employers and TVET providers as the two main stakeholders involved in implementing SSCs' objectives. Thus, in light of the findings presented, the following section will discuss the assumptions outlined in the first section concerning SSCs.

5.2.3 Similarities and differences between cases concerning SSCs' adopters' main assumptions

The first section of this chapter outlined the main assumptions from SSC's adopters concerning the implementation of SSCs, particularly those related to the role of these bodies in the development and delivery of information about sectoral skills needs. In this line, Table 5.1 presented a list of unpacked assumptions from SSCs' adopters about employers, TVET providers and SSCs' staff in the Chilean mining and wine sectors. Thus, to compare the implementation of SSCs between these two sectors, the following paragraphs assess the findings reviewed in the previous section in light of these assumptions.

Based on the interviews conducted, it has been possible to identify that the reactions from employers concerning their willingness to share information about their skills needs are not significantly different between employers in both sectors. The Mining Skills Council has successfully acted as a mechanism to generate trust among employers to disclose information in the mining sector. Similarly, in the wine sector, the business association WoC has played this role through its Human Capital area. Thus, it is possible to note that in both cases, the assumption about the willingness of employers to share information is fulfilled.

However, it is also possible to notice that the previous condition related to the assumption that employers understand their current and future skills needs may differ between the two sectors. Particularly in the wine sector, some companies mentioned they are going through a process of technologization for some production processes that affect their skills needs. However, there seems to be little analysis around this new challenge as a sector. Some interviewees mentioned that they would welcome collaboration fostered by the business association to exchange information about this issue among employers. Differently, there was little mention of this aspect in the mining sector as a particular concern among employers. Moreover, as mentioned in the previous chapter, in 2018, the Mining Sector Skills Council has published an additional study covering the impact of new

technologies on the skills needs of the industry. The study was conducted by the FCh and considered two scenarios, the effects of the technologic evolution in the middle term and the impact of the digital transformation in the long term (CCM and FCh, 2018).

Furthermore, it is worth adding that all companies participating in the Mining Skills Council are large-sized companies. Thus, these companies have HR departments comprised of multidisciplinary professionals focused on different aspects of human resource management. In contrast, wine companies participating in the initiatives of WoC are of diverse size, with the predominance of medium and small companies (FCh, 2014). As a result, the HR departments of these companies tend to be smaller. For instance, according to the interviews conducted, some small companies have HR departments comprised of only three professionals mainly focused on the compliance of legal aspects of HRM. Thus, these differences in the size and level of expertise of HR departments may also account for the capacity of employers to forecast skills needs. Table 5.10 summarises these similarities and differences concerning the two first assumptions identified about employers and the implementation of SSCs.

Table 5.10 Comparison of findings concerning employers information sharing

SSC' adopters' assumption	Mining sector	Wine sector
Employers have a good understanding of the skills/competencies currently needed and future ones.	Apparently yes; Analysis and studies conducted by the FCh are already available; Large-scale companies with multidisciplinary HR departments.	Relative; Technological change in large-sized companies as a recent process; Companies of different sizes and predominance of small HR departments focused on legal aspects of HRM.
Employers are willing to share private information about the skills/job profiles needed.	Yes; SSC has acted as a mechanism to generate trust among employers about the use and manipulation of data; Employers give great importance to providing information for TVET stakeholders.	Yes; Good perception of WoC as an organisation to gather information; Sectoral information about skills and HR issues is lacking and desired by employers.

Additionally, the reaction from employers concerning the value of the information and standards provided by the SSCs to implement internal changes seems to be similar in both sectors. Companies have presented mixed responses in both cases, with some companies highly convinced of their advantages and others do not perceive the benefits of using the standards internally. In this sense, in both cases, the development of standards by SSCs has been only partially translated into employers' implementation of these standards in their organisational practices. Table 5.11 summarises these findings.

Table 5.11 Comparison of findings concerning employers use of SSCs' standards

SSC' adopters' assumption	Mining sector	Wine sector
Employers will consider the information and standards from SSCs as a useful instrument to use in their internal processes.	Relative; Response varies among mining companies depending on time operating and size.	Relative; Response varies among employers according to perceptions of its HR professionals.
Employers will adjust/change their organisational practices according to sectoral standards.	Relative; Use of standards varies depending on the perception of value and internal barriers (e.g. costs, competency standards established by international HQ)	Relative; Use of standards varies according to the understanding of benefits (e.g. motivation, career progression, international certification)

Concerning TVET providers and their reception of information coming from employers through SSCs, it is possible to observe that the differences between the two sectors are more marked. This is because, according to the interviews conducted, TVET providers focused on the mining sector seem to be more open to receiving information about specific skills needs from employers to adjust their offer than TVET providers focused on the wine sector.

A potential explanation for this difference may relate to different TVET providers' perceptions about the type of skills employers value in their students and, thus, the specific information required. For instance, it was noted that representatives of TVET schools oriented to the mining sector mentioned the high level of technical skills demanded in the

industry. Differently, TVET providers oriented to the agricultural sector stressed the emphasis of employers on soft skills. Thus, possibly affecting their considerations about the need to obtain information from employers about specific technical skills needs.

Moreover, the Mining Skills Council is highly recognised for delivering relevant information for the TVET sector. In contrast, in the wine sector, the SSC or the business association—as the executing agency—does not have the same level of recognition. As a result, there are significant differences in TVET providers' perception of validity about the information delivered by the SSCs in the two sectors. Table 5.12 below summarises the differences among these sectors concerning the SSCs' adopters assumptions about TVET providers reception of information.

Table 5.12 Comparison of findings concerning TVET providers information reception

SSC' adopters' assumption	Mining sector	Wine sector
TVET providers are open to hearing information about sectors' skills needs to ensure better employability for students.	Yes; All interviewees recognised the need for organised information from employers about technical skills needs valued by employers.	Relative; All interviewees have a fluid relationship with single employers and hear their skills needs. Thus, they perceive that employers may value more soft skills, and not much information is needed.
TVET providers will consider the information received from SSCs as valid.	Yes; All interviewees showed greater trust in the information provided by the Mining Skills Council.	Relative; Wine Skills Council or WoC are not generally recognised as providers of information about employers skills needs. Single employers are considered as valid voices.

In the same vein, contextual differences between TVET providers may also explain their different response capacities and, finally, the feasibility to implement changes according to employers information. In this sense, it has been noticeable that TVET providers considered in SSC's initiatives for the wine sector seem to face more barriers to responding to employers' needs and implementing changes to their TVET offer.

For instance, considering TVET providers of the same type, such as secondary technical schools, a possible explanation may be related to the type of management of each school. According to the data reviewed for this study, it has been noticed that TVET schools oriented to the mining sector are predominantly managed by employers associations or other types of associations (e.g. catholic congregations). Moreover, some of them have been granted *especial singularidad*, which gives them more freedom to change programmes. Conversely, in the case of TVET schools focused on the agricultural sector, municipalities are responsible for the administration of most schools. Thus, the different administrative dependence among schools may entail different types of barriers concerning their access to resources and the action capacity of their directive teams to implement changes that respond to labour market skills demands.

However, different TVET providers showed difficulties or reluctance to implement changes to some of their programmes according to SSCs' standards in both cases. For that reason, it may be said that the assumptions concerning the response capacity of TVET providers and the effective implementation of changes are relatively fulfilled. Table 5.13 below summarises these findings.

Table 5.13 Comparison of findings concerning TVET providers implementation of changes according to SSCs' standards/information

SSC' adopters' assumption	Mining sector	Wine sector
TVET providers will be able/have the resources to implement changes to their education and training offer according to information from the sectors.	Relative; There are differences between secondary public TVET schools and private tertiary TVET providers.	Low; Public TVET schools focused on the agricultural sector show institutional and financial constraints to make changes.
TVET providers will effectively adjust their education and training offer to suit the skills needs of the sectors.	Relative; Depending on internal evaluations and capacities.	Relative; Depending on contextual evaluations and resources.

Finally, as discussed at the beginning of this chapter, the flow of information from employers to TVET providers implies that SSCs act like—arguably one way—bridges

between these two types of stakeholders. Thus, there are assumptions about the role of SSCs related to their capacity to process information gathered from employers and subsequently deliver this information to the TVET sector.

In this regard, as the description of findings showed, the strategies carried out by each SSC to approach stakeholders differs significantly between the two sectors. In mining, the availability of resources from companies' fees has allowed hiring the FCh's services to execute actions. Thus, this organisation has been continually implementing measures to work with employers and TVET providers to achieve the SSC's objectives. As a result, there is vast awareness about the Mining Skills Council and its objectives. Conversely, in the wine sector, there is no specific funding to support the actions of the SSC, and the execution of activities is made by the same business association (WoC) through its Human Capital area. Thus, both employers and TVET providers are less aware of the existence of the SSC and its objectives but recognise WoC as the central organisation related to skills issues for the sector.

Accordingly, from the analysis of interviews with employers and TVET providers, it has been possible to identify findings concerning the actions and capacities of SSCs in both sectors. For instance, concerning the processing capacity of information, it has been noticed that the Mining Skills Council has a permanent capacity through the services of FCh. On the other hand, given the lack of funds of the Wine Skills Council, its capacity depends on the feasibility to obtain external funds to hire an organisation to execute this process. Likewise, the capacity to deliver information to TVET providers follows the same logic. In this sense, possibly because of financial conditions, the Mining Skills Council is better positioned to fulfil its articulation role between employers and TVET providers than the Wine Skills Council. However, it is worth noticing that this situation is exclusively based on the feasibility to access external capacities, such as the consultancy services of the FCh. Table 5.14 summarises these findings.

To sum up, in both sectors, SSCs have been adopted to overcome information asymmetries between employers and TVET providers about sectoral skills needs with the final aim of closing skills gaps affecting these sectors. In this sense, the implementation of SSCs has depended on both employers' capacity to communicate their skills demands and TVET providers' capacity to adjust their offer according to the needs of employers. This implementation involves a series of assumptions about how SSCs can facilitate the flow of

information between these two stakeholders. Hence, this section has comparatively discussed the fulfilment of these assumptions in the mining and wine sectors.

Table 5.14 Comparison of findings concerning SSCs' staff (or designated organisation) capacity to process and deliver information

SSC' adopters' assumption	Mining sector	Wine sector
SSCs' staff (or the designated organisation) can capture and systematise employers' information.	Yes; The CCM has secured funding from memberships fees to hiring the FCh to execute actions.	Relative; WoC does not have funds to finance this function and depends on obtaining external funds.
SSCs' staff (or the designated organisation) can communicate and deliver information to TVET providers.	Yes; The SSC's has a manager responsible for this delivery. Also, the SSC's relies on FCh expertise and execution.	Relative; The SSC's relies on the Human Capital Area of the business association (WoC), but no specific budget or staff for this.

Accordingly, it has been possible to identify that in both cases, SSCs' adopters' assumptions about employers' reactions have been fulfilled concerning their disclosure of information but not fulfilled concerning their use of SSCs' standards.

Conversely, the main difference between the two sectors can be noticed in the reactions of TVET providers concerning the reception of information from SSCs. This is because TVET providers focused on the mining sector showed more open to receiving this information than TVET providers focused on the wine sector. Also, it has been possible to notice that the Mining Skills Council has had a better capacity to approach these stakeholders and deliver information to generate changes. Arguably, this capacity is due to financial conditions and the economic and political power of the mining sector in the country. Added to this, the different contextual and institutional conditions of TVET providers with programmes oriented to these sectors seem to have an important effect on these actors possibilities to implement changes according to SSCs or employers information.

Given the above, it is possible to notice that one of the main challenges for the effective implementation of SSCs in Chile relies on their capacity to generate the expected reactions from TVET providers. In that sense, as illustrated by the cases presented, it seems that not

only the capacity of SSCs to deliver information to TVET providers plays a critical role, but also the capacity of the SSC to demonstrate that sectoral employers value the technical skills developed in TVET programmes oriented to the sector and there are good jobs opportunities within the sector.

5.3 Chapter Summary

This chapter has presented the findings concerning the implementation of SSCs in Chile for the mining and wine sectors. First, following the principles of the realist evaluation approach, the chapter has identified and unpacked the main assumptions from SSCs' adopters, particularly concerning employers and TVET providers.

Second, the chapter has discussed the findings concerning the interpretation and reactions of employers and TVET providers to each SSC. In the mining sector, the Mining Skills Council is broadly recognised and valued among different stakeholders. In this line, employers have shown a positive reaction to the SSC by sharing information about their skills needs and financially contributing to funding its operation. In the same line, most TVET providers have reacted positively to the SSC by adjusting some of its programmes to the standards demanded by the sector. However, the findings indicate that this skills council still faces some challenges to convince employers about the internal use of the standards created through the SSC.

Differently, the Wine Skills Council lacks recognition among stakeholders, and WoC's Human Capital area is the organisation acknowledged for skills issues within the sector. However, employers have reacted positively to information requests about their skills needs. Also, similar to the mining sector, employers' use of standards to inform skill formation and development processes has been patchy. On the other hand, TVET providers responses have been varied and have shown contextual and ideational barriers to adjust their programmes to suit wine sector needs.

Finally, the last section has compared the two cases concerning the SSCs' adopters assumptions identified. Notably, employers in both sectors have reacted positively to the assumptions concerning their willingness to share information. On the other hand, assumptions about TVET providers have been fulfilled differently between the two sectors.

CHAPTER 6: DISCUSSION

6.1 Introduction

This chapter discusses the findings reported in chapters four and five. Accordingly, it is divided into two sections.

First, section 6.2 discusses the findings concerning the first research question guiding this study: *Why and how private actors in Chile have adopted Sector Skills Councils?*. Hence, it presents an examination of the adoption of SSCs as a particular TVET policy voluntarily adopted by three business associations in Chile. In doing so, this discussion draws on the literature of comparative education focused on policy borrowing, which seeks to understand the variety of forces and motivations involved in the adoption process of education policies (Verger, 2014). Moreover, this section draws on the literature on sector skills bodies and employer engagement in skill formation to help explain why employers and their business associations led the process.

Next, section 6.3 discusses the findings concerning the second research question guiding this study: *How have different employers and TVET providers implemented Sector Skills Councils' initiatives in Chile?*. Accordingly, it presents an examination of how employers and TVET providers have interpreted and reacted to SSCs in two of the sectors studied, mining and wine. For this purpose, this study's findings are discussed concerning the literature on sector skills bodies and employer engagement in skill formation policies.

Also, acknowledging the importance of contextual circumstances and their effects on policy adoption and the reactions from the actors affected, both sections consider the literature on TVET and education policies in Chile. The two sections are finalised with a summary and final remarks.

The chapter concludes with section 6.4, which summarises the main point presented in this chapter.

6.2 Why and How Private Actors in Chile Have Adopted Sector Skills Councils?

This section discusses the findings regarding the adoption of private-led SSCs in Chile's mining, wine, and maintenance sectors presented in chapter four. Guided by a cultural political economy (Jessop, 2010; Jessop and Sum, 2010) analytical framework, the findings presented the key processes, events and actors involved in the variation, selection and retention mechanisms related to the adoption of SSCs in the three sectors. Likewise, the material and ideational factors (and their interaction) possibly underpinning these mechanisms were identified. In this line, at least three main findings can be highlighted about the adoption of SSCs in the cases studied,

- In the three sectors, economic challenges and their relationship with labour and skills shortages or gaps were identified as pre-conditions for adopting SSCs. Notably, a key factor accounting for the adoption of SSCs was the direct or indirect influence of a local public-private organisation that acted as a policy entrepreneur by using persuasion and framing strategies carefully adapted to private actors' interests and national conditions.
- The selection of private-led SSCs in Chile's mining, wine and maintenance sectors resulted from the interaction between different material and ideational factors at national and sectoral levels. Ideational factors and their interaction with national conditions seem key to explain why SSCs have been an attractive policy for private actors. Simultaneously, sectoral material factors seem to be more prominent to explain how SSCs were finally recontextualised in each sector.
- The possibility for employers to influence public spending on TVET seems to be a critical factor in the retention of SSCs in Chile by private actors. In this sense, it is noticeable a skills supply orthodoxy underpinning the adoption of these bodies, where the central role of employers is to define what is needed from the TVET system.

Consequently, these main findings will be discussed in the following paragraphs according to the main policy change mechanisms analysed in this study: variation, selection, and retention.

6.2.1 Variation

As discussed in the findings chapter four, economic challenges at the sectoral level and their relationship with labour and skills shortages were material factors that originated the problem that adopting an SSC was supposed to solve. However, business associations only perceived the situation as significant and in need of coordinated industry action after an external organisation acted—directly or indirectly—as a policy entrepreneur framing the problem and simultaneously presenting SSCs as the best solution to address it. This organisation was the Fundación Chile (FCh), hereafter identified as the policy entrepreneur.

Hence, it is possible to say that the policy entrepreneur's actions played a crucial role in the variation mechanisms in these sectors as this organisation established a particular logic of action related to SSCs for the Chilean context. Noticeably, the idea of SSCs was borrowed from Anglo-Saxon countries, where these bodies were created to introduce coordination mechanisms to address the limitations of the market in coordinating skill formation (Raddon and Sung, 2006; Kraak, 2013). Therefore, at the theoretical level, the diagnosis and prognosis of this policy idea (Verger, 2012) were based on a problem and solution previously theorised. Moreover, the institutional contextual conditions of these countries and their similarity with the Chilean context facilitated what Ochs and Phillips (2002, p. 326) identify as the "cross-national attraction" of the policy. This is because the policy entrepreneur considered the features of liberal market skill regimes typically associated with Anglo-Saxon countries (Thelen, 2004; Busemeyer and Trampusch, 2012; Sung and Ashton, 2015) a closer model to the extreme Chilean case of the market model of skill formation (Valiente, Zancajo and Jacovkis, 2020). In this sense, the theoretically borrowable aspect of the policy, which Phillips and Ochs (2003, p. 453) identify as the "externalising potential", were considered more compatible with the Chilean context than other policies that emerged in countries identified as coordinated market economies. As a reminder of this rationality made by the policy entrepreneur organisation,

> *In the Chilean formative system, the incentive is through vouchers. You give a voucher to students so they can go to study and choose the programme they want. From that point of view, a TVET organisation can teach wherever they want as long as they fill their courses, their matriculation spaces. So, from that perspective, we decided not to go for a German system, dual, because TVET in Chile is not dual, it will not be dual, the Chilean regulation for these issues is very anti-dual* **[Participant 3 – Consultant working for the Mining Skills Council]**

Thus, the compatibility of the national contextual conditions from the countries where SSCs originate facilitated the policy entrepreneur's work to give local meaning to an existing global policy, which, according to Steiner-Khamsi (2010), is a common phenomenon in the borrowing of education policies. For that purpose, the policy entrepreneur carried out a common strategy used by international organisations to introduce policy ideas based on establishing a "crisis rhetoric" (Auld and Morris, 2016, p. 205). In this case, where the main actors to be convinced were employers, the crisis rhetoric was based on the recruitment and retention problems affecting the mining sector, which was the first sector persuaded to adopt an SSC. Accordingly, a 'human capital problem' was presented as a severe threat to the sector's competitiveness, requiring urgent action. Notably, this action shows how the FCh's consultants carefully adapted their persuasion strategies to suit the interests of private actors. Similarly, the policy actors framing the SSCs idea for the other two sectors—Human Capital areas within the business associations—followed the same logic. Still, they focused on the specific economic and skills challenges they were facing.

In this sense, this study's findings indicate that, possibly given the profit-making nature of businesses, the problems related to skill formation are only considered significant when they could affect the business's continuity or growth. In a similar vein, Sung and Ashton (2015) suggest that skills policies that are effective in changing employers' considerations about skills are the ones that affect the cost-benefit calculations of employers concerning their business strategy so that skills become a driver to achieve the desired business outcome. Moreover, as Huddleston and Laczik (2018) concluded when studying the involvement of employers in the development of qualifications in England, employers will get involved with education and training when they consider it meaningful to do so. Thus, it can be argued that the persuasion strategies performed to affect the *assessment made by employers concerning the level of importance of skills issues to the business* played a key role in the variation mechanisms that started the adoption process of SSCs by these actors.

Overall, a main possible conclusion from this part of the process is that material factors alone, both sectoral and national, were not sufficient to trigger policy change. Even when single employers and their business associations were relatively aware of their sectoral skills problems, they only realised that they needed to address them collectively when an external actor acted as a policy entrepreneur by strategically framing the problem and the solution. Thus, in all cases, the common underlying problem considered was the disconnect

between the needs of the labour market and the skills developed through the TVET system caused by information asymmetries, which adopting SSCs could solve.

In this line, a key factor explaining why SSCs were perceived as an attractive policy to adopt in the Chilean context involves the actions performed by the policy entrepreneur to frame and mobilise this policy as a programmatic idea. A programmatic idea can be defined as technical or professional ideas that interpret a problem's causes and prescribe tangible solutions to address it (Campbell, 1998; Verger, 2012). Accordingly, the following subsection discusses how the policy entrepreneur carried out different strategies to introduce an interpretation of the problem that SSCs could solve by framing them as the best solution for the Chilean context.

6.2.2 Selection

Once the problematisation of skill formation for each sector was achieved, coordination through SSCs to develop sectoral information was presented as the best solution to solve these problems. This situation possibly shows how policy borrowing can act as a coalition builder among actors (Steiner-Khamsi, 2016). In these cases, it encouraged employers to collaborate in an aspect where they usually compete. In fact, in the mining sector, the competition for qualified people among employers was widely recognised.

Thus, the SSCs' policy idea was strategically framed to be accepted as a valid initiative adopted by private actors in the Chilean context. According to Verger (2012), frames are discourses that help obtain public support to policy ideas by making them "familiar, feasible and perceived as a superior policy solution" (p.112). Concerning this last point, this study's findings showed that at least three discourses were used to elicit this perception. As a reminder, a summarised version of these are:

1) The industry (or employers) has an informational role in skill formation.
2) Other actors, and particularly the state, will not solve the problem.
3) Adopting SSCs will generate positive economic outcomes for the sector and enhance employability for TVET students.

These discourses possibly align with the country's political paradigms and broader ideational environment, which has been identified as necessary to successfully framing a programmatic idea (Verger, 2012).

First, the discourse concerning the informational role of the industry in skill formation aligns with the predominant political paradigm that education and training function with a

market logic in which information is an essential input to coordinate supply and demand (Somma, 2012; Simbürger and Donoso, 2020). Moreover, the extreme degree of marketisation that characterises the Chilean education system (Bellei and Cabalin, 2013; Valiente, Zancajo and Jacovkis, 2020) has acted as a favourable condition for the intake of this discourse.

Second, the discourse that other actors, and primarily the state, will not solve the problem aligns with the institutional context that has prevailed for years in the country, in which the state has had a reduced responsibility in the education system (Bellei, Cabalin and Orellana, 2014; Kubal and Fisher, 2016). Moreover, the persistent inability of different government coalitions to establish a robust TVET system (Valiente, Sepúlveda and Zancajo, 2020) and the lack of an articulated skill formation system (CNP, 2018) contributed to this perception.

Finally, the discourse that adopting SSCs will bring positive economic outcomes for the sector and simultaneously enhance the employability of TVET students aligns with the widespread global discourse that education and skills are essential to improve social and economic outcomes (McGrath and Powell, 2016; Asadullah and Ullah, 2018).

Arguably, the contextual conditions discussed can be related to the neoliberal ideology imposed in the country since the mid-1970s (Solimano, 2012). This ideology acted as an umbrella for the political and institutional material conditions that allowed the overall credibility of the policy entrepreneur's discourses. Furthermore, notably, the neoliberal thinking predominating among the stakeholders involved has played a fundamental role in the reception of private-led SSCs as a policy idea.

First, the prevalence of ideas from HCT found among employers to understand the functioning of the skill formation system enabled their decision to lead the creation of SSCs. TVET has been conceived under a skills supply orthodoxy, meaning that it should supply the skills employers require (Hodgson *et al.*, 2019). Thus, employers play a fundamental role in the communication of those needs. In this sense, the way SSCs have been framed does not move away from supply-side policies that have characterised skill formation policies derived from HCT (Sung and Ashton, 2015; Dobbins and Plows, 2017).

Second, the market's hegemonic position as the best coordination method is so strong that employers have not questioned it as part of the skill formation problem. Instead, they consider possible failures natural when the market's adequate operation conditions are not present. Counterintuitively, it is coordination among employers to provide information about skills demand the necessary condition. In this line, employers recognise the

possibilities of market failures affecting the relationship between supply and demand of skills due to informational asymmetries between employers and TVET providers.

Moreover, one of the main explanatory factors found in this research relates to the evaluation made by employers and their business associations concerning the capacity of the state to address the skills issues affecting their sectors. For this reason, it is possible to suggest that the selection of SSCs managed by employers responds to the existence of material and ideational factors affecting their *assessments about the different stakeholders' capacities to address the skills problems detected*. Thus, employers considered that private-led SSCs were more capable of addressing skill formation issues than government agencies. Once again, here, the policy entrepreneur's discourses concerning the state played a crucial role.

Concerning the mobilisation of SSCs as a programmatic idea, both the policy entrepreneur and the sectoral policy actors involved used strategies commonly identified in the literature for this purpose, such as seminars, reports and meetings (Ball and Exley, 2010; Verger, 2012; Portnoi, 2016). Moreover, it is possible to note that these actors carried out the strategy of highlighting their experience and internal knowledge of each sector (Auld and Morris, 2016) to establish their expertise and show they have the credentials to recommend this initiative and also to implement it.

In this last point, it is important to reflect on the role of interests from these actors in the policy adoption process (Ball, 2012). Remarkably, considering that some scholars have suggested, policy entrepreneurs usually invest their time and resources to push policies expecting to receive future returns (e.g. Cohen, 2016). In this regard, it is possible to say that this study's findings may support this view and provide an example of this situation. By fostering the adoption of an SSC in the mining sector, the policy entrepreneur secured a contract for technical assistance with this sector for several years, obtaining a permanent source of income for the organisation. Moreover, politically, this policy entrepreneur has used this case to develop an image of expertise in skill formation policies that have allowed them to participate in national discussions on TVET policies (e.g. MINEDUC and CORFO, 2017; FCh, 2021) and beginning to influence other sectors. Thus, this situation exemplifies the type of interests of local policy entrepreneurs involved in policy adoption processes that act as consultancy companies, which has been identified as a common feature of these types of organisations (Stone, 2012).

Finally, as shown in the findings section, the three skills council differ significantly concerning their operation, members and ambition to influence TVET. For instance, while all sectors converged in the view of SSCs as a coordination initiative for informational purposes led by employers, they differed in their idea of involving representatives from the public sector as part of the initiative. The Mining Skills Council was established as an employers-only skills council. The Maintenance 4.0 Skills Council decided to involve employers and some private TVET providers, and the Wine Skills Council involved a wide range of stakeholders. This is because each sectoral policy actor involved—in two of the cases with the policy entrepreneur's close guidance—recontextualised the SSCs policy idea to be perceived as technically and financially viable for the sector. In this regard, it was found that sectoral material factors played a key role in this process (i.e. business association's political and economic power, the technical support/knowledge available to adopt SSCs). This explains why each sector recontextualised the SSC idea differently and finally implemented a unique private-led SSC model. Thus, it could be argued that these cases provide an example of the type of factors that may account for the phenomenon of giving a different meaning to the same global education policy recognised in the literature (Steiner-Khamsi, 2014). In particular, these cases illustrate this phenomenon in the context of a sectoral skills policy. Moreover, these differences also account for the different levels of retention of these bodies. The following subsection discusses this issue.

6.2.3 Retention

This study's findings showed that the three SSCs have focused on three main objectives to be retained as a valid initiative among private and public actors. These are *developing labour market intelligence studies*, *developing standards for skill formation* and *fostering their use by key actors in skill formation*. However, the strategies performed to achieve these objectives varied according to the different operational models defined, and arguably, the resources of each SSCs. In this line, the Mining Skills Council has shown a greater retention level among different stakeholders than the Maintenance 4.0 and Wine Skills Councils.

Moreover, the employers' retention of SSCs has been affected by a combination of factors at sectoral and national levels. On one side, continuing leaders sustaining the initiative within the sectors interact with the perception of new skill formation challenges that must be addressed continuously. On the other side, the favourable conditions of the national training system to allow some level of employers' influence and the intention of sectoral actors to influence TVET policies has allowed maintaining employers' enthusiasm

to keep the operation of SSCs. In this sense, it is possible to suggest that, as Sung (2008, 2010) has noted when analysing sectoral TVET policies in New Zealand and The Netherlands, to involve employers on sectoral skill formation strategies, there should exist the real possibility of influencing TVET. In other words, employers will maintain their interest in participating in skill formation initiatives if they *perceive that they can generate tangible changes*. Interestingly, in this case, this perception among employers has not resulted from changes in national regulations or government incentives, as it has been in other countries' cases of sectoral involvement of employers in skill formation (Sung, 2008, 2010). Instead, it seems to be the result of an assessment influenced by the policy entrepreneur's framing strategies.

Nevertheless, it is interesting to note that even when these SSCs have been adopted as a private initiative, their main actors continue to engage with them as a policy idea because of the potential to influence public spending on TVET and the content of TVET provision. In this sense, two main issues are worth mentioning. First, the dependence on public funds to retain the initiative possibly shows that state support is still needed to retain these types of bodies, as it has been in other countries (Raddon and Sung, 2006; Sung, 2008). Second, it shows how these bodies have been established underpinned in a skills supply orthodoxy (Hodgson *et al.*, 2019) concerning skill formation. The following subsection discusses the possible implications of this situation and summarises the discussion presented in this section.

6.2.4 Section summary and final remarks

In summary, this section has discussed why and how business associations have adopted SSCs in the mining, wine and maintenance sectors in Chile. It showed why and how SSCs had been perceived as an attractive policy idea by business associations in the Chilean ideational, political and educational context. Accordingly, it has been argued that SSCs have been framed and mobilised as a programmatic idea by a local policy entrepreneur who strategically directed actions towards the business sector. However, to be finally adopted by these private actors, SSCs have required certain economic and institutional conditions at the sectoral level.

Notably, each sector's economic conditions have acted as contextual factors allowing that the idea of SSCs had the chance to be heard. In this sense, the economic challenges of each sector and its relation with labour or skills shortages served as a concrete base that opened a policy window (Kingdon, 2002) which the policy entrepreneur was able to use in

its favour. Also, the existence of business associations strongly organised has been a favourable condition for the viability of SSCs, as these bodies were able to be established over a base of previously built relationships. Moreover, these associations have areas or commissions interested in examining human capital issues affecting their sectors, which means some specific people could be targeted to introduce the SSCs idea.

Consequently, it can be said that the adoption of SSCs in Chile can be regarded as a case of soft transfer (Perry and Tor, 2008) of a TVET policy. Thus, persuasion strategies and discursive selectivity have played a significant role to present SSCs as an attractive idea for business sector actors. Moreover, as discussed, several contextual factors at the national level, including a strong neoliberal ideology, have contributed to the good reception of this policy idea. Figure 6.1 summarises the main factors discussed in this section.

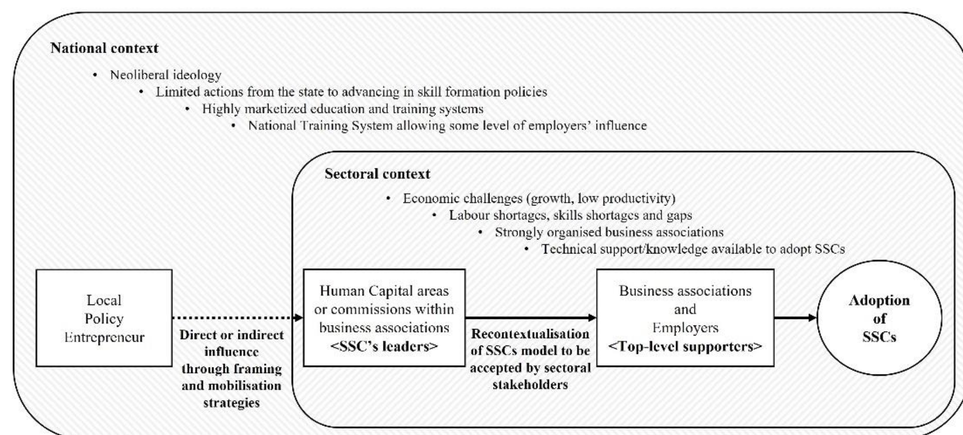

Figure 6.1 Factors involved in the adoption of SSCs by business associations in Chile's mining, wine and maintenance sectors

Likewise, this discussion has explained why and how the adoption of SSCs in one particular national context has resulted from non-state actors' actions. In particular, it has been stressed how employers and their business associations have been convinced to play an active role in adopting a sectoral skills policy. Contrary to what some scholars have suggested (e.g. Sung, 2010; Sung and Ashton, 2015), this process has not required systemic reforms to regulations and incentives to engage employers in skill formation policies. Thus, this research has shown how ideas and framing strategies could have the power to change employers' perceptions regarding their role in the skill formation system and their possibilities to affect TVET. In this line, it has been argued that an essential requirement of this process has been that the persuasion strategies carried out were directed to the specific interests and ideological frames of employers as the targeted actor to push policy change.

Likewise, it was examined the particular national and sectoral conditions under which this situation was possible.

Consequently, the discussion presented in this section identified at least three employers' assessments when exposed to the contextual circumstances and persuasion strategies from the policy actors involved. Simultaneously, it offers a potential explanation of why the interaction between these material and ideational forces have successfully encouraged private actors to lead the adoption of SSCs in the mining, wine and maintenance sectors in Chile. Figure 6.2 illustrates the interaction between the three assessments described above, namely (1) an assessment of the relevance level of skills formation issues for the business; (2) an assessment of different stakeholders capacity to solve skill formation problems; (3) and finally an assessment of their tangible possibilities to affect TVET. In this sense, this discussion suggests that employer engagement in sectoral skills policies in Chile is the result of impacting at least these three assessments towards their decision to get involved.

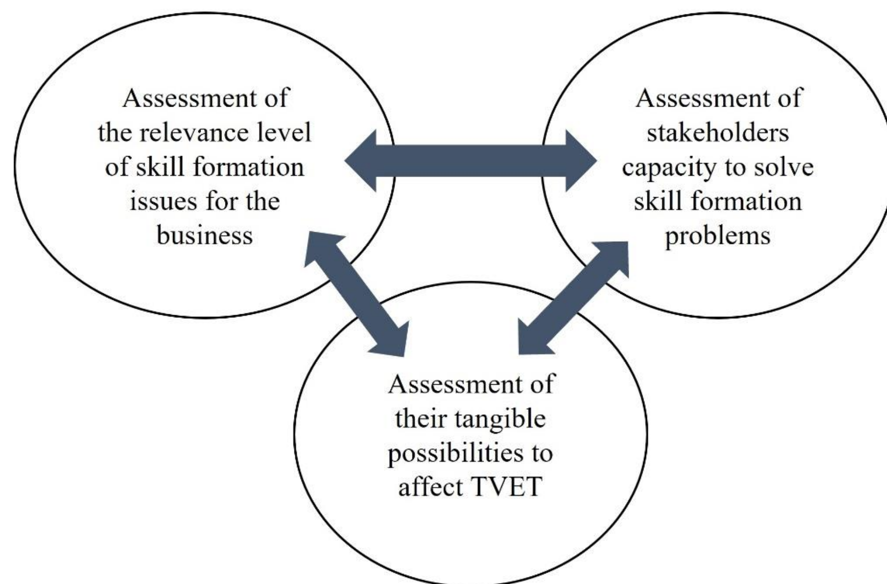

Figure 6.2 Business associations and employers' assessments when deciding to involve in skill formation initiatives in Chile's mining, wine and maintenance sectors

Moreover, this discussion showed that even in a context where TVET is strongly conceived under the HCT's assumptions and neo-liberal economic ideas, it is possible to use these assumptions to convince employers to have a more active role in TVET. Notably, these assumptions helped to influence employers to actively align the communication of their skills demands instead of just leaving this coordination to the market. However, given the criticisms to the assumptions derived from the HCT and the outcomes of policies based

on it (e.g. Lauder, 2015; Sung and Ashton, 2015; Dobbins and Plows, 2017; Brown, Lauder and Cheung, 2020), this HCT-based approach to engaging employers in skill formation can be questioned.

First, because it is possible to note that the initial arguments used to convince employers are mainly related to their informational role in skill formation since the data required about their skills demand is valuable to enhance skills supply. Hence, the problem emphasised was related to the skills supply with little initial attention to the characteristics of the demand. In this regard, various scholars have suggested that the emphasis on enhancing the supply-side of skills without addressing demand-side issues seems problematic in the current global context (e.g. Gleeson and Keep, 2004; Sung and Ashton, 2015; Brown, Lauder and Cheung, 2020). For instance, in the case of Anglo-Saxon countries, it has been argued that supply-based skills policies have not been able to address the problems of low skills and the existence of a large amount of low-skills jobs (Sung and Ashton, 2015). In this sense, employers' emphasis on information provision could mean that they are trying to push part of their responsibility for initial training to TVET providers. Moreover, as Gleeson and Keep (2004) suggest in the case of England, it could turn into a situation where employers blame the TVET system for not developing the skills that would be better developed in the workplace. Thus, it could be argued that skills policies oriented to satisfy employers' skills demands should be accompanied by labour market regulations that ensure they also play their part in developing skills in the workplace (Keep, 2005).

The above can be related to a further point related to the adoption of SSCs by private actors without more substantial public sector participation. While employers' voice to ensure the relevance of TVET provision for the world of work is essential (Bolli *et al.*, 2018), other stakeholders such as TVET providers and local authorities carry the same relevance regarding TVET definitions (Gleeson and Keep, 2004). In this sense, an approach where the high engagement of employers results in a stronger position of their voice to influence TVET because of economic imperatives could undermine the relevance of social objectives that are usually advocated by other stakeholders (Raddon and Sung, 2006). This may be a particular concern in the case of the Mining Skills Council, where employers are the main decision-makers in the initiative, and the political and economic power of this sector gives them a significant influence on TVET discussions. In this line, international organisations such as the International Labour Organization (ILO) have promoted the development of sectoral skills bodies with the necessary involvement of employers. Still, they have done so, emphasising social dialogue and tripartism (ILO, 2013) and recognising

the importance of giving equal weight to different stakeholders' voices affected by the policy.

In this last regard, the adoption of business-led SSCs as the one studied here raises questions concerning the reaction of those stakeholders affected by the policy that have little participation in the main discussions within these skills councils, such as TVET providers. Accordingly, the second part of this research addresses these questions.

6.3 How Have Different Employers and TVET Providers Implemented Sector Skills Councils' Initiatives in Chile?

This section discusses the findings concerning the second research question that guided this study. It discusses the findings regarding the implementation of SSCs' initiatives by employers and TVET providers in Chile's mining and wine sectors presented in chapter five. As a reminder, the Maintenance 4.0 Skills Council was not considered in this part of the study because the initiatives involving both types of stakeholders had not started when the fieldwork was conducted.

Accordingly, considering a policy enactment focus, findings in chapter five described how employers and TVET providers have interpreted and reacted to SSCs in the mining and wine sectors. Moreover, via the principles and concepts of realist evaluation for the analytical process, it was assessed if the reactions from these actors aligned with SSCs' adopters' assumptions. This approach represents a difference with how SSCs have been studied to date, as little focus has been given to key actors' reactions concerning the policy expectations, with employers receiving some attention (e.g. Lloyd, 2008) and TVET providers receiving practically none. Accordingly, this section discusses these findings concerning the available academic literature and, when appropriate, grey literature on SSCs and related policies.

The two main findings of this part of the research that will be discussed are:

- In general, employers of all sizes in the two sectors are open to sharing information about their skills needs with their business associations or SSCs. However, not all of them consider sectoral skills standards developed through SSCs to inform or change their organisational practices.
- TVET providers oriented to both sectors are, generally, open to hearing employers' skills needs. However, their approach to consider employers information and, where feasible, implement changes to their TVET provision depends on different economic

and institutional contextual factors affecting them and their perception about the type of skills valued within the sector and employment opportunities for their students.

This section's discussion is organised by type of actor, starting with employers and followed by TVET providers. The section ends with a summary and final remarks.

6.3.1 Employers

Although four assumptions from SSCs' adopters about employers were identified in the findings of this study, two main assumptions were selected to focus the discussion. Accordingly, this discussion emphasises the findings showing that, in general, employers have positively responded to the implementation of SSCs. However, not all employers have satisfied all the assumptions that SSCs' adopters have about them. This is because, even when all employers interviewed have been willing to share information with their respective SSCs or business associations, only a few of them have been open to implementing changes to their organisational practices suggested by their SSCs. The following paragraphs discuss these findings organised according to the two main selected assumptions about employers from SSCs' adopters.

Main assumption 1: Employers are willing to share private information about the skills/jobs profiles needed.

The main assumptions behind the adoption of SSCs relate to the expectation of how employers would react to the request to share internal information about their skills needs. In this line, SSCs' adopters assume that employers will be open to sharing information with their SSCs or business associations as it benefits several stakeholders. As a reminder,

> *The industry knows that it [SSC's work] is necessary, knows that we will do serious work, and have to have results, concrete results. And, as I said, we care about competitiveness and productivity, but also people development.* **[Participant 20 – Wine business association representative and SSC's adopter and executive]**

According to the interviews with employers in both sectors, generally, employers are open to sharing information with their SSCs or business associations. In both cases, employers have participated in various processes to define sectoral skills demands (e.g. surveys, meetings) for which they have given quantitative or qualitative information to their SSCs. Thus, it is possible to say that the assumptions from SSCs' adopters have been met for both sectors. However, there are some differences between them.

First, employers have shown they trust their SSCs or business association with internal information about their skills needs in both sectors. Moreover, employers recognised that these organisations positively impact building trust and cooperation among employers within a sector. Arguably, this situation seems more evident for the Mining Skills Council, as several employers recognise it as a 'space' where they can cooperate and share good practices. In contrast, the wine sector's employers have provided information when requested by the business association's Human Capital area. However, some employers consider that this area could foster more opportunities to discuss human capital issues among sectoral employers.

In this sense, it can be noticed that trust from employers in their respective SSCs is presented here as a favourable condition for implementing SSCs. This situation is not surprising, as trust among stakeholders has been emphasised in the grey literature as a necessary condition for the success of SSCs (e.g. Lempinen, 2013; Powell, 2016). In the same line, Kazis (2003) suggests that workforce intermediaries—possibly such as SSCs—succeed or fail based on their ability to build trust, particularly from employers. Similarly, Petersen et al. (2016) identified the key role of private-sector intermediaries for skill formation—similar to the ones studied here—in enabling trust and a culture of cooperation among private-sector actors. Moreover, according to Kazis (2003), two strategies can help these intermediaries win trust from employers. The first entails developing and maintaining a good understanding of the sector they support, which has also been emphasised in the grey literature on sector skills bodies (e.g. Kraak, 2013; Powell, 2016). The second relates to showing a long-term commitment to the industry. In this regard, it is possible to say that given that the SSCs studied are linked to their business associations, these strategies seem to be naturally taken by SSCs' adopters. Thus, the business association-led approach of the Mining and Wine Skills Councils in Chile has acted as a favourable condition to build the trust needed to engage employers with the SSCs' information requirements.

Second, it can be observed some differences concerning employers' considerations about the benefits for them of sharing information with their SSCs. In both cases, employers recognised that having more information about sectoral skills and job profiles is beneficial for them and the sector. However, employers in the mining sector seem to have more clarity about the specific benefits for them and their role in achieving these benefits. This is because employers in the mining sector repeat almost like a mantra that their role in the SSC is to provide information about their skills needs to pass to TVET providers. Accordingly, mining employers think they will be benefited from the effects of this

information on the education and training offered by TVET providers and, subsequently, in the supply of skilled workers.

In contrast, in the case of employers within the wine sector, the perceived benefits of giving information and time to the SSC seem less discursively aligned among employers. This situation could be possibly explained because of the limited resources that the Wine Skills Council had to promote the benefits of these actions with employers. However, the employers interviewed seem to understand that having aggregated information about the sectoral demand for skills can benefit them. Moreover, given that the wine business association provides training and certification services to employers, there seems to be an understanding that their information is vital to enhance these services.

In this sense, the emphasis on improving the supply of skilled workers promoted by the SSCs' adopters seems to have successfully convinced employers to share information. Likewise, consistent with the findings of the adoption of these bodies, it shows how the implementation of SSCs in these two sectors has been based on a skills supply orthodoxy. In this line, employers consider TVET providers the main actors responsible for delivering skilled people according to what they say they require (Keep, 2012; Hodgson *et al.*, 2019). Moreover, as will be discussed in the following paragraphs, the prevalence of this skills supply emphasis may also account for the difficulties in fulfilling additional assumptions about employers beyond information sharing.

Main assumption 2: Employers will adjust/change their organisational practices according to sectoral standards.

The second main assumption that SSCs' adopters in the mining and wine sectors have about employers concerns their use of sectoral standards (e.g. labour competencies profiles, qualifications frameworks, training standards) developed through SSCs. It is expected that employers will react to sectoral standards by using them to inform their HRM practices. This expectation has been predominantly observed in the case of the Mining Skills Council. However, although more modestly, it has also been recognised by the adopters of the Wine Skills Council. In this line, the Mining Skills Council has developed actions oriented to encourage sectoral standards in the industry's recruitment, selection, training, and, ideally, people development practices. Likewise, in the Wine Skills Council's case, actions have been taken to promote the certification of labour competencies as the base to inform practices such as training and people development. As a reminder,

So with companies, we have been doing work like quite individual. One-to-one to see how they can use the CCM's [Mining Skills Council] products in their human resource management practices in career development, tenders, organisational issues in general… during this time is something that we have been trying to reinforce. **[Participant 5 – Mining SSC's former executive]**

In this line, a particular strategy to encourage employers' use of standards has been stressing the direct benefits for them and the sector as a whole. For instance, in the mining sector, it has been emphasised that sectoral standards can help have a common language between employers and TVET providers, facilitating employers' recruitment and training practices. However, as the findings of this research suggest, not all employers acknowledge that using sectoral standards in their internal practices directly benefit them. As a result, only some employers have responded according to the assumptions of SSCs' adopters.

For instance, only some companies have used sectoral standards as criteria within their HRM practices. Among these companies are mining companies with new operations, more flexibility to change, and, notably, large-scale contractors who are motivated to show that their workers have the skills needed to provide services to mining companies. In this last case, it is possible to notice that sectoral standards have been used with a signalling purpose, emphasised by the same SSC as an implicit regulation method. Possibly, these findings are similar to those of Gospel and Lewis (2011) in their study of the social care sector in the UK, where new regulations about the minimum level of skills required to provide care services had a positive effect on some of the HRM practices within the sector. However, in the UK's case, the government formally established the regulations, implying a mandatory element different from the cases discussed in this study. Despite this difference, it is possible to notice that establishing skills requirements to provide services seems to have impacted some employers' usage of sectoral standards in their HRM practices. Particularly, contractors companies have been practically obligated to take the skills and training of their staff more seriously in order to continue operating. This issue possibly reveals how skills can become essential in commercial relationships within a sector. Simultaneously, this situation may suggest examining the relative power of different actors within this industry, which, according to Gog et al. (2018), could explain firms' behaviours and skills policies outcomes.

A different response from employers in the mining sector comes from the companies that acknowledge the value of sectoral standards but consider it is challenging to implement

internally. In these cases, some interviewees have mentioned the costs involved as one of the main barriers restricting the full implementation of sectoral standards in their organisations. For instance, training employees to comply with the SSC's competency profiles may entail removing the worker from the job for a few days. Thus, besides the training costs, others are related to having fewer workers in the production site or finding replacements, which seems to complicate managers given the system of shifts within the sector. These cost considerations have also been identified as one of the main barriers for employers provision of training according to competency frameworks (e.g. Gospel and Lewis, 2011; Smith *et al.*, 2019). In this regard, the provision of public funds and a better alignment between training and the work organisation have been identified as two factors that could help overcome these barriers (Smith and Smith, 2008; Gospel and Lewis, 2011; Smith *et al.*, 2019).

On the other side, some of the sector's largest companies continue using company-specific standards as a corporate decision. At the same time, an interesting finding concerning this group of employers is that even when they mentioned not formally using SSCs' standards in their organisational practices, they recognised the importance of its use by external actors such as TVET providers and contractors. Hence, this situation could indicate that, implicitly, sectoral standards are being considered in the recruitment and selection of new workers or contractors. Moreover, an issue that could support this argument is the concern among some large-scale contractors companies—that recruit and train their employees according to sectoral standards—that mining companies usually poach their workers. As one representative from one large-scale contractor company commented,

> *Sometimes our high-level technicians are tempted and taken by mining companies. So sometimes we act a little as providers of [workers]... and they told me. I remember talking with an [mining company] executive, he told me 'I have two providers', and I asked 'who they are?' [answer with the name of two large-scale contractors] and I said 'how can you tell me that, I have to provide you a quality service and you are poaching my best elements', he said 'yes, but you have the capacity to hire and train'* **[Participant 16 - Mining sector employer (contractor company)]**

This situation possibly suggests some of the effects of implementing SSCs adopted by powerful employers within an industry without other powerful contrasting voices. On the one hand, the development of sectoral standards by the SSC may contribute to fostering

industry-specific skills training within some companies. On the other hand, the main companies incentivised to train according to sectoral standards are those in a less powerful position (contractors or service providers) than others (mining companies). This is not to say that these mining companies do not train their employees as they may still need to develop specific combinations of firm-specific skills (Lazear, 2009). Instead, this situation could exemplify the recurrence of employers' expected behaviours in market skill regimes related to their preference for hiring skilled labour to reduce in-house training (Valiente, Zancajo and Jacovkis, 2020). Moreover, this situation raises questions about power issues within the industry and how private-led SSCs could further emphasise it. However, more research about this situation is needed to have a deeper understanding of this phenomenon.

Additionally, the emphasis on affecting TVET providers could be a consequence of the initial arguments used to convince employers to participate in the SSC based on enhancing skills supply. At the same time, if employers are actually hiring TVET students that were trained according to sectoral skills standards, it could be indicating that SSCs could be helping to overcome the lack of confidence in TVET qualifications suggested by other studies about the Chilean skill formation system (e.g. Sevilla and Farías, 2020; Valiente, Zancajo and Jacovkis, 2020). In this regard, further research inquiring into the recruitment criteria from these companies could help to have a better understanding of this possible SSCs' outcome.

In the case of employers in the wine sector, the evidence presented in documents and interviews indicates that employers have extensively used the certification of workers labour competencies. However, the evidence found is inconclusive concerning the use of information about workers' certification of labour competencies to inform HRM practices, such as recruitment, promotions or reward management.

For instance, in large-sized wine companies, the situation has been varied. Some employers recognised that one of the main reasons to certify their workers is to comply with legal requirements (e.g. health and safety) and quality standards necessary for wines' trade. In that sense, it can be said that certification and possibly training in these organisations has been motivated by push factors, meaning external regulatory factors that mandate employers to comply with specific standards (Cully, 2005). However, within this same group of companies, some employers mentioned that, more recently, skills and certified workers' competencies are becoming to be considered for career development purposes.

Simultaneously, in some of these companies, the HR and Training departments' professionals considered the certification process only as a verification exercise with little value to identify training needs that can help enhance workers' skills to perform their jobs. In this sense, these findings could be revealing deeper problems concerning the labour competencies certification system and its capacity to support skills development. On one side, it could indicate deficiencies in the competency profiles established by the sector. On the other side, it could suggest that the certification processes are inappropriate to identify skills gaps. Therefore, the Wine Skills Council's efforts to promote labour competencies certification as the base for people's development will hardly meet the desired effects. Certainly, as suggested by other studies (e.g. Vera Campos *et al.*, 2013), more research on how employers consider that the labour competencies certification system makes sense for the business could better understand this situation.

Moreover, some small wine companies with few organisational levels have reported that certification is only used with a motivational aim and does not inform career development processes. This may concur with the findings from Gospel and Lewis (2011) for the UK's care sector. They found that it seems unrealistic to offer rapid career progression based on training and competencies in organisations with flat structures.

On the whole, it can be said that there are varied reasons that can explain why employers in both sectors have not responded according to SSCs' adopters' assumption concerning the use of sectoral skills standards in their organisational practices. In the same line, the few studies that have analysed the reactions from employers to SSCs have shown that employers do not always act according to the definitions established by these councils (e.g. Lloyd, 2008; Payne, 2008). The reasons found in these studies point out issues of representativeness and resources. Thus, this research concurs with these studies by showing the difficulties for a policy such as SSCs to convince employers to implement changes related to skills issues. Undoubtedly, more research from the perspective of employers participating in different SSCs' initiatives is needed to understand this situation better.

From an alternative perspective, studies about the adoption of National Vocational Qualifications (NVQ)—which could be considered similar to the SSCs' sectoral standards here studied—by employers offer insights about the barriers and enablers for its use within organisations (e.g. Matlay and Addis, 2002; Smith *et al.*, 2005, 2019; Smith and Smith, 2008; Gospel and Lewis, 2011). In this line, the existence of regulations (e.g. that affect skills and training requirements) and the provision of public funding have been identified

as the primary drivers for the use of external skills standards by employers (Smith *et al.*, 2005; Smith and Smith, 2008; Gospel and Lewis, 2011). Only Smith et al. (2005) slightly mention industrial organisations—such as SSCs—as a factor contributing to employers' use of national vocational qualifications. This is because these organisations support employers to understand its language and structure. In this sense, these studies provide evidence to suggest the restricted capacity of the private-led SSCs examined in this study to trigger the expected reactions from employers without regulations and public funds. Moreover, this situation could be particularly relevant in the case of the mining sector given SSCs' adopters' reluctance to involve the public sector in SSCs' discussions, keeping the initiative exclusively employer-owned.

Beyond the above, an important point to consider is the complexity involved in convincing employers to implement skills or competency standards within their HRM practices when the standards come from external sources (Matlay, 2000; Matlay and Addis, 2002; Gospel and Lewis, 2011). For instance, based on a study of Australian employers, Smith et al. (2005) suggest that companies that adopted national training standards in their organisational practices presented three conditions. These are a formalised HRM system based on competency standards, all HR staff knows the nationally recognised training system, and workforce development is considered essential for the business strategy. Similarly, Hales et al. (1996) found out that in small firms, a developed HRM and training system was an essential foundation for adopting national vocational qualifications that could be linked to these practices.

Comparatively, it can be noticed that the cases reviewed in the present study show that some employers hardly meet the conditions mentioned above. Particularly, the wine sector, which comprises many SMEs and the small companies interviewed, mainly showed an administrative focus to HRM. This is not to say that SMEs cannot adopt HRM practices strategically, as the literature has shown that many SMEs can do it (e.g. Fabi, Raymond and Lacoursière, 2009). The point to highlight here is that of Bishop (2015). He argues that some skills policies created on liberal market economies—such as the one studied here—are based on assumptions that fail to recognise the particular characteristics of small firms. As such, these policies expect reactions from SMEs that could be difficult to achieve. In this sense, it seems clear that expecting that employers change their organisational practices according to sectoral standards entails a more challenging objective for SSCs than requesting information about their skills needs. In this regard, better recognition of employers' different characteristics within a sector and their capacity to comply with

various requirements seems essential to adjust the expectations on what skills policies such as SSCs can achieve. An issue that has been recognised in studies focused on employer engagement in other skill formation policies (e.g. Laczik and White, 2009; Ertl and Stasz, 2010).

6.3.2 TVET providers

This study's findings showed that TVET providers oriented to both sectors had presented diverse responses to SSCs' initiatives. TVET providers oriented to the mining sector have been highly open to hearing employers through the SSC and subsequently to adjust some of their programmes according to the mining sector's standards. Differently, TVET providers oriented to the agricultural sector have been open to hearing single employers but less willing to implement changes to their offer according to the wine sector's expectations.

Given the above, it is important to note that, even when the two SSCs have similar expectations about TVET providers, the strategies performed and the incentives to convince them to implement changes to their offer have been different. These differences will be discussed below, organised according to two main assumptions about TVET providers from SSCs' adopters identified in chapter five.

Main assumption 1: TVET providers are open to hearing information about sector skills' needs from employers to ensure better employability for students.

The first assumption from SSCs' adopters about TVET providers relates to their receptivity to hearing information from employers about their skills needs. In this line, SSCs' adopters expect TVET providers to consider the SSC or the business association a valid source of information about employers' skills demands. As a reminder,

> *When we developed the first labour market intelligence study was very useful for several things [...] for the Ministry of Education. It allowed them to realise that the secondary technical schools should be oriented, hear, and meet and coordinate with industry.* **[Participant 20 – Wine business association representative and SSC's adopter and executive]**

This research shows there are differences among TVET providers regarding their approach to hearing the skills demand from employers. In general, TVET providers oriented to the mining sector have been open to hearing mining employers represented by their SSC. Furthermore, they consider the SSC's information necessary and valuable to guide their education and training offer. In this sense, the Mining Skills Council's strategy to contact

TVET providers through the ELEVA project has played a crucial role in promoting the SSC's objectives and expectations. Differently, TVET providers oriented to the agricultural sector are aware of the wine business association's existence and some of their initiatives from the Human Capital area. However, in general, they do not seem to conceive this organisation or the SSC as a relevant actor to deliver information about skills needs. This situation may be explained by the Wine Skills Council's lack of resources to continually develop actions to approach TVET providers.

Nevertheless, it is possible to note that TVET providers oriented to the agricultural sector have been open to hearing employers' skills needs. In general, they have a close relationship with single employers in their nearest area. Thus, they seem to consider local employers' information sufficient to understand the skills they need and value.

Beyond the different strategies mentioned, it is possible to notice that, in both cases, the aim has been to achieve more relevance of TVET offer to the needs of the industry. Indeed, this is one of the main messages delivered by the SSCs when getting closer to TVET providers. SSCs' adopters in both sectors have assumed that improving 'relevance' is considered necessary—and possibly urgent—by TVET providers. However, according to this study's findings, this assumption is not always met with the same intensity for all TVET providers. Moreover, it can be observed that the urgency given to enhance relevance by TVET providers in both sectors seems to be one of the main differences among them. This is because 'relevance' was mentioned by all TVET providers oriented to the mining sector as a worry and essential condition they must achieve. Conversely, TVET providers oriented to the agricultural sector did not directly or indirectly reference this concept.

One possible reason for this difference could be their perception of the link between relevance and their students' employability. TVET providers oriented to the mining sector consider there is a critical link between these two conditions. Differently, TVET providers oriented to the agricultural sector link the employability of their students to other aspects, such as the geographical proximity to local employers. For instance, secondary technical schools oriented to both sectors recognised that finding internships for their students is not a problem. However, while TVET schools oriented to the mining sector indicated that this is because of the school's quality of training, TVET schools oriented to the agricultural sector (located in rural areas) highlighted their good relationships with local employers as one of the main reasons. This may show how each TVET provider's local context affects

their attention to the relevance of the formative offer, and subsequently, to their perceived need for information from employers.

Another related factor accounting for the differences among TVET providers between sectors to hear employers may be their perceptions of the type of skills that employers consider valuable when recruiting TVET students. For instance, TVET providers oriented to the mining sector explained that employers demand high knowledge and technical skills standards when recruiting TVET students. Accordingly, these actors seem to be more worried to ensure that the technical skills they develop in their students meet the sector's requirements. As a result, they tend to be more interested in having technical specific information from employers, which aligns with SSCs' adopters' assumptions about TVET providers. Differently, TVET providers oriented to the agricultural sector commented that employers tend to give more importance to 'soft skills' rather than technical skills when recruiting their students. For this reason, these providers have given further attention to developing the soft skills demanded by employers, for which possibly they think they need less technical specific information from them.

In this last case, it is worth discussing how the emphasis on soft skills over technical skills in TVET schools oriented to the agricultural sector in response to employers' demands may be problematic. First, it can be noticed that some of the demanded soft skills mentioned by the interviewees, such as 'willingness to obey rules' and 'not being late for work' are highly contested as skills (Green, 2011; Hurrell, Scholarios and Thompson, 2013; Payne, 2017) and represent behavioural requirements (Lafer, 2004; Lloyd and Payne, 2009). Second, this situation could show that employers are asking TVET schools to fix skills deficits that could be better explained by bad jobs and low-skill settings (Hurrell, 2016; Payne, 2017). Indeed, some apprehensions from secondary TVET providers about the quality of employment offered to their students, which will be discussed later, could point in this direction. Finally, as Lloyd (2008) suggests, prioritising these skills can disregard the technical skills requested that could form an essential part of the job. As a result possibly affecting the bargain power associated to those technical skills (Grugulis and Vincent, 2009).

Main assumption 2: TVET providers will adjust their education and training offers to suit the needs of the sectors.

The second main assumption that SSCs' adopters have about TVET providers concerns their positive response to the information developed and delivered through the SSCs by adjusting their offer to this information. As a reminder,

> *I mean this [SSC] emerges from the industry because of real and valid interest of having more trained people but also has benefits for the people that in the end, they will be… they are going to improve their employability, their opportunities. The [Technical] Training Centres, in general, will see an alignment, or they will find it easier to be aligned with what requires the world of work. Thus, if there is a better conversation between formation and the world of work is something that is extremely beneficial not only for industry but also for the [Technical] Training Centres.* **[Participant 5 – Mining SSC's former executive]**

Moreover, as noticed, an important related assumption to a positive response to SSCs from TVET providers refers to the motivations or incentives that these actors may have to adjust their offer to employers' needs. In particular, both SSCs start from the base that employers' skills needs, and thus their voice, have superior relevance than other stakeholders. This is mainly because of the assumed link between employers demands and the employability of TVET students. In this line, it seems that SSCs' adopters consider that acting according to employers' definitions to provide good employability for students is enough incentive for TVET providers. However, the findings of this study suggest that not all TVET providers have reasoned in this way. Thus, the link between responding to SSCs' definitions and students' employability has not been enough incentive for all TVET providers. These results may be in line with previous studies suggesting that TVET providers in Chile tend to be mainly moved by patterns of demands from students, who do not necessarily consider employability the main criteria for selection (Valiente, Zancajo and Jacovkis, 2020).

Moreover, possibly because of the reasons above, the Mining Skills Council has developed signalling mechanisms to convince TVET providers to change their offer. The accreditation scheme for TVET providers that comply with SSC's standards has served as an incentive that, simultaneously, acts as a quasi-formal regulation within the sector. In this line, the main idea behind this accreditation is that TVET providers can use it as an advertising device to attract more students and signal their quality to employers. This

capacity of the mining sector to impose a form of regulation on the TVET sector is indicative of the political power of the mining industry, arguably linked to its economic power in the country (10% of the GDP). Conversely, this situation is not the case in the wine sector (0,5% of the GDP). Thus, it is noticeable how each industry's contextual economic conditions may play a vital role in the chances that private-led SSCs, such as those studied here, can directly influence TVET providers. At the same time, the excessive power of some economic sectors over TVET definitions should be seen with caution as the motivations of employers may not always be aligned with broader social aims (Raddon and Sung, 2006). Moreover, this situation could mean that skills definitions could be narrowed to those required for specific production tasks and lack a development perspective raised by other actors such as TVET providers or the state (Gleeson and Keep, 2004; Gekara and Snell, 2018).

Furthermore, a related underlying assumption linked to the incentive of fostering better students' employability considers that employment opportunities within the sector are perceived as attractive. In this regard, the interviews conducted also showed some differences between TVET providers oriented to each industry. For instance, TVET providers oriented to the mining sector recognised a high demand for middle-level technicians within the industry. Therefore their students can enter mining or contractor companies in job positions aligned with their education and training level. Thus, this situation suggests a clear incentive to adjust their offer to these companies' needs and comply with the SSC's expectations.

On the contrary, in the case of TVET providers oriented to the agricultural sector, some interviewees mentioned that sometimes they have to remind employers that their students are technicians and not 'cheap labour' (sic). In that sense, it seems that the quality of jobs offered to TVET students within the industry may discourage TVET providers' efforts to hear and act upon employers' demands. However, these TVET providers' emphasis on enhancing soft skills in response to employers' requirements seems contradictory. At the same time, this situation may be an example of the threats of considering employers' voice as the most relevant one to guide TVET (Gleeson and Keep, 2004). Particularly in sectors where employers may undervalue secondary TVET education, and its students have poor economic returns, as tend to be the case in Chile (Zancajo and Valiente, 2018). However, further detailed research on the quality of jobs offered within this industry is needed to better understand these concerns from TVET providers.

Additionally, a related assumption from SSCs' adopters about TVET providers refers to these actors capacity and resources to adjust their education and training offer according to industry needs. In this regard, it is possible to notice that both SSCs have offered some support to TVET providers to implement the requested changes. On one side, through the ELEVA project, the Mining Skills Council have delivered training for TVET teachers, developed support networks between providers and, in some cases, have donated technology to TVET providers. On the other side, the Wine Skills Council has provided training sessions and handbooks for TVET teachers, although more modestly. Accordingly, the interviews indicate that these actions contributed to changes in some TVET providers in both sectors, either on their educational offer or their teachers' practices. Thus, these actions possibly facilitated some organisational conditions needed for reaching the expectations of SSCs.

Nevertheless, it is possible to observe that the economic and institutional conditions of each TVET provider, in some cases, have benefited and, in others, have constrained their chances to react according to SSCs' expectations. The most noticeable difference can be seen among TVET providers oriented to each sector concerning their economic resources. The secondary schools oriented to the mining sector have obtained funds from the ELEVA project, charities or mining companies. Hence, these schools have received the funding needed to implement the technology compliant with the SSC's standards. On the contrary, there is no evidence that the secondary schools oriented to the agricultural sector have obtained economic resources to implement changes or acquire new technology to update their teaching practices. Moreover, some interviewees mentioned that even when they can have good information about the updates needed to train students according to workplace changes, they are usually constrained by institutional barriers to obtaining funding.

Also, it is possible to notice differences between secondary technical schools concerning their curriculum implementation model, which the Ministry of Education authorises. For instance, those schools that have been granted 'special singularity'—as the case of some schools oriented to the mining sector—have more flexibility to implement curricular changes (Sevilla, 2013). On the other hand, those schools that have not been granted this condition must necessarily follow the Ministry of Education's curricular framework, and therefore, are more restricted to implement changes. Hence, this difference makes more or less applicable the assumptions from SSCs' adopters about their likelihood to directly affect some TVET providers, such as secondary TVET schools. However, it could also be a

protective barrier to regulate employers' power to push TVET providers to implement changes that only serve their short-term interests.

6.3.3 Section summary and final remarks

This section has discussed the reactions from employers and TVET providers to SSCs and their alignment with the main SSCs' adopters' assumptions about these actors.

As noticed, employers in both sectors have reacted as expected by SSCs' adopters concerning the request to share information about their skills demands with their SSC or business association. This positive reaction has been underpinned by employers' trust in these organisations and their perception of the possible skills supply benefits for them and the sector. Inversely, employers have presented diverse responses to SSCs' requests to adjust organisational practices according to sectoral skills standards. Some companies have used sectoral standards in their recruitment, selection, training, and development practices. Others have been reluctant or limited to use them fully. As showed, this diversity of responses could be explained by the interaction of various factors among employers. On one side, it was found that material factors such as company size, time operating and costs could be potential enablers or barriers. On the other side, ideational factors related to the final aim of sector skills standards (e.g. affecting TVET providers, enhancing motivation) have constrained their use within employers' HRM practices. Interestingly, in one of the sectors, some actors' relative power over others within the industry seems to be a factor that incentivises some employers to use these standards more broadly.

In the case of TVET providers, this study's findings showed that only one of the SSCs has managed to affect TVET providers approach to hear employers and implement changes according to this information. In doing so, the Mining Skills Council is considered by TVET providers interviewed as a valid source of coordinated information to understand the sector's skills requirements. As a result, several TVET providers have decided to implement changes to their programmes to comply with SSCs' standards. This is possibly due to the strategies carried out by this SSC that have involved a public-private project to engage TVET providers and the development of a private accreditation scheme that acts as some type of quasi-formal quality regulation. However, the economic (access to funding) and institutional (more flexibility to adjust programmes) conditions of some TVET providers oriented to this sector have also seemed to facilitate the SSC's work. Simultaneously, the perception of quality employment opportunities for TVET students and the value given to

technical skills within the industry appears to contribute to a positive response from TVET providers to the SSC.

On the contrary, the modest actions performed by the Wine Skills Council have had little effect on affecting TVET providers oriented to the agricultural sector to consider this body or the business association as a valid voice in skill formation issues. In this sense, TVET providers have continued hearing the skills needs of single employers geographically near, which seems to be enough for them to have a general idea about employers' demands. Moreover, only a few secondary TVET schools decided to implement the wine sub-speciality promoted by WoC. Also, it has been noted that the quality of sectoral employment opportunities and the perceived emphasis of employers on soft skills seems to affect their trust in employers as a valid voice for TVET definitions.

Based on the diverse responses from employers and TVET providers to SSCs, it seems that these bodies have partially achieved their aim to address the disconnect between TVET provision and their sectors' skills needs. On one side, employers have been open to sharing data and time to develop organised information about sectoral skills demands. Thus, at least information is available to coordinate supply and demand. On the other, TVET providers have been open to receiving information about skills demands, although with some differences between both sectors. However, employers and TVET providers showed diverse responses to the expectation to implement internal changes based on this information. It seems that the development and delivery of information on its own have a modest effect on changing the behaviours of these actors. Moreover, several contextual and employers/TVET providers conditions enable or constrain the implementation of changes.

In this sense, the strategies performed by the Mining Skills Council seems to have had more success in convincing some of these actors to implement changes. Notably, the use of signalling mechanisms such as accreditation schemes that act as quasi-formal regulations seems to have worked as an incentive. Furthermore, this sector's political power and economic resources to influence and support TVET providers seem to be critical factors that contrast starkly with the wine sector.

Nevertheless, it is important to note that the findings discussed do not imply that one SSC has been more effective than the other. Instead, they show how the differences between sectors, employers and TVET providers may explain the fulfilment or not of the general assumptions related to SSCs. In this sense, the results of this study may provide some evidence to support Gog, Sung and Ashton's (2018) claim that given that the institutional

logics across sectors tend to differ, the form of policy interventions are likely to be sector-specific.

6.4 Chapter Summary

This chapter has discussed this study's findings of the adoption and implementation of private-led SSCs in Chile in light of the literature on comparative education, sector skills bodies and employer engagement in skill formation.

The first section discussed why and how business associations adopted SSCs in Chile. Accordingly, this section showed that SSCs as a TVET policy idea had been driven by a local policy entrepreneur's strategic actions, notably because this actor identified the national and sectoral conditions for introducing the SSCs idea to private actors. Hence, the adoption of SSCs in Chile resulted from the interaction between several national and sectoral material and ideational factors. Ideational factors (i.e. crisis rhetoric highlighted by the policy entrepreneur) and their interaction with national contextual conditions (i.e. neoliberal institutions) seem important in explaining why SSCs have been attractive to Chilean employers. Simultaneously, sectoral material factors (i.e. presence of business associations) seem to explain how SSCs were finally recontextualised in each sector.

Furthermore, it was discussed why the policy adoption process had business associations and employers as leading adopters, and it was identified three assessments these actors tend to perform when considering to involve in skill formation policies (summarised in Figure 6.2).

Finally, the last section has discussed how employers and TVET providers have reacted to SSCs in Chile's mining and wine sectors and the extent to which these actors' reactions align with the assumptions of SSCs' adopters. Hence, the discussion showed that employers in both sectors are open to sharing information about their skills demands with their SSCs or business associations. Trust in these organisations, and the perception of benefits associated with a better supply of skilled workers has been found as factors accounting for employers' positive response. In contrast, employers have been less keen to consider sectoral standards developed by the SSCs in their organisational practices. However, there is some evidence of greater use among some employers. Different characteristics from employers account for their varied responses, ranging from the company's size, time operating, the maturity of the HRM practices, commercial need and sensitivity to costs. Also, ideational factors related to a skill supply orthodoxy and the final aim of developing sectoral standards seem to explain some employers' responses.

In the case of TVET providers, this discussion showed that these actors present different responses to the expectation to be open to hearing employers demands through SSC. TVET providers oriented to the mining sector recognised the work of the Mining Skills Council as valuable for understanding skills demands. Conversely, TVET providers oriented to the wine sector do not perceive the SSC as an informational source and continue engaging with employers individually to understand the sector's skills demands. These differences may be explained by the different strategies carried by each SSCs to approach TVET providers, their resources and the geographical position and relative power of employers concerning TVET providers in each sector.

Moreover, TVET providers have also presented different responses to the expectation of changing their programmes according to SSCs' standards/information. These differences may be explained by the different strategies performed by each SSCs to incentivise TVET providers and the institutional and economic conditions affecting each TVET provider. Also, TVET providers' perceptions about the quality of employment opportunities for their students and the type of skills that employers demand within each sector seem to affect their responses.

Accordingly, the discussion of the cases studied may suggest that SSCs' development and delivery of information by itself may have modest effects on generating changes on employers and TVET providers' practices. Thus, further actions (i.e. accreditation scheme) and conditions (i.e. quality of employment opportunities) have been needed to incentivise these actors.

CHAPTER 7: CONCLUSIONS

7.1 Introduction

This chapter presents the contributions of this thesis to the debates in the comparative education literature, particularly focused on policy transfer in TVET, and more specifically, sector skills bodies. Notably, the study of the adoption and implementation of private-led SSCs in Chile here presented can be valuable to advance the debates regarding the role of different factors in the transfer of TVET policies and their enactment by key stakeholders. The chapter also presents the limitations of this study and directions for future research.

This research examined SSCs as a TVET policy usually promoted in global TVET agendas that have not been studied from a policy transfer perspective. Accordingly, the work presented in this thesis concerning the adoption of these bodies in a new adopter country addressed this gap identified in the literature on both policy transfer in TVET and sector skills bodies. Likewise, the findings concerning the implementation of SSCs fill a gap in the literature on sector skills bodies, which lacks studies examining this policy from the perspective of the main stakeholders involved in its enactment.

Moreover, this study addressed two empirical gaps in the sector skills bodies literature. First, it presents evidence about private-led SSCs, considered a rare type of sector skills bodies (Raddon and Sung, 2006). Second, it contributes with evidence about SSCs in Chile, a new and not before studied context.

The findings of this study showed that the adoption of private-led SSCs in Chile could be considered a case of *soft* policy transfer. Thus, a local policy entrepreneur's actions were found crucial to explain *why* SSCs have been an attractive policy for business sector actors. Likewise, specific economic, institutional and political conditions at the sectoral level have been found relevant to explain *how* SSCs were finally adopted in different sectors. These findings challenge previous arguments on sectoral approaches to skills development, suggesting that involving employers in skill formation requires systemic changes to regulations and incentives (e.g. Sung, 2010; Sung and Ashton, 2015). Instead, this research showed how ideas and framing strategies could affect employers and business associations' assessments concerning their involvement in TVET policies.

Also, this study's findings concerning the implementation of SSCs showed that, in general, employer and TVET providers are open to share and hear information about skills needs, respectively. However, their implementation of changes according to skills needs

information is varied due to different contextual (e.g. economic, institutional) and employers/TVET providers conditions (e.g. main stakeholders' perceptions, resources). Thus, showing that the development and delivery of sectoral skills needs' information on its own has modest effects on changing the behaviour of employers and TVET providers. Further, it was identified that additional actions and strategies (e.g. partnerships with the public sector, accreditation scheme) performed by some of these SSCs to incentivise these actors to implement changes were needed.

Accordingly, this research offers the following contributions to the comparative education and sector skills bodies literature,

1. It advances the understanding of the different roles of ideational and material factors and their interaction in the policy adoption process involving SSCs as a TVET policy.
2. It provides an empirical demonstration of SSCs adopted by business sector actors and offers potential novel insights about the assessments made by these actors when deciding to involve in skill formation policies.
3. It provides an initial understanding of the varied contextual and employers/TVET providers conditions affecting these actors' responses to SSCs.
4. It provides an empirical demonstration of the limitations of SSCs adopted with a skills supply orthodoxy rhetoric.

The following section provides more details about these contributions and their possible implications.

7.2 Contributions and Implications

The role and interaction of ideational and material factors in the process of policy adoption involving SSCs as a TVET policy

The first part of this research addressed the study of SSCs as a globally diffused TVET policy adopted in a new context by private actors. In this line, this research has answered the research call from Verger (2014), who suggests giving further attention to the policy adoption stage of global education policies. In doing so, this study has examined the ideas and contextual conditions that may explain policy change. Thus, guided by a cultural political economy analytical framework, this study focused on identifying the multiple material and ideational factors underpinning the mechanisms involved in the adoption of SSCs.

As a result, it was found the determinant role of a local policy entrepreneur who performed different strategies to give local meaning to SSCs. Likewise, it was identified the national and sectoral conditions involved in this process. Notably, it was found that material factors alone (e.g. economic challenges, skills shortages and gaps) were not sufficient to trigger policy change. Also, ideational factors (e.g. influence of policy entrepreneur) were needed to mobilise private actors towards adopting a new policy. These findings show the interrelation and interdependence of ideational and material factors in the adoption of a TVET policy. Thus, this study contributes new evidence to the debate on the drivers of education policies.

Likewise, the findings from this study concur with those studies that have found the key role of policy entrepreneurs, consultants and other non-state agencies in education policymaking (e.g. Verger, 2012; Ball, 2016; Baek, 2021). Moreover, this study adds novel empirical insights into these actors' strategies and arguments to target and persuade private stakeholders to drive TVET policies. For instance, the use of crisis rhetoric pointing to a skills problem threatening sector competitiveness or suggesting the inability of the public sector to solve skill formation problems. These insights are particularly relevant in the current global context of education policymaking, as it has been noted that private actors have gained significant influence in education policy change (Ball, 2012, 2016). Thus, this thesis contributes to expanding this debate by showing how the presence and actions of these actors interact with contextual conditions to involve private actors (specifically employers and business associations) in TVET policymaking. In this line, these findings could be particularly relevant for other LMEs contexts, which could tend to similar dynamics between private actors.

Moreover, this study revealed that ideational factors played a key role in the variation and (initial) selection mechanisms leading to SSCs' adoption. This led to the conclusion that ideational factors and their interaction with national material factors play a more prominent role in explaining *why* SSCs were an attractive policy idea for private actors. Conversely, material factors at the sectoral level were found particularly relevant to the (final) selection and retention mechanisms in the adoption process. Thus, material factors have played a more significant role to explain *how* these bodies were finally recontextualised in each sector.

Consequently, these last findings advance our conceptual understanding of the drivers of TVET policies in two ways. First, they support Jessop's (2010) hypothesis concerning

the decline of the relative importance of semiosis (ideational factors) from variation to retention in policy change processes. Second, they show the different roles of ideational and material factors and their interaction at different levels (national and sectoral) in policy adoption processes involving SSCs. In doing so, this study expands the debate concerning the roles played by different factors to drive TVET policies.

These findings could be of particular interest for policymakers seeking to adopt sector skills bodies in other contexts. Particularly for those seeking to select specific sectors to implement these bodies. For instance, well-established business associations and the presence of professionals within these associations with an interest in people skills related issues were found as favourable sectoral conditions to adopt these bodies. Thus, this information could serve as guidance for the selection of sectors to implement these bodies.

Business sector actors' assessments when deciding to get involved in skill formation policies

In Chile, business associations and employers have been the leading SSCs adopters. This situation represents a critical difference to how SSCs have generally been adopted in other countries, where the government is the driver (Kraak, 2013; Powell, 2016). This is an important difference in the case of SSCs, as one of the main objectives of this policy is to enhance employer engagement in skill formation (Raddon and Sung, 2006), and even some reports suggest that ideally, they should lead the initiative (e.g. Enabel and British Council, 2020). However, there is little empirical evidence about SSCs purely adopted or owned by private actors. Possibly, because these types of bodies are rare (Raddon and Sung, 2006). Accordingly, this research has filled a gap in the sector skills bodies literature, providing empirical evidence about this unusual—and arguably desired—business-led adoption of sector skills bodies.

Moreover, by using cultural political economy as a heuristic framework to examine the policy adoption process and assessing the resulting findings against the literature on employer engagement in skill formation, it was possible to identify some novel insights for this area of research. Specifically, by examining how employers were convinced to adopt SSCs through variation, selection and retention mechanisms, this thesis has identified three assessments these actors tend to make when considering to involve in skill formation policies. Namely, (1) an assessment of the relevance level of skill formation issues for the business; (2) an assessment of different stakeholders capacity to solve skill formation problems; and finally, (3) an assessment of their tangible possibilities to affect TVET.

Previous studies addressing employer engagement in skill formation policies have recognised some of these assessments separately (e.g. Sung, 2008, 2010; Huddleston and Laczik, 2018). Notably, identifying their interaction in a policy adoption process is an emergent contribution to the literature that could be explored in further research.

Moreover, this research showed that tackling these assessments in the ‘right’ direction makes it possible to persuade employers and their business associations to play a more active role in skill formation policies. This finding shows the power of ideas and persuasion strategies to foster the involvement of employers in skills policies which adds new insights to the debate on employer engagement in skill formation.

These findings could be of interest to policymakers seeking to foster employer engagement in TVET. For instance, they could evaluate which sectors could be more liable to implement sectoral TVET policies based on the importance given by employers to skills and skill formation for their businesses. Also, they could work with employers to clarify the capacities of different stakeholders to solve skill formation problems and foster collaborative effort. Likewise, they could assess if their current policies and practices allow employers to really affect TVET. On one side, this could serve to evaluate why SSCs in some sectors have been able or not to engage employers. On the other side, it could help focus efforts when working with employers.

Different contextual and employers/TVET providers conditions affecting their responses to SSCs

The literature on sector skills bodies provides some evidence about the implementation of these bodies in different contexts. The emphasis has been on systemic analysis to explain these bodies’ implementation and evaluate their success, usually concerning employer engagement and the relevance of TVET provision. Accordingly, beyond Lloyd's (2008) study with employers, little has been reported from the perspective of those actors who are expected to enact the policy in their day-to-day practices. This study has filled this gap and has provided an initial understanding of the varied contextual and employers/TVET providers conditions affecting the enactment of SSCs’ initiatives by these actors. In this line, the CMO configurations identified according to the principles and concepts of the realist evaluation approach may help to better understand what works, for whom and under what circumstances.

These findings could be of interest to policymakers adopting SSCs in other sectors in Chile for two reasons. First, they provide an initial understanding of the enablers and

barriers employers and TVET providers face to implement changes to their practices as expected by SSCs. Likewise, serving as antecedents of the different types of support needed by each actor. Second, they serve as a reminder of the agency of these actors and the importance of considering their voices when adopting and implementing skills policies (Gleeson and Keep, 2004).

The limitations of SSCs adopted with a skills supply orthodoxy rhetoric.

A rather confusing aspect of sector skills bodies is that they have been considered a policy intervention related to the demand side of skills (Raddon and Sung, 2006). However, as the literature review on the implementation of these bodies in different countries suggests, they are generally still focused on enhancing skills supply. Moreover, the literature on these bodies emphasises that they aim to engage employers in skill formation to achieve two main objectives. First, to have better information about their skills requirements. Second, to foster their provision of training in the workplace. However, it is the first aim that, arguably, has had more attention, particularly in international organisations' reports (e.g. Wilson, Tarjáni and Rihova, 2016; Enabel and British Council, 2020). Thus, the skills supply orthodoxy rhetoric, notably underpinned in HCT assumptions, seems to prevail.

This study has provided an empirical illustration of how SSCs have been adopted mainly under a skills supply orthodoxy similar to those adopted in Anglo-Saxon countries (Kraak, 2013). Further, by examining the implementation of two of these bodies from a policy enactment perspective and a realist evaluation approach, this study showed the limitations of a policy such SSCs to move beyond this orthodoxy to foster changes in employers practices involving skills. Particularly those related to recruitment, training and career development. It was noted that even when it is expected that employers use sector skills standards developed by their SSCs, this expectation has been hardly met. Differently, employers have been highly open to sharing information about their skills needs to affect TVET provision. As a result, it seems that—through SSCs—employers have been able to ask for a greater supply of skills, but they still do not fully play their part to use and keep developing the skills they say to need. In this line, the private-led SSCs here studied may contribute to a situation similar to the one Gleeson and Keep (2004) argued for the English TVET system, where employers have been given a *voice without accountability*.

Moreover, it is noticeable that the employability argument underpinned in HCT assumptions could be helping to undermine the potential struggle between different stakeholders about who defines TVET and possibly, who provides and who funds. As a

result, employers are convinced of their primary informational role in the skill formation system as they can best define what is needed to develop employable individuals. Thus, strengthening their relative power in TVET definitions.

Accordingly, as presented in the discussion chapter, the cases presented in this study once again show some of the implications of adopting skills policies based on assumptions derived from the Human Capital Theory. In particular, when it is expected to foster changes among employers and their workplace practices concerning the provision of training and learning in the workplace. Thus, as the findings of this thesis imply, and several scholars have stressed (e.g. Sung and Ashton, 2015; Brown, Lauder and Cheung, 2020), skills policies aimed to enhance issues concerning the demand side for skills need to move beyond HCT assumptions that have prevailed until now.

7.3 Limitations of the Study and Directions for Further Research

This study aimed to understand the adoption and implementation of private-led SSCs in Chile. Accordingly, this study was focused on two main areas of interrogation, adoption and implementation, for which it was examined the cases of three particular SSCs within one national context. Methodological decisions were taken to fulfil the aims of this study. However, as with any research study, these decisions also posed some limitations.

First, this is a qualitative study. As such, it does not aim to represent the reality of all sector skills bodies. Hence, this study's findings may not be empirically generalised to other sector skills bodies adopted in contexts with different national and sectoral conditions, particularly those adopted by government agencies or those adopted as part of broader reforms driven by the state. Nevertheless, this study has provided conceptual clarity around the different roles of the factors underpinning the adoption of SSCs, which can be used to examine tendencies in other LMEs. Further studies considering a policy adoption perspective could focus on government-led bodies in other new adopter countries. In so doing, they could conceptually contrast findings with this study, particularly concerning the role played by different ideational and material factors. Such a comparison can further our conceptual understanding of SSCs adoption, adding to the overall body of work.

Similarly, the three assessments identified concerning business sector actors when deciding to involve in skill formation policies could be refined by further studies on other sector skill bodies. This is because, despite who drives this policy, SSCs seek to involve employers. Thus, further studies could explore or test these assessments in other contexts

with qualitative studies considering both employers' perspectives who have decided to get involved in skill formation policies and those who have not.

Second, an additional limitation relates to access to relevant participants for this study. Even when all feasible attempts were made to contact and gain access to all relevant people identified, this was not always possible. This situation meant, for instance, that there was a slight imbalance of informants among cases. However, actions were taken to fill information gaps by using different sources. One of the reasons it was challenging to access some people relates to time since one of the phenomena under study (policy adoption) occurred mainly in the past. Thus, some relevant people involved were difficult to contact or had no interest in providing an interview to talk about past events. Further research could be conducted in sectors currently adopting SSCs that could allow access to participants involved in the process at the time of adoption. For instance, an ethnographic study could be conducted where the researcher observes events and interactions among different actors. Also, this could potentially serve to obtain insights about cases of a failed adoption if the SSCs were not, later, retained.

Moreover, this study presented some emergent findings that were not explored in-depth as they were beyond the scope of this study. These findings could indicate future directions to investigate SSCs. For instance, interviews with TVET providers indicated that TVET students could access jobs according to their educational level in the mining sector. In contrast, in the wine sector, TVET providers indicated this is not always the case. Further studies could investigate these issues in more depth, considering the voice of TVET students and those who have recently entered the labour market. Additionally, these studies could rely on a mixed-methods approach by using national statistics on employment or databases containing job advertisings to explore the work opportunities offered in these industries. Similarly, they could gain access to recruitment and selection professionals within these industries to explore these issues from their perspective.

In the same line, the proposed studies could explore further the technical/soft skills demands differences mentioned by some TVET providers. For instance, it could be investigated to what extent the skills standards definitions made by these SSCs represent the actual requirements of these industries, how they affect the job prospects of TVET students and what this tells us about the employer demand for skills.

Finally, the findings of this study showed a strong relationship between SSCs and the development of qualifications frameworks. However, this issue was outside the scope of

this study and was not explored in great detail. Two of the SSCs studied developed qualifications frameworks for their sectors, and the Ministry of Education uses these frameworks for a national implementation pilot. It would be interesting to explore how these qualifications frameworks developed by private-led SSCs contrast with those developed through other initiatives, especially public ones. For instance, further studies could consider a *policy learning* perspective to contrast these different approaches to developing sectoral qualifications frameworks. This could be particularly interesting to continue exploring the role of policy entrepreneurs in TVET policymaking. Particularly considering the high involvement of these actors in advancing private-led qualifications frameworks through SSCs, which poses some questions concerning who is really learning from these processes?, how this expertise is being passed to public sector actors?, and ultimately, does Chile depend on the role of policy entrepreneurs and consulting companies to drive TVET policymaking?

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APPENDICES

APPENDIX 1: SEMI-STRUCTURED INTERVIEW GUIDES

1. INTERVIEW GUIDES POLICY ADOPTION

INTERVIEW GUIDE 1 - Type of actor: SSCs' adopters

Introduction: Interviewee profile

- Would you please tell me about your organisation [or past organisation related to the SSC] and your role within this organisation?

Section 1: Motivations, problems challenges

- How did the idea of creating a Sector Skills Council came about?
- What where the problems or challenges that motivated the creation of a Sector Skills Council? What were the reasons of those problems/challenges?
- What was your role [personal or organisation] in the creation of the SSC?

Section 2: Reasons, circumstances, key actors

- Why it was decided that creating a SSC was the best option to solve the problems/challenges described?
- What other options were discussed?
- How was held the process to convince different actors?
- What was the key moment/event when the decision to create a SSC was made?
- Who were the key actors in this process?

Section 3: Functions, role, relation with context

- How the creation of the SSC is finally materialised?
- How the SSC begins its functions officially?
- After [number] of years of its creation, today, What is the role of the Sector Skills Council?

INTERVIEW GUIDE 2 - Type of actor: Policy makers, civil servants (e.g. representatives from Ministries, national agencies, etc.)

Introduction: Interviewee profile

- Would you please tell me about your organisation [or past organisation related to the SSC] and your role within this organisation?

Section 1: Motivations, problems challenges

- When do you hear for the first time about [the idea of creating/or the existence] of Sector Skills Councils?
- What do you think were the problems or challenges that may have motivated the creation of a Sector Skills Council? What were the reasons of those problems/challenges?

Section 2: Reasons, circumstances, key actors

- Why do you think it was decided that creating SSCs was the best option to solve the problems/challenges described?
- Who do you think were the key actors in the creation of these SSCs?

Section 3: Functions, role, relation with context

- Did you or your organisation were asked/invited to participate in these SSCs?
- What is the relationship between the SSCs and your organisation?
- After [number] of years of its creation, today, What is the role of the Sector Skills Councils?

2. INTERVIEW GUIDES POLICY IMPLEMENTATION

INTERVIEW GUIDE 3 - Type of actor: Employers (e.g. HR managers, L&D managers)

Introduction: HRM organisation/challenges and interviewee role/profile

- How is human resource management organised in your organisation and what is your role?
- What are the main challenges or problems faced in your organisation with regards to human resource management?

Section 1: Reactions - motivations, changes, effects

- Please describe, How is your participation in the SSCs' initiatives?
- What were/have been the motivations to participate in these initiatives?
- What are the implications for your organisation of participating in these initiatives?
- Does these initiatives have any effect on your human resource management practices? Could you provide an example?

Section 2: Contextual circumstances - enables, barriers

- Could you identify some difficulties to participate in these initiatives?

Section 3: Interpretations - objectives, functions, role

- What is the problem the SSC is trying to address?
- What do you think is the role of the SSC within the sector?
- In your opinion/experience, What does the SSCs expect from [mining/wine] companies? What do [mining/wine] companies expect from the SSC?

INTERVIEW GUIDE 4 - Type of actor: TVET Providers (e.g. school directors, program directors)

Introduction: Interviewee role, program oriented to the sector and skill formation challenges

- Would you tell me about your organisation and your role?
- Would you tell me more about your specific program oriented to the [mining/wine] sector? (years on offer, number of students, type of program)
- What are the main challenges faced by your [school/training centre] to train students for working at the [mining/wine] sector?

Section 1: Reactions - motivations, changes, effects

- Please describe, How is your participation in the SSCs' initiatives?
- What were/have been the motivations to participate in these initiatives?
- What are the implications for your organisation of participating in these initiatives?
- Does these initiatives have any effect on your skill formation practices? (e.g. contents, internships) Could you provide an example?

Section 2: Contextual circumstances - enables, barriers

- Could you identify some difficulties to participate in these initiatives?

Section 3: Interpretations - objectives, functions, role

- What is the problem the SSC is trying to address?
- What do you think is the role of the SSC within the TVET system?
- In your opinion/experience, What does the SSCs expect from TVET providers? What do TVET providers expect from the SSC?

APPENDIX 2: PARTICIPANT INFORMATION SHEET AND CONSENT FORM FOR INTERVIEWS

College of Social Sciences

Participant Information Sheet

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

Identification of the researcher
This research is conducted by Paulina Bravo Contreras, she is a PhD student at the School of Education, University of Glasgow, funded by BecasChile CONICYT Scholarship.

Title of the research project
Understanding the adoption and implementation of sectoral approaches to skill development in Chile.

Aim of the study
The research aims to study how skills policies with a sectoral focus have been adopted and implemented in Chile.

Why have you been chosen?
The sectors of Mining and Wine are key for the Chilean economy and have been part of the few sectors that have implemented sectoral strategies for skills development in the country. Hence, understanding how these sectors adopt and implement these strategies will enrich the academic literature on this subject, as well as provide an example for other sectors in the country.

The present study addresses the research subject from the perspective of the relevant actors involved in skill formation, which are employers, educational organisations, workers representatives and policy-makers. Therefore, your opinion as a/an [employer/educational organisation/worker representative/policy-maker] will provide useful insights for the research purposes.

How will the research be conducted?

The study will be conducted through semi-structured interviews. Only one interview is required per participant. The approximate length of each interview will be 1 hour.

The interview will cover questions regarding the following topics:
- Description of organisational activities in relation to skill formation
- Skills needed within the sector
- Challenges, problems and solutions in relation to skills needs within the sector
- The relationships with other actors involved in skill formation
- Influence of current sectoral coordination initiatives for skill formation

Participants' rights

Please note that your participation in this study is voluntary.

You have the right to have your questions about the procedures answered. If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.

You have the right to omit or refuse to answer or respond to any question that is asked of you.

You may decide to stop being interviewed at any time without explanation. You have the right to ask that any data you have supplied to that point be withdrawn/destroyed.

The present study does not consider monetary compensation.

Confidentiality

Please note that confidentiality will be respected unless there are compelling and legitimate reasons for this to be breached. If this was the case we would inform you of any decisions that might limit your confidentiality.

The data collected do not contain any personal information about you. No one will link the data you provided to the identifying information you supplied (e.g., name, company name). Your personal details will be kept confidential by the allocation of id numbers.

Provided you give explicit consent, the interview will be audio-recorded. However, your identity will remain anonymous. If you don't feel comfortable during the interview, you are free to ask for its cancellation.

The data collected will be codified and then processed through content analysis. Results of this study will be obtained using aggregate data from a pool of anonymous respondents.

The information will be used for the development of a PhD thesis to be submitted at the University of Glasgow. Also, results may be published in academic journals and conference papers in the field of education and training, and presented in academic conferences. If requested, an executive summary of the results may be sent to the participants of this study. Individual participants will not be identifiable in any of these instances.

In compliance with the General Data Protection Regulation 2018, personal data will be destroyed once the research project is completed.

As required by the University of Glasgow regulations, research data will be retained securely for a period of ten years after the completion of a research project.

If you need further information about this study, please feel free to contact the researcher at her email: p.bravo-contreras.1@research.gla.ac.uk or alternatively the researcher's main supervisor Dr Oscar Valiente oscar.valiente@glasgow.ac.uk

This research project has been considered and approved by the College Research Ethics Committee.
In the event you wish to pursue any complaint you can contact the College of Social Sciences Ethics Officer, Dr Muir Houston, email: Muir.Houston@glasgow.ac.uk

College of Social Sciences

Consent Form

Title of Project: Understanding the adoption and implementation of sectoral approaches to skill development in Chile.

Name of Researcher: Paulina Bravo Contreras, PhD Student School of Education University of Glasgow

If you are happy to participate please, complete and sign the consent form below.

I confirm that I have read and understood the Participant Information Sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw from the interview at any time, without giving any reason.

I acknowledge that all names and other material likely to identify individuals will be anonymised.

I acknowledge that the material will be treated as confidential and kept in secure storage at all times.

I acknowledge that personal data will be destroyed once the project is complete and that research data will be retained for ten years in secure storage.

I acknowledge that the material may be used in future publications, both print and online.

I agree to waive my copyright to any data collected as part of this project.

I agree to take part in this research study ☐

I do not agree to take part in this research study ☐

I consent to the interview being audio-recorded ☐

I do not consent to the interview being audio-recorded ☐

Name of Participant ………………………………………… Signature ……………………

Date ……………………………………

Name of Researcher ………………………………………… Signature ……………………

Date …………………………………

APPENDIX 3: LIST OF DOCUMENTS

I. LIST OF REPORTS ANALYSED FOR THIS STUDY

ID	Name	Author	Year	General description	SSC	Classification
Document 1	Fuerza Laboral en la Gran Minería Chilena: Diagnostico y Recomendaciones, 2011-2020	Fundación Chile (FCh)	2011	Labour Market Intelligence Report	Mining	Organisational report
Document 2	Reporte Anual Consejo Minero 2011-2012	Consejo Minero	2012	BA Annual Report		
Document 3	Fuerza Laboral en la Gran Minería Chilena 2012-2020. Diagnostico y Recomendaciones.	Fundación Chile (FCh)	2012	Labour Market Intelligence Report		
Document 4	Consejo de Competencias del Vino: 1a Sesión Consejo Directivo.	Vinos de Chile	2013	PPT used at SSCs' first board meeting	Wine	
Document 5	Resumen Ejecutivo. Estudio de Inteligencia de Mercado Laboral (IML) para la Industria Vitivinícola.	Fundación Chile (FCh)	2014	Labour Market Intelligence Report		
Document 6	Plan Estratégico para la Innovación y el Desarrollo de Capital Humano en la Industria del Vino Chileno	Vinos de Chile	2014	Business Association Report		
Document 7	Informe Técnico Final. Proyecto Vinos de Chile - Mineduc. "Vinculación Industria Vitivinícola - Educación Media Técnico Profesional (EMTP) a Nivel Regional y Articulación Educación Superior (ES)"	Vinos de Chile & CCiV	2015	End of Project Report		
Document 8	Memoria Anual Vinos de Chile 2018.	Vinos de Chile	2018	Business Association Report		

ID	Name	Author	Year	General description	SSC	Classification
Document 9	En Chile Si podemos. Iniciativas para mejorar juntos la productividad de Chile.	Comisión de Productividad CPC (CPCPC)	2016	Business Association Report	Maintenance 4.0	Organisational report
Document 10	Hacia un Sistema de Formación para el trabajo en Chile: El Rol de los Sectores Productivos	CPCPC, CPC, FCh	2017	Business Association Report		
Document 11	Formación para el trabajo. Una propuesta para Chile.	CPCPC, CPC, FCh	2017	Business Association Report		
Document 12	2017 Memoria. Confederación de la Producción y del Comercio.	Confederación de la Producción y del Comercio (CPC)	2018	Business Association Annual Report		
Document 13	Marco de Cualificaciones Mantenimiento 4.0, Poblamiento Multisectorial	Fundación Chile (FCh)	2018	Sector Skills Council's report		
Document 14	Consejo de Competencias Mantenimiento 4.0	Confederación de la Producción y del Comercio (CPC) y Fundación Chile (FCh)	2018	PPT used at workshop organised by the Ministry of Education		

II. LIST OF PRESS ARTICLES ANALYSED FOR THIS STUDY

ID	Date of publication	Media	Press article name	SSC
Document 15	05-05-2016	Minería Chilena	Capital humano: El desacople entre formación e industria	Mining
Document 16	07-12-2018	Reporte Minero	Mira lo que pasó en el seminario “Nuevos Técnicos para la Industria del Futuro” de ELEVA	
Document 17	12-06-2014	ASL Website	Vinos de Chile A.G. reveló el programa del capital humano de la viticultura chilena	Wine
Document 18	27-08-2018	Mundoagro	La idea fija de la industria del vino	
Document 19	10-06-2019	UTALCA Website	Director de Colchagua integrará Consejo del Vino	
Document 20	20-08-2017	CPC Website	Fundación Chile, CPC y J.P. Morgan impulsarán el desarrollo de capital humano para la especialidad de mantenimiento	Maintenance 4.0
Document 21	Oct-2017	FCh Website	CPC propone Hoja de Ruta para fortalecer Formación para el Trabajo	
Document 22	28-11-2018	CPC Website	CPC y Fundación Chile lanzan propuestas para un capital humano 4.0	
Document 23	14-06-2019	CCM4.0 Website	CPC, FCH Y Sence firman acuerdo que permitirá capacitar y mejorar la empleabilidad de mil personas a nivel nacional	