Maintaining Employer Cooperation:
Organisations of the World of Work in Swiss Collective Skill Formation

DISSERTATION
of the University of St. Gallen,
School of Management, Economics, Law, Social Sciences,
International Affairs and Computer Science,
to obtain the title of
Doctor of Philosophy in International
Affairs and Political Economy

submitted by

Alexandra Strebel

from

Geltwil (Aargau)

Approved on the application of

Prof. Dr. Patrick Emmenegger

and

Prof. Dr. Justin J.W. Powell

Dissertation no. 5151

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The University of St.Gallen, School of Management, Economics, Law, Social Sciences, International Affairs and Computer Science, hereby consents to the printing of the present dissertation, without hereby expressing any opinion on the views herein expressed.

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The President:

Prof. Dr. Bernhard Ehrenzeller

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Bern, January 2021 Alexandra Strebel

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Summary

Collective skill formation systems potentially enhance economic efficiency and integrate non-academic youth into the labour market. They are a core policy area of coordinated capitalism and rely on high levels of commitment of employers and the state. Countries such as Germany and Switzerland developed institutions that foster employers' contribution to the collective good of transferable, occupational training. Especially, neo-corporatist intermediary associations represent firms' interests and fulfil public tasks in vocational education and training (VET).

However, these institutions have come under pressure through technological change, liberalisation and deindustrialisation. Collective skill formation systems face the challenges of maintaining high employer involvement and increasing training in the service sector of the economy in a context in which the organisational capacity of employer and labour associations is under great strain as well.

This dissertation analyses the institutional maintenance of the Swiss collective skill formation system. It focuses on the time around the major 2002 reform of the VET Act that was characterised as a self-preserving form of institutional change. Addressing decentralised institutional processes, it bridges historical institutionalist literature with insights from organisational institutionalist perspectives. Based on a new database on the Swiss Organisations of the World of Work and case studies of intermediary associations' institutional work in three reform processes in small occupations, the dissertation is organised in seven chapters, which address specific research questions under the broad question how intermediary associations contribute to stabilising collective skill formation.

Overall, the findings demonstrate that in the last two decades the Swiss VET system underwent transformations at the subnational level. The associational landscape became more heterogeneous due to the creation of new forms of intermediary associations, especially in sectors recently integrated into the VET system. The system also remained marked by many small occupations although their number was to be reduced after the reform. The case studies show that associational leaders' institutional work was decisive to mobilise additional material resources and support. In conclusion, the dissertation provides a rich description of the Swiss VET system that highlights incremental adaptations, which, up to date, have contributed to its maintenance.

Zusammenfassung

Kollektive Berufsbildungssysteme können die wirtschaftliche Effizienz steigern und viele Jugendliche in den Arbeitsmarkt integrieren. Als zentrales Politikfeld des koordinierten Kapitalismus setzen sie ein hohes Engagement der Arbeitgeber und des Staates voraus. Länder wie Deutschland und die Schweiz haben Institutionen entwickelt, die den Beitrag der Arbeitgeber zum kollektiven Gut der Berufsbildung fördern. Insbesondere neokorporatistische Verbände vertreten Unternehmensinteressen und erfüllen öffentliche Aufgaben in der Berufsbildung.

Diese Institutionen sind jedoch durch technologischen Wandel, Liberalisierung und Deindustrialisierung unter Druck geraten. Die kollektiven Berufsbildungssysteme stehen vor der Herausforderung, eine hohe Arbeitgeberbeteiligung aufrechtzuerhalten und sie im wachsenden Dienstleistungssektor zu steigern, während auch Arbeitgeber- und Arbeitnehmerverbände unter grossem Druck stehen.

Diese Dissertation analysiert die institutionelle Aufrechterhaltung des schweizerischen kollektiven Berufsbildungssystems in der Zeit um die Reform des Berufsbildungsgesetzes von 2002, die als sich selbst erhaltende Form des institutionellen Wandels charakterisiert wurde. Für die Analyse dezentraler institutioneller Prozesse verbindet sie die historisch-institutionalistische Literatur mit organisations-institutionalistischen Perspektiven. Basierend auf einer neuen Datenbank zu den Organisationen der Arbeitswelt und Fallstudien zur institutionellen Arbeit von Verbänden in drei Reformprozessen in kleinen Berufen, erörtert die Dissertation die übergeordnete Fragestellung wie intermediäre Verbände die Stabilisierung der kollektiven Berufsbildung unterstützen.

Die Ergebnisse zeigen, dass sich das Schweizer Berufsbildungssystem auf der subnationalen Ebene gewandelt hat. Die Verbandslandschaft wurde durch die Schaffung neuer Verbände heterogener, vor allem in den kürzlich in das System integrierten Sektoren. Obwohl ihre Zahl reduziert werden sollte, prägen weiterhin viele kleine Berufe das System. Die Fallstudien zeigen die institutionelle Arbeit der VerbandsvertreterInnen zur Mobilisierung zusätzlicher materieller Ressourcen und Unterstützung. Zusammenfassend liefert die Dissertation eine detaillierte Beschreibung des Schweizer Berufsbildungssystems und hebt inkrementelle Anpassungen hervor, die bis heute zu seinem Erhalt beigetragen haben.

Introduction

In countries such as Austria, Denmark, Germany, the Netherlands and Switzerland, dual apprenticeships fulfilled the double role of enhancing economic efficiency and integrating non-academic youth into the world of work in the post-World War II period of economic growth. Moreover, collective skill formation systems constituted a core area of coordinated capitalism and contributed to macro-economic outcomes such as economic competitiveness, social equality and a high level of skill provision (Culpepper & Thelen, 2008; Streeck, 1997; Thelen, 2014). Currently, European countries have developed a renewed interest in strengthening apprenticeship-based vocational education and training (VET) programmes to promote economic development and social inclusion (European Union [EU], 2020). However, this type of VET in collective skill formation systems relies on high levels of commitment of both employers and the state (Busemeyer & Trampusch, 2012). The countries in which collective skill formation has evolved historically have institutions that foster employers' contribution to the collective good of transferable, occupational training, while other countries lack such institutions.

The institutional arrangements characterising collective skill formation countries include neo-corporatist political-economic systems (Busemeyer & Trampusch, 2012), in which neo-corporatist associations act as intermediaries between firms and public authorities, as well as represent firms' interests and fulfil public tasks (Streeck & Kenworthy, 2005). Neo-corporatist associations are key for social and economic coordination in neo-corporatist countries and coordinated types of market economies (Hall & Soskice, 2001). The associations' capacity to promote cooperation is theorised to rest on two elements: one is an associational system that promotes the aggregation of interests in a systematic and coordinated way (e.g., Schmitter & Streeck, 1999), and the other is the process of policymaking and implementation in which associations are systematically involved (e.g. Baccaro, 2014; Lehmbruch, 1984; Streeck & Kenworthy, 2005).

However, the institutions that underpin coordinated market economies have come under pressure through technological change, liberalisation and deindustrialisation. Therefore, both collective skill formation and neo-corporatist intermediary associations have now come under pressure. Arguably, technological change in the form of digitalisation is substantially altering the skill needs of the economy, and many occupations may become

redundant in the next decades (Frey & Osborne, 2017). This trend might hollow out medium-skilled jobs (Autor et al., 2013; Oesch & Rodrígues Menés, 2010), which are typically associated with VET. Liberalisation – the expansion of market forms of coordination to the detriment of non-market coordination – threatens the institutions of social and economic coordination that underpinned economic growth and social equality in post-war neo-corporatist economies (Baccaro & Howell, 2011; Streeck, 2009; Thelen, 2014). Liberalisation loosens the constraints on employers that make investing in occupational skills worthwhile for employers and employees as it weakens the nation state and allows certain firms to circumvent national regulations (e.g., Streeck, 2009; Traxler, 2006). This trend also affects the capacity of intermediary associations to bind members and foster cooperation (Behrens, 2011; Brandl & Lehr, 2019; Eichenberger & Mach, 2011; Traxler, 2006). Finally, the craft and industrial sectors of the economy have constituted the strongholds of dual apprenticeship training (Culpepper & Thelen, 2008; Thelen, 2004). Yet, employment in the industrial sector of the economy is in decline, and employment growth takes place mainly in the service sector of the economy. The third sector, however, is typically less involved in providing apprenticeship positions (Culpepper & Thelen, 2008; Müller & Schweri, 2012).

Thus, paradoxically, at a time when apprenticeship-based VET is being politically furthered, with the threat of rapidly changing skill requirements, liberalisation, and declining employment in the industrial sector, the traditional collective skill formation systems struggle to fulfil their social and economic functions (Bonoli & Emmenegger, 2020; Carstensen & Ibsen, 2019). Collective skill formation systems face the challenges of maintaining high employer involvement and increasing training in the growing service sector of the economy (Culpepper & Thelen, 2008) in a political-economic context in which the organisational capacity of employer and labour organisations is under great strain as well.

Thus, it is no surprise that research has found tendencies of transformative institutional change in collective skill formation systems. In particular, if large firms dominated reform processes, they were found to promote a development towards less transferable, more firm-specific skill provision in apprenticeships (Emmenegger & Seitzl, 2019; Thelen & Busemeyer, 2008) or shifts towards the provision of general skills through higher education (Culpepper, 2007; Trampusch, 2010a). In other areas, the state has stepped in to provide apprenticeships for disadvantaged youth (Durazzi & Geyer, 2020;

Seitzl & Unterweger, in press). However, some reforms have also aimed to preserve the existing institutional arrangements. These reforms are associated with incremental adaptations that are promoted by coalitions of small firms with state actors (Trampusch, 2010a).

However, although policy reforms constitute an important factor in institutional change processes, they alone are not decisive in determining the type of institutional change that follows. Instead, how a multitude of affected stakeholders interpret and translate formal rules into concrete practices on the ground matters (Mahoney & Thelen, 2010; Streeck & Thelen, 2005). Hence, organisational responses to reform may contribute to transforming institutions rather than maintaining them, even if such a transformation is not intended (Behrens, 2011; Streeck & Thelen, 2005). To shed light on such decentralised institutional processes, I bridge historical institutionalist literature on collective skill formation with insights from organisational institutionalist perspectives. This strand of literature has found that organisations often develop various responses to policy reforms, rather than simply complying with and implementing them (Cloutier, Denis, Langley, & Lamothe, 2016; Fossestol, Breit, Andreassen, & Klemsdal, 2015; Meyer & Rowan, 1977; Oliver, 1991). For example, organisations develop *institutional work* – purposive action to maintain, disrupt, or create institutions (Lawrence & Suddaby, 2006, p. 215). Through institutional work, actors may resist institutional change or maintain their position in a field (Currie, Lockett, Finn, Martin, & Waring, 2012; Micelotta & Washington, 2013). However, actors' ability to change or maintain institutions depends on their social position, skills and resources (Battilana, Leca, & Boxenbaum, 2009; Fligstein & McAdam, 2011). Consequently, policy reforms may result in partial or fragmented implementation, and this, in turn, facilitates transformative institutional change or the emergence of hybrid institutional arrangements, including organisations that blend different institutional logics (Fossestol et al., 2015; Reay & Hinings, 2009).

Thus far, research on institutional change in collective skill formation systems has provided important insights into the role of intermediary associations and coalitions between small or large firms' representatives and the state. Yet, these studies have mostly analysed central actors at the core of the system, such as national umbrella associations or large occupational groups. It has paid comparatively little attention to employer associations at the subnational level that are responsible for training in specific

occupations. However, collective skill formation systems consist of apprenticeships that lead to many different occupations (e.g. Bundesinstitut für Berufsbildung [BIBB], 2020; Staatssekretariat für Bildung, Forschung und Innovation [SBFI], 2018a). Moreover, organisational institutionalist approaches provide detailed insights into organisational strategies after policy reforms have entered into force. Studies that combine insights from comparative research with the institutional work perspective are thus a promising approach to deepen the understanding of institutional change (see also Nicklich & Fortwengel, 2017).

In this dissertation, I suggest that, in addition to national-level VET policy reforms, maintaining employer cooperation in a changing environment plays out at the level of intermediary associations and occupations. In light of neo-corporatist theory, shoring up employer associations' organisational capacity appears to be key for the adaptation of VET to the changing skill requirements of the service economy. The broad research question addressed by this dissertation is how intermediary associations contribute to stabilising collective skill formation in a changing socio-economic environment. More specifically, I ask how employer organisations' forms and activities foster apprenticeship-based vocational training in the service economy.

To address these questions, I use the empirical case of the Swiss collective skill formation system. While digitalisation, liberalisation and deindustrialisation affect all dual VET countries, in Switzerland, the adaptation to the post-industrial economy has apparently been smoother than elsewhere. Switzerland has maintained the highest share of youth in dual apprenticeships over the last decades (Ryan, 2012; Organisation for Economic Cooperation and Development [OECD], 2017a). Like other dual VET countries, Switzerland faced a crisis in the 1990s when many employers stopped offering apprenticeship positions (Müller & Schweri, 2012; Strahm, 2008). To overcome the crisis, a major VET reform was launched to address challenges of technological change, the service sector transition, and youth inclusion, with the aim of improving the existing system and making it fit for the service economy (Bundesrat, 2000; Wettstein, 2020). While this reform was ostensibly a self-preserving type of institutional change (Trampusch, 2010b), it also expanded the scope of the VET system to new economic sectors, at the same time enabling the federal state to increase its role in occupation-level processes of content definition and pursue the strategic aim of reducing the number of occupations (Berner, 2013; Bundesrat, 2000; Maurer & Pieneck,

2013). Arguably, the VET reform helped to maintain the institutions of collective skill formation. Yet, it led to transformations at the subnational level.

The 2002 VET reform introduced the new term *Organisationen der Arbeitswelt* (OdA) (Organisations of the World of Work) to take into account a new type of intermediary organisation in the newly integrated sectors (Rauner, 2009; Wettstein, Gonon, & Schmid, 2014). However, it remained unclear which stakeholders were represented in these organisations, and if these organisations had reached a similar organisational capacity to traditional intermediary associations to fulfil the public tasks in administering dual apprenticeships. Moreover, notwithstanding the aim of reducing the number of occupations, the system still existed in a divided landscape of small and large occupations. Currently, over half of the 240 occupations train fewer than a hundred apprentices annually, and only a few train more than 1,000 (Bundesamt für Statistik [BFS], 2018; State Secretariat for Education, Research and Innovation [SERI], 2019).

In terms of methodology, I use a quantitative approach to analyse the characteristics of the OdA. I collected cross-sectional data about intermediary associations in charge of upper-secondary level apprenticeships. This method allowed to identify a new type of intermediary organisation and its differences to traditional types of intermediary associations in terms of organisational capacity, membership composition, and field of activity. I also conducted three process-oriented case studies to reveal which institutional work intermediary associations of small occupations developed to handle the 2002 VET policy reform.

This introductory chapter is structured as follows: first, I present the case of collective skill formation systems and the related literature on neo-corporatism. Second, I discuss the challenges affecting these systems. The third section reviews the literature on institutional change in historical and organisational institutionalism as well as collective skill formation. Fourth, I describe the empirical case of the Swiss collective skill formation system, and fifth, I discuss research gaps and puzzles. Then, I present an overview of the methodological approach and the outline of the further chapters of this dissertation.

1.1. Collective Skill Formation and Neo-Corporatism

This section first defines the collective type of skill formation systems and the role of occupations. It then goes on to show how collective skill formation systems are associated with wider political-economic institutional arrangements, namely neo-corporatism, that characterise different countries' political-economic systems.

Collective skill formation systems are characterised by training taking place in vocational schools and the workplace. The training provides occupational skills that are certified and standardised, which makes them transferable beyond the training firm. Firms are heavily involved in training as they offer apprenticeship positions. Moreover, interest associations, such as employer associations and trade unions, participate in the administration, governance, and reform of training (Busemeyer & Trampusch, 2012, pp. 14–15). Importantly, the collective systems provide the labour market with high-quality occupational skills needed to compete in high-quality production markets as well as incremental innovations (Culpepper, 2001; Hall & Soskice, 2001). Moreover, certified occupations create a connection between the education and employment systems, which fosters a relatively smooth transition from education to work (Bolli, Caves, Renold, & Buergi, 2018; de Lange, Gesthuizen, & Wolbers, 2014). Hence, these systems can contribute to both economic efficiency and social inclusion (Bonoli & Emmenegger, 2020; Carstensen & Ibsen, 2019).

The typologies of VET systems distinguish various dimensions within which VET systems can be categorised. For example, VET systems vary regarding the dominant location in which learning takes place (vocational schools, on-the-job, or alternating between vocational school and in-firm training) and the role of the state and firms in the provision of training (e.g. Greinert, 2004). In their political-economic approach, Busemeyer and Trampusch (2012) distinguished four types of skill formation systems within two dimensions: the involvement of the state in skill formation and the engagement of employers. In the collective type of skill formation systems, both employers and public authorities are highly engaged in the provision of training. The Austrian, German, Danish, Dutch and Swiss skill formation systems belong to this type. Countries in which neither the state nor employers are highly involved in skill formation have liberal skill formation systems (for example, Great Britain). France is known as an example of a statist system in which the state is the dominant actor in training provision, and Japan provides an example of a segmentalist system in which large firms are

strongly involved in skill formation but not the state. This dissertation focuses on the collective type of skill formation. The other types serve as a contrast; for example, a movement towards more firm-specific training dominated by large firms is seen as a 'segmentalist' tendency that undermines collectivism (Thelen & Busemeyer, 2012), while a replacement of collective VET by state-provided VET represents a movement towards a statist system. However, while this typology provides an important analytical tool to compare VET systems, it obscures the variation within countries and amongst countries that belong to the same type. For example, Switzerland has a certain historically grown institutional variety while the French-speaking part leans towards a more statist approach to skill formation, which is more school-based (Kuhn, Schweri, & Wolter, 2019). This has also been the case for sectors such as health and social care, which were not integrated in the VET system until the 2002 reform (Graf, Strebel, & Emmenegger, 2020; Wettstein, 2020).

Collective skill formation countries organise VET and economic activity around *Berufe* (occupations). The occupational principle is defined as an organising principle that structures skill formation processes and the labour market in these countries (Deißinger, 1999; Severing, 2014). For example, Winch (2015, p. 171) noted that 'a *Beruf* is a legally recognised sphere of economic activity with its own educational regulations. It has social significance as a marker of social identity and citizenship'. Occupation-based systems provide workers with more encompassing sets of skills that allow labour market mobility and substantial autonomy for the workers. This contrasts with trade-based systems that train narrower skills and leave workers with less autonomy in the workplace (Clarke, Winch, & Brockmann, 2013). However, dual VET occupations can also be subdivided into narrower profiles and specialisations (Grønning, Kriesi, & Sacchi, 2019; Maurer & Pieneck, 2013). This was the case especially in the post-World War II period (Deißinger, 2001, p. 3; Schwarz & Bretschneider, 2014, p. 183). Indeed, the creation, adaptation and ordering of occupations is a constant negotiating process in which public authorities and labour market stakeholders are involved (Schwarz & Bretschneider, 2014; Thelen & Busemeyer, 2008; Winch, 2015). In these processes, employer-side intermediary associations represent firms' interests at the occupational level. Hence, institutional adaptation takes place through continuous revisions of training in specific occupations that align them with employers' changing skill requirements.

Dual VET systems have a long tradition, yet the institutional arrangements underpinning them remain vulnerable to changes in firms' training behaviour. Firms' contribution to training is essential to running it but is also considered the Achilles' heel of the collective systems because it implies a *cooperation dilemma* related to the provision of collective goods by private actors (Busemeyer, 2012; Culpepper, 2003). Firms provide apprenticeship positions, and they finance apprentice wages and other costs associated with training. However, given that apprentices acquire transferable skills, they might leave the training firm after the apprenticeship. Hence, the firm faces uncertainty about its ability to retain the apprentice to profit from its investment in training. If enough firms adopt cooperative behaviour, they profit from a labour market with sufficient skilled workers. Yet, if only a few firms train and others recruit the trained workers from these firms, the training firms are disadvantaged (Culpepper, 2003). Thus, a lack of cooperation leads to a shortage in the provision of the collective good of transferable occupational skills. As a consequence, institutional arrangements are needed to foster this *decentralised cooperation* of employers in collective skill formation systems (Culpepper, 2003; Emmenegger, Graf, & Trampusch, 2019), because these complex structures are vulnerable to cooperation breakdowns (Busemeyer & Trampusch, 2012).

Comparative political-economic research associates skill formation systems with wider institutional arrangements in different types of market economies (Hall & Soskice, 2001; Marsden, 1999; Streeck & Kenworthy, 2005; Thelen, 2014). This literature emphasises that institutional arrangements support cooperation amongst firms in various policy areas, in which collective action problems need to be solved, for example, industrial relations, corporate finance or research and development. In their famous work on varieties of capitalism (VoC), Hall and Soskice (2001) distinguished only two ideal typical forms of market economies: coordinated and liberal market economies. In coordinated market economies, cooperation amongst firms is facilitated by institutional arrangements and forums for information exchange such as employer associations. Firms embedded in these coordinated market economies have developed production strategies that are based on cooperation. Thus, they have an interest in maintaining this non-market form of coordination, as it enhances their economic efficiency and provides them with certain comparative advantages in contrast to firms in liberal market economies. In liberal market economies, such institutions that support the decentralised cooperation amongst firms are lacking. Coordination takes place through the mechanism of competitive markets. This also implies more short-term oriented behaviour of firms.

Regarding skill formation, coordinated market economies include the collective type but also statist and segmentalist types of skill formation. Liberal market economies have liberal skill formation systems (see Vossiek, 2018).

While the VoC approach acknowledges the role of associations in coordinated market economies, it mainly focuses on firms as central actors. In contrast, the earlier neo-corporatist literature suggested that the characteristics of interest associations of business and labour are decisive for the development of different types of political-economic systems. Building on theories of collective action (Olson, 1965), theories of interest intermediation have distinguished neo-corporatist and pluralist ideal types of interest intermediation (Schmitter & Streeck, 1999; Streeck & Kenworthy, 2005). In *pluralist systems*, for example, Great Britain, associations represent their members' interests through lobbying and organising members with similar interests. Thus, they represent relatively narrow interests and are not systematically involved in policymaking. These associations are competing and have overlapping domains, and the associational system is fragmented. In this case, associations do not contribute to the provision of collective goods (Schmitter & Streeck, 1999). In *neo-corporatist systems*, for example, Germany, intermediary associations support the provision of collective goods by private actors (Streeck & Schmitter, 1985). In this view, neo-corporatism has its own *institutional logic*, which is 'a set of material practices and symbolic constructions – which constitutes its organizing principles and which is available to organizations and individuals to elaborate' (Friedland & Alford, 1991, p. 248). Several elements characterise the associational logic: Neo-corporatist associations are systematically involved in the design and implementation of policies (Streeck & Kenworthy, 2005). Such intermediary associations are capable of unifying diverging interests of a heterogeneous membership. They develop forms of regulated self-regulation or private interest governance because the state entrusts them with public tasks, for example, the definition of VET content (Streeck & Schmitter, 1985). The state may also supply them with financial resources for fulfilling delegated tasks. This increases the autonomy of the associations from their members and their authority over them, in other words, their organisational development (Traxler, 1993; Traxler & Huemer, 2007). Thereby, associations become more apt to adopt long-term perspectives that are in the interest of the whole branch and can be aligned with public policies (Campbell, 2007; Martin, 2004; Streeck & Schmitter, 1985). Ideal-typical associations are membership-based, with associations representing employer or labour interests in a

broad array of policy fields often along sectoral lines (Behrens & Helfen, 2009; Farago & Kriesi, 1986). Typically, intermediary associations are members of higher-level umbrella associations. This allows a hierarchically structured and coordinated aggregation and representation of interests (Schmitter & Streeck, 1999). Hence, the related literature suggests that the systematic involvement of interest associations in policymaking and implementation and a highly coordinated associational system are fundamental to the provision of collective goods by private actors (Lehmbruch, 1984; Streeck & Schmitter, 1985).

In brief, amongst other institutional elements, neo-corporatist intermediary associations play a significant role in collective skill formation systems, such as the German or Swiss VET systems. In these systems, employers and the state are highly involved in the provision of the collective goods of transferable occupational skills, which is based on training firms' *decentralised cooperation*.

1.2. Changing Skill Requirements and Challenged Neo-Corporatism

This section discusses how technological change, deindustrialisation and liberalisation affect collective skill formation systems and neo-corporatist intermediary associations.

The close link between the education and employment systems is a prime asset of collective skill formation systems. Yet, this tight coupling also makes them especially exposed to changes in the labour market. Over the last decades, deindustrialisation, technological change and liberalisation pressures have transformed labour markets. Dual apprenticeships evolved out of traditional training in the craft sector and had their strongholds for a long time in the craft and industrial sectors of the economy (Thelen, 2004; Wettstein, Schmid, & Gonon, 2009). Although dual VET countries, such as Germany and Switzerland, managed to maintain a relatively high share of industrial value creation (approx. 20%; Aepli et al., 2017, p. 30), as in many other OECD countries, in Switzerland, the employment share in the industrial sector declined, such as the number of apprenticeship positions in this sector (Bundesamt für Berufsbildung und Technologie [BBT], 2012). Employment thus expands only in the service sector. However, on average, service sector firms have a lower participation rate in dual VET than craft or industrial firms (Müller & Schweri, 2012). Moreover, institutions that were developed in the craft and industrial sectors of the economy cannot easily be transferred to the service sector, for example, if the service sector lacks strong unions and employer

associations (Thelen, 2012, p. 147). Thus, transferring VET to the service sector is considered a key challenge for maintaining collective skill formation systems (Culpepper & Thelen, 2008; Thelen, 2012).

Furthermore, technological change affects the labour market. In particular, the digitisation of the economy creates new products, production processes and distribution channels (e.g. Aepli et al., 2017). Labour market economists have argued that this development strongly affects occupations. While some expect a general upgrading of occupations due to increased skill needs, others predict the demise of a large number of occupations (Frey & Osborne, 2017), or a hollowing out of middle-skilled occupations (Aepli et al., 2017, p. 34). In response to the first approach, the latter have argued that one must distinguish the type of tasks an occupation executes. Due to automatisation, routine tasks disappear while non-routine analytical or manual tasks and interactive tasks are not easily replaced by machines (Autor, 2013). From this, it follows that occupations that contain manual or cognitive routine tasks, for example, manual occupations in industry or clerical work such as accountancy, are increasingly replaced, which typically concerns the middle-skilled segments of the labour market (Kurer & Palier, 2019). For Switzerland, labour market research has found that, indeed, the middle-skilled jobs diminish, while highly qualified employment expands (Oesch & Piccitto, 2019; Oesch & Rodríguez Menés, 2010). However, the institutional context, for example collective bargaining, minimum wages and welfare systems, appear to mediate the effects of these overarching trends in labour markets on occupations (Busemeyer & Iversen, 2012; Oesch & Rodrígues Menés, 2010). Oesch and Rodrígues Menés (2010), for example, found that low-skilled work does not expand in countries with stronger institutional constraints on wages, such as Germany and Switzerland.

Yet institutions which put constraints on wages and incentivise firms and individuals to invest in occupation-specific skills are themselves under pressure. Economic globalisation, European integration, and reduced union membership in post-industrial societies affect the institutional arrangements of coordinated market economies that rely on neo-corporatist arrangements (e.g. Baccaro & Howell, 2011; Streeck & Kenworthy, 2005; Traxler, 2010). In fact, the nation state, as a facilitator of neo-corporatist arrangements, suffers from a reduced capacity to put constraints on firms (Streeck & Kenworthy, 2005). This is due to the increased international mobility of firms and capital that ‘untie’ firms from their attachments to nation states (Streeck & Kenworthy,

2005; Traxler, 2010). Moreover, the dismantling of protectionist policies, for example, by adapting to the rules of the World Trade Organisation (WTO) and European Union (EU), also increases pressure on domestic industries. For example, abolishing protectionist arrangements in the 1990s led to conflicts between domestic industries and international, export-oriented firms in Switzerland (Armingeon, 2011, p. 180) and the dismantling of private interest governments in formerly protected sectors (Wagemann, 2005). Hence, these developments have accentuated divisions within the business camp and limited the government's capacity to put constraints on firms or protect domestic economies from market competition.

Collective wage bargaining is considered a central policy area underpinning neo-corporatist systems of interest intermediation that has managed to reconcile social and economic goals. However, collective wage bargaining has suffered severe strain in various European countries (Baccaro & Howell, 2011; Brandl & Bechter, 2019). Nevertheless, the erosion or decentralisation of collective wage bargaining has not led to the complete demise of employer-side intermediary associations. Nevertheless, intermediary associations need to adapt to the changing environment and struggle to bind their members (Behrens, 2011; Brandl & Lehr, 2019). These adaptations include an increasing orientation towards providing services to members as selective incentives for membership; moreover, raising competition between associations and large, powerful (member) firms has been observed, which also diminishes associations' influence in the political sphere (Eichenberger & Mach, 2011; Kriesi, 2006; Traxler & Huemer, 2007; Wagemann, 2005). Further, in Germany, associations changed membership regulations to circumvent collective wage bargaining, which may, in turn, translate into gradual but transformative forms of institutional change (Behrens, 2011).

In this context, Traxler and colleagues argued that financial and organisational support from the state is needed to allow associations to maintain a certain autonomy, especially vis-à-vis their large member firms (Traxler, Brandl, & Pernicka, 2007, p. 394ff). Moreover, comparing developments in various countries over time suggests employer and business associations' activities related to training and active labour market policies help them to shore up collective action and maintain a higher membership density, while the involvement in collective wage bargaining changed from being a central pillar of associational development to a factor that decreases membership density (Brandl & Lehr, 2019, p. 948).

Overall, deindustrialisation and digitalisation change the labour market's skills needs. These dynamics affect initial vocational training as the main road to occupations. While, in the sense of an upgrading dynamic, the content of initial VET occupations is continuously adapted to labour market developments, occupations that provide manual or cognitive routine skills may become redundant, and the diploma holders of these occupations may suffer from wage losses when they change positions due to skill mismatch (Aepli, 2019). To address these changes, the skill formation system should also provide more apprenticeships in the service sector of the economy and in occupations that provide skills for non-routine or interactive analytical and manual tasks, which cannot easily be automated. Moreover, collective wage bargaining, which puts constraints on wages and incentivises firms and individuals to invest in occupation-specific skills, is under pressure, and employer-side intermediary associations generally adapt their activities to a liberalising environment. Against this backdrop, institutions may change, or they need to be adapted to maintain their functions (Thelen, 2007, 2012). However, thus far, there is no consensus amongst comparative scholars concerning whether the institutions underpinning the coordinated types of capitalism converge to a more liberal type (e.g. Baccaro & Howell, 2017; Streeck, 2009) or remain stable because they correspond to equilibrium outcomes in strategic cooperation of self-interested actors (e.g. Hall & Soskice, 2001), or if different modes of institutional change allow preserving certain features of the coordinated models, such as lower levels of inequality or higher levels of employer cooperation (Thelen, 2014). Thus, this dissertation contributes to the literature that claims variations in the responses to pressures and explores gradual forms of institutional change. In this regard, the next section first discusses institutional change from a historical and then from an organisational institutionalist perspective, ending with the case of institutional change in collective skill formation systems.

1.3. Current Debates: Historical and Organisational Institutionalism

The area of collective skill formation is considered a prototypical example of coordinated capitalism, and a rich literature has analysed the dynamics of institutional change and transformation in collective skill formation systems. However, various disciplinary approaches tackle the question of how institutions change from different theoretical angles. For example, historical institutionalists often focus on regulative aspects of institutions and analyse political processes in institutional change; rational

choice institutionalists define institutional arrangements as coordinating action and fostering strategic equilibria amongst actors that are guided by economic self-interest; and sociological and organisational institutionalists, conversely, highlight the role of cognitive and normative institutional elements and see actors' behaviour as oriented towards legitimacy and appropriateness (Campbell, 2010; Campbell & Pedersen, 2001; Hall, 2010; Hall & Taylor, 1996). Although there are limits to the compatibility of various streams of literature within the institutionalist traditions, bridging these literatures is a promising approach to analysing institutional change processes, as each approach has its blind spots (see also Campbell & Pedersen, 2001, p. 2).

In this dissertation, I bridge historical institutionalist research on collective skill formation with perspectives from the organisational institutionalist literature. I chose this approach because recent developments in historical institutionalism to explain institutional change and reproduction have underlined the gap between formal rules and their implementation and enactment on the ground as essential elements for incremental, but potentially transformative, institutional change (Mahoney & Thelen, 2010; Streeck & Thelen, 2005). While historical institutionalists focus mainly on regulative aspects of institutions and the policymaking process, sociological and organisational institutionalist approaches have a long tradition of studying this gap (e.g. Meyer & Rowan, 1977; Oliver, 1991), making reference to the regulative, normative and cultural-cognitive elements of institutions.

Institutional Change in Political-Economies

Historical institutionalists in political economy are interested in macro-level outcomes, e.g. inequality, of different political-economic arrangements such as those involved in coordinated or liberal varieties of capitalism. In contrast to the rational-choice institutionalist suggestion that, as strategic equilibria, both ideal types of capitalism are relatively stable and persist, many scholars observed that liberalisation affects all capitalist market economies. Yet, some have highlighted similar trajectories of liberalisation that lead to deregulation and change in the direction of the liberal market economies (Baccaro & Howell, 2011; Streeck, 2009). Others argued that, faced with similar pressures, some countries maintain higher levels of equality or employer coordination than others, and similar pressures lead to different types of change processes and outcomes (Martin & Graf, 2020; Martin & Thelen, 2007; Thelen, 2012,

2014). Hence, some countries may be better able to adapt to pressures and safeguard employer cooperation or equality than others.[1]

Streeck and Thelen (2005) defined institutions as regimes that are based on formal rules, which can be enforced by third parties. In this view, formal institutions are devised by rule makers to be implemented by rule takers, and third parties can legitimately enforce these rules. Hence, policies can be understood as institutions to the extent that 'they constitute rules for actors other than for the policymakers themselves – rules that can and need to be implemented and that are legitimate in that they will if necessary be enforced by agents acting on behalf of the society as a whole' (Streeck & Thelen, 2005, p.12). However, Streeck and Thelen's (2005) famous conceptualisation of modes of gradual institutional change suggests that institutional change does not necessarily imply policy change or the abolishment of a rule in favour of a new one (*displacement*). Instead, institutions change if they are no longer enacted (*exhaustion*), their enactment is turned to new purposes (*conversion*), formal rules remain in place but their impact changes due to shifts in their environment (*drift*) or additional rules are added to existing institutional arrangements (*layering*). These gradual modes of institutional change are associated with incremental but significant transformations. This strand of literature has argued that these incremental modes of institutional change are more common than radical, revolutionary shifts from one institutional arrangement to another.

Hence, concerning theory development on institutional change, in contrast to earlier definitions of institutions as being relatively enduring, Thelen (2004, 2012) claimed that institutions, such as collective skill formation systems, do not survive because they are innately stable but through their ongoing and active adaptation to changing contexts: 'As the world around these institutions shifts, their survival depends on their active, ongoing adaptation to the social, political, and market context in which they are embedded' (Thelen, 2012, p. 139). In this view, institutions need to be actively maintained if they are to survive.

[1] This strand of literature notably highlights that employers need to be cajoled into cooperating and that state capacity and power play a primary role in promoting solidarity (Martin & Thelen, 2007; Thelen, 2012).

Moreover, in contrast to rational choice institutionalists' approach to institutions as equilibrium outcomes in strategic cooperation of self-interested actors (e.g. Hall & Soskice, 2001) or sociological institutionalist theories that see institutions as cognitive scripts, which are enacted unconsciously (e.g. Zucker, 1977), Mahoney and Thelen (2010) conceived of institutions as compromises or contested settlements of distributional conflicts. In their view, institutions are distributional instruments with power implications. Consequently, their reproduction is not automatic or self-sustaining but a dynamic process involving negotiation and conflict. Institutional change and stability both depend on the mobilisation of political support. However, Mahoney and Thelen (p. 13) also make reference to shared understandings that are needed to put rules into practice because formal rules are always ambiguous and their enactment depends on the interpretation of the rules by the stakeholders that implement them.

Thelen (2014) also argued that similar liberalisation pressures result in various types of trajectories. Focusing on the results of change, she distinguished two dimensions: social solidarity and strategic employer cooperation. For example, if employer cooperation decreases, but equality remains high, this corresponds to embedded flexibilisation (e.g. Denmark). If employer cooperation remains high but social equality diminishes, this represents dualisation (e.g. Germany).

Although it is debated whether institutional change should include change in the functions of the institutions (Campbell, 2010), as suggested by Thelen and co-authors (Mahoney & Thelen, 2010; Streeck & Thelen, 2005), adopting this view helps to assess the capacity of collective skill formation systems to adapt to change. From this perspective, *reproduction through adaptation* amounts to continuity in the result of change and an incremental process of change (Streeck & Thelen, 2005, pp. 8–9). Hence, for an institution to be judged 'stable', it needs to preserve its essential dimensions, e.g. the basic characteristics that define collective skill formation systems, but also its impact (see drift), e.g. the provision of training to a large share of youth without producing high levels of exclusion of youth from the labour market. Therefore, faced with technological change, liberalisation and tertiarisation, rule makers need to take measures to shore up the collective skill formation system that would otherwise decay gradually, for example, through exhaustion due to shrinking apprenticeship provision in the industrial sector of the economy (Culpepper & Thelen, 2008). Thus, policy change may be necessary to shore up an institution in a changing environment (see also Vossiek, 2017). However,

policy change alone is not sufficient for stabilising an institution; these policies also need to be enacted. To enrich the literature on gradual change in collective skill formation, I bridge this approach with insights from organisational institutionalist literature that focus on the enactment of policies presented in the next section.

Institutional Change in Organisational Fields

In this section, I first discuss how neo-institutionalist approaches in sociology and organisation studies view institutions, focusing on Scott's influential 'pillar model'. I then examine the agentic turn in this literature on institutional change to show how actors influence institutions through institutional work, focusing on the role of policy reforms.

Sociological institutionalists' analytical focus is directed towards organisational forms and practices and the cultural-cognitive and normative elements in processes of institutionalisation. Its core questions address how cognitive elements, such as meaning and belief systems – rather than rational calculations and efficiency – influence organisations (DiMaggio & Powell, 1983; Suddaby, 2010). However, an important stream within this tradition has claimed that institutions rely on three interrelated pillars, which also include regulations. Institutions enable and constrain social action through coercive, normative and cognitive elements (DiMaggio & Powell, 1983; Scott, 2014). Regulative institutions reward or sanction behaviour based on formal rules and law, while normative institutions shape behaviour through the logic of appropriateness and informal sanctions, such as social disapproval of behaviour (March & Olsen, 1984). Further, culturally influenced conceptions of social reality are often taken for granted. They shape behaviour by providing scripts for action or templates for organising (Scott, 2014).

Yet, initially, sociological neo-institutionalism presented an over-socialised view of actors as following taken-for-granted scripts. Moreover, until recently, institutional maintenance remained under-researched because of the assumption that institutions are self-replicating and innately stable (DiMaggio & Powell, 1983; Jepperson, 1991). Currently, different strands within the large body of organisational institutionalist literature have explored institutional change, which is theorised to be promoted through exogenous shock, institutional entrepreneurship or changes in practices (for a review, see Micelotta et al., 2017). Considering this development, few institutions appear have

such resilient, powerful reproductive mechanisms. Hence, research has come to consider institutional maintenance as an active process, which includes 'the complex and often invisible processes by which actors work to maintain institutions' (Suddaby, 2010, p. 15).

In an 'agentic turn', researchers began to explore how actors affect institutions, defining human agency as the 'ability to intentionally pursue interests and exert some effect on their social environment' (Battilana et al., 2009, p. 72). This included literature on institutional entrepreneurship and institutional work (Hardy & Maguire, 2008; Lawrence & Suddaby, 2006). The *institutional work* perspective underlined that not only institutional entrepreneurs but also a multitude of actors are involved in attempts to create, maintain or disrupt institutions (Hampel et al., 2017). This perspective was based on Lawrence and Suddaby's (2006) influential review on institutional change processes which posited that actors engage in purposive action aimed at changing or preserving the institutions in which they are embedded. These authors proposed a conceptualisation of actors as disposing of reflexive awareness of the institutional context in which they are embedded. Hence, rather than following taken-for-granted routines, such actors develop attempts at influencing regulative, normative and cultural-cognitive institutions (e.g. Maguire & Hardy, 2009; Nicklich & Fortwengel, 2017). However, these efforts may also fail or have unintended consequences (Hampel, Lawrence, & Tracey, 2017; Lawrence, Suddaby, & Leca, 2009).

This strand of literature also explored factors that enable actors to influence the very institutions in which they are embedded (e.g. Battilana et al., 2009), claiming that actors' ability to influence institutional processes varies with their social position, skills and resources, such as formal authority, finances or informal networks (Battilana et al., 2009; Fligstein, 2001). Therefore, powerful, incumbent actors may resist change as guardians of institutionalised practices, but they may also adapt institutions to their changing needs and, thus, act as change agents (Campbell, 2010; Greenwood et al., 2002; Micelotta & Washington, 2013). Meanwhile, peripheral actors, due to their position at the margin of a field, may be more apt to develop innovation and promote divergent change, but they may struggle to mobilise substantial resources and the support of various stakeholder groups to implement and diffuse change (Battilana et al., 2009; Tracey et al., 2011).

Besides actors' positions and skills, institutional pluralism and complexity were identified as enabling factors for actors' ability to create new institutional arrangements, maintain or disrupt existing ones (Smets & Jarzabkowski, 2013, p. 1280). Institutional pluralism designates situations in which institutional logics co-exist, whereas institutional complexity refers to situations in which institutional logics with contradictory prescriptions are present in the same organisational field (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Smets & Jarzabkowski, 2013). In these situations, an organisation or individual is confronted with multiple institutional logics (Friedland & Alford, 1991), and this promotes reflexivity. Moreover, exposure to multiple institutional logics can result in the creation of hybrid organisational forms or arrangements; typical examples are social enterprises that combine market and humanitarian logics (Battilana & Dorado, 2010; Mair, Mayer, & Lutz, 2015; Tracey, Phillips, & Jarvis, 2011) or organisational solutions to conflicting policy prescriptions (Fossestol et al., 2015; Reay & Hinings, 2009).

While not all institutional work revolves around policies (e.g. Zilber, 2009), policy reforms constitute a context in which institutional work becomes necessary and salient to the extent that Houben (2019, p. 165) characterised governance *as* institutional work. Policy reforms unsettle established organisational practices and routines; they involve ambiguity and may conflict with institutionalised rules, norms and shared understandings (Cloutier et al., 2016). For example, studies of institutional work examined how coercive pressures from the EU met substantial resistance of national-level collective actors, especially highly organised professional groups (Micelotta & Washington, 2013; Sminia, 2011). Moreover, the implementing stakeholders interpret and adapt policies to fit local circumstances through institutional work (Bertels & Lawrence, 2016; Cloutier et al., 2016). Intermediaries between policymakers and practitioners on the ground, for example, managers of public service organisations or associations of business and professions, occupy a primary role in these processes. Thus, reforms interact with existing institutional arrangements, which potentially leads to unexpected consequences, partial implementation, policy slippage or hybrid organisational arrangements (Cloutier et al., 2016, Fossestol et al., 2015, Reay & Hinings, 2009).

Intermediary associations of professionals and business, which direct their institutional work both at internal and external audiences, are therefore recognised as essential actors

in institutional work studies (Hampel et al., 2017). However, this strand of literature does not relate to the systematic variation of national-level institutional contexts regarding the political-economic role of intermediary associations (see section 1.1.). Moreover, it mostly focuses on powerful associations rather than associations that fulfil their socio-economic role but do not engage in influencing the field.

In contrast to historical institutionalist literature, in this strand of literature, the enactment of policy reforms often serves as the starting point for institutional analysis of organisational change, and thus, this strand of literature contributes to insights on policy implementation. Policy change triggers the reactions of multiple stakeholder groups because they affect the distribution of tasks and resources or call the legitimacy of traditional practices into question. This could lead to the empowerment of new or the marginalisation of incumbent stakeholders and the need to legitimate existing practices. This literature is especially apt at demonstrating that institutional processes are more complex than previously conceptualised and often conflictual, which resonates with the historical institutionalists' approach to institutions as legacies of past struggles (Campbell, 2004; Mahoney & Thelen, 2010). It has also provided detailed studies on the emergence of new organisational forms, for example hybrid organisations (Battilana & Dorado, 2010; Mair et al., 2015; Tracey et al., 2011). Yet, thus far, the institutional work of less influential actors remains under-researched (Lawrence, Leca, & Zilber, 2013), as is the institutional work that is related to large-scale societal institutions (Hampel et al., 2017). As a result, analysing the institutional work of various types of intermediary associations in collective skill formation systems – or more broadly coordinated market economies that build on collective governance – can contribute to this strand of literature (e.g., Fortwengel & Jackson, 2016; Nicklich & Fortwengel, 2017).

Institutional Change in Collective Skill Formation Systems

Historical institutionalist research has provided important insights into institutional change in collective skill formation systems. One particular approach to understanding institutional change in skill formation examined the role of coalitions. In her seminal work, Thelen (2004) established cross-class coalitions in favour of collective skill formation as a major factor for the survival of these systems and their evolution over time. Current research has focused on divides on the business side. For example, Culpepper (2007) argued that large firms' demand for broader, higher-level skills was a

driver for the introduction of the Universities of Applied Sciences (UAS) in Switzerland, which is considered a transformative element of institutional change. Similarly, Trampusch (2010a) compared various policy reforms in Austria, Germany and Switzerland and associated the prevalence of large firms with transformative change. Small firms, conversely, act as guardians of the institutional arrangements of collective skill formation, while the strength of unions does not explain the type of institutional change. However, different types of change may coexist; for example, in Swiss commercial training, public authorities sided with large firms and enabled transformative change towards more firm-specific training. However, the adoption of the 2002 VET reform relied on a coalition between public authorities and small firms and led to self-preserving institutional change. Importantly, coalitions between these different stakeholder groups and the state are not stable but may change over time, which implies 'coalitional work' – the efforts involved in the mobilisation of collective action – for promoting institutional change or maintenance (Seitzl & Emmenegger, 2019).

My review of this literature revealed that institutional change and maintenance occur at different levels of analysis. First, I found that new national-level policies have been introduced without altering the core institutional dimensions of initial dual apprenticeship training. For example, pathways between VET and higher education increase permeability and maintain VET as an attractive educational option for school-leavers with good grades (Culpepper, 2007; Gonon & Maurer 2012; Trampusch, 2010a). In addition, inclusion-enhancing policies, such as short-track training or public training workshops, have been implemented through layering (Di Maio, Graf, & Wilson, 2019; Durazzi & Geyer, 2020). Moreover, national policy reforms may also preserve existing institutions (Trampusch, 2010b). Second, my review indicated that institutional change processes also come to the fore at the level of occupations. In Germany, large firms and unions' demands for high quality skills geared to the needs of the larger firms led to the upskilling of occupations that resulted in segmentalist tendencies as small firms were crowded out of training (Thelen & Busemeyer, 2008). Similarly, in the Swiss commercial training reform, large firms prevailed, and training became more firm-specific (Seitzl & Emmenegger, 2019). As a result, the outcomes of occupation-level negotiations affected the overall composition and characteristics of VET systems.

Over time, various attempts at reforming VET policies either succeeded or failed (Trampusch, 2010a; Di Maio et al., 2020; Emmenegger & Seitzl, 2019). It was also

noted that institutional change takes place gradually at diverging paces, and that transformative and self-preserving changes coexist within the same system.

These strands of literature have mostly focused on reforming VET policies and the role of actor coalitions to explain institutional change. This approach therefore highlights the political work of intermediary associations and less so on their decentral activities for maintaining high firm involvement in training. In addition, recent research on collective skill formation has started to bridge this literature with sociological and organisational institutionalist approaches that distinguish regulative, normative and cultural-cognitive elements of institutions (Di Maio et al., 2019; Nicklich & Fortwengel, 2017; Powell, Bernhard, & Graf, 2012). For example, Di Maio and colleagues (2019) documented that similar policies in different collective skill formation systems are underpinned with different shared understandings about the goals of the policy, tending towards social inclusion or economic efficiency goal dimensions. Fortwengel and Jackson (2016) applied the pillar framework to collective skill formation systems and found that, besides the national regulative framework, normative and cultural-cognitive elements play a role: the participation of firms in training is seen as appropriate and valorised, and dual apprenticeship is a taken-for-granted, widespread form of upper secondary education for a broad share of youth. Nicklich and Fortwengel (2017) showed that actors involved in developing a new security sector apprenticeship in Germany engaged in institutional work that partly failed due to a lack of regulative work associating training with rewards for workers. Moreover, there existed a tension and debate in earlier scholarship on the relevance of normative aspects of employer associations' capacity to foster cooperation. While Culpepper (2003) argued that employer associations contribute to overcoming the cooperation dilemma amongst firms thanks to the circulation of information rather than normative pressure, other authors claimed that capable associations mould firms' preferences and help to align them with long-term aims and public policies (Martin, 2004; Schmitter & Streeck 1999, pp. 86–87). Thus, by distinguishing the three institutional dimensions analytically, institutional work research can contribute to this debate.

1.4. The Empirical Case

Most of the comparative research on the institutional characteristics of dual VET and the occupational principle has concentrated on the German case. While it is acknowledged that Austria, Denmark, the Netherlands and Switzerland have similar systems (Busemeyer & Trampusch, 2012; Winch, 2015), less attention has been paid to

differences within the family of collective skill formation systems. However, recent research has greatly contributed to addressing this gap (Di Maio et al., 2019; Ebner & Nikolai, 2010; Emmenegger, Graf, & Strebel, 2020; Thelen, 2014; Trampusch, 2010a). This dissertation contributes to this literature by exploring institutional change in the Swiss system. This section introduces the Swiss collective skill formation system and Swiss neo-corporatism using the better-known German case as a shadow case.

Switzerland

Since 1930, a national VET act has constituted the main regulative framework for organising vocational training in Switzerland. This act was last reformed in 2002. Today, the State Secretariat for Education, Research and Innovation (SERI) is the state agency responsible for strategically developing the system and approving occupation-level training regulations. Regional public authorities, the cantons, organise and finance VET schools, supervise the training implementation in firms and offer career counselling to help youth find appropriate apprenticeships (SERI, 2019). Firms offer apprenticeship positions, finance apprenticeship wages and defray the other costs associated with training. Intermediary associations of labour market stakeholders are involved in the reform and governance of training. Yet, unions have a limited role in Swiss VET, which contrasts with the German system, where unions are involved in monitoring firms and are included at all levels of VET governance (Emmenegger et al., 2020).

Employers' involvement also differs. German employers are members of economic chambers, which have a public law status and compulsory memberships. The VET act names specific chambers as responsible for training in specific sectors (BBiG §71, 1–6). Industry associations or top-level employer associations are also involved in defining training content, but the Federal Institute for Vocational Education and Training (BIBB) has the leading role in coordinating the process (Hippach-Schneider & Huismann, 2016). In contrast, in Switzerland, labour market stakeholder intermediary associations have the leading role in content definition, which makes them particularly important stakeholders in VET governance. However, the Swiss VET Act only provides a broad definition of the organisations that may represent labour market stakeholders in VET. These organisations are subsumed under the heading of OdA, which are defined as 'social partners, occupational associations, other responsible organisations and

providers of vocational education and training' (BBG, Art. 1, Abs.1) and membership of firms in associations is voluntary (see also Höpflinger, 1984).

Thus, regarding associational structures, Switzerland deviates somewhat from the expected features of a neo-corporatist economy. However, Swiss interest associations traditionally display neo-corporatist features regarding their involvement in policymaking and their integration into associational systems (Kriesi & Farago, 1989). Concerning social partner involvement and the culture of consensus (Baccaro, 2014; Katzenstein, 1985; Lehmbruch, 1984), Switzerland is clearly neo-corporatist with a strong tradition of consultation procedures involving all stakeholders in consensus-based decision-making. Moreover, collective skill formation is a key area of Swiss neo-corporatism (Armingeon, 2011; Rüegg, 1987). In general, Switzerland is still considered a neo-corporatist country although a more liberal type than, for example, Austria (Katzenstein, 1985; Kenworthy, 2003; Mach & Trampusch, 2011).

Concerning occupations, in Germany, 324 recognised initial VET occupations exist (BIBB, 2020, Table A3.1). Since 2006, 20 new occupations have been introduced (BIBB, 2020, Table A3.2-1; Hippach-Schneider & Huismann, 2016, p. 64). In Switzerland, around 240 recognised occupations exist (BFS, 2018), and since 2006, 11 new occupations have been created (SBFI, 2016).

The 2002 VET Reform: Maintaining Collective Skill Formation

In the 1990s, the Swiss VET system suffered from a rapid decline in the number of apprenticeship positions offered by firms, which coincided with a large cohort of school-leavers (Dubs, 2006; Müller & Schweri, 2012). The ensuing lack of apprenticeship positions made the parliament react with initiatives to shore up the apprenticeship market (Strahm, 2008). Moreover, at the time, the Swiss education system was criticised for its low share of youth in baccalaureate schools (around 20%), and OECD experts considered the system too rigid with its key role for intermediary associations as well as too specialised, i.e. offering too many training occupations with too narrow profiles instead of more general skills (Dubs, 2006, p. 23). Against this backdrop, the VET system was reformed in 2002 with the aim of modernising it. According to Trampusch (2010b), this reform followed a logic of self-preserving institutional change as the key characteristics of collective skill formation systems were maintained. Namely, training organised at the workplace and in VET schools remained the dominant form of

education at the upper-secondary level, firms were still the main providers of apprenticeship positions and their intermediary associations were involved in policymaking and implementation. Regarding neo-corporatism, the reform continued to support the neo-corporatist ideology of self-governance of private actors, cooperation between social partners and the state and a culture of consensus.

However, maintaining formal elements is not sufficient to preserve an institution. Instead, institutions need to be adapted to survive in a changing environment (Streeck & Thelen, 2005; Thelen, 2012). Therefore, zooming in on specific elements of the 2002 reform gives further insights into the Swiss approach of shoring up employer cooperation in a changing socio-economic environment. Importantly, the VET reform expanded the institutions of dual VET to new sectors and aimed to improve labour market mobility and flexibility by broadening occupational profiles and reducing the number of small occupations. Hence, the VET reform entailed important changes at the decentral level of interest associations and occupations.

Integrating new sectors

Before 2002, the VET Act covered training in the crafts, commercial sector and industry. Training in other sectors of the economy was regulated by other federal departments (agriculture and forestry training) or regional authorities (arts, health and social care training) (Wettstein, 2020). This diverse group of economic sectors was then to be aligned with training in the craft and industry parts of the economy. To transfer the governance model of collective skill formation to these sectors, responsible interest associations to take over public tasks needed to be defined. Yet, in these sectors, no traditional employer associations were thus far involved in training and, in the reform process, new intermediary associations were created for this specific purpose (Rauner, 2009). However, these new intermediary associations brought together very diverse actors, for example, cantonal authorities, professional associations and employer associations. Their activities were limited to VET governance. As a result, in the new VET act, the term *occupational association* (*Berufsverband*) was replaced by the newly created umbrella term OdA to account for this new type of organisation.

Reducing the number of occupations

In reaction to debates on the need to increase the flexibility of the system and to offer broader skill sets (Bundesrat, 2000; Dubs, 2006, p. 23f; Häfeli & Gasche, 2002), the

reform aimed to reduce the number of small occupations. The rationale behind this goal was to adapt VET to the changing socio-economic environment. It was expected that rapid technological change would increase the need for broader skill sets. It was reasoned that such broader skill sets would help trained workers to adapt to technological change and increase their labour market mobility. These reflections mirrored larger debates about the relevance of occupations and occupational training for structuring work in a context in which occupational mobility became the rule rather than the exception (Baethge & Baethge-Kinsky, 1998; Deißinger, 2001). For example, traditional occupations were said to be too rigid for new demands of flexible work organisation in firms (Baethge & Baethge-Kinsky, 1998).

Moreover, it was projected that a higher number of apprentices per occupation would result in increased efficiency in training, for example, reducing the costs of vocational schooling. In particular, Swiss public authorities wanted to avoid subsidising training infrastructures for small occupations (Maurer & Pieneck, 2013). In a preliminary report, Häfeli and Gasche (2002, p. 4) observed that the 30 occupations with more than 1000 apprentices per year offered 75% of the apprenticeships positions. Thus, they considered that the effort to reduce the number of occupations should be focused on around 130 small occupations, which train fewer than 100 apprentices per year. They suggested that it should be possible to substantially reduce the number of occupations to around 100 'core occupations' (Häfeli & Gasche, 2002, p. 4). In the occupational revision processes after the VET reform, evaluating mergers of small occupations were included as necessary step in occupational revisions in the official guidelines (BBT, 2005, p. 14). This led to the disruption of various small occupations. Currently, the need to flexibilise dual VET to adapt it to the changing labour market environment is being debated again (Seufert, 2018).

Outcomes

In the years following the policy reform, all training occupations were revised. While the newly integrated agricultural, arts and forestry occupations only offered a small number of apprenticeship positions per year, the newly created occupations of healthcare and social care workers quickly became two of the most common apprenticeships, offering respectively 4,795 and 3,657 apprenticeship positions annually (SERI, 2019, p. 12). Thus, these occupations contributed to strengthening dual VET in the service sector of the economy.

Concerning occupational mergers, 18 occupations (7%) currently offer more than 1,000 apprenticeship positions per year, instead of 30 in the early 2000s (Häfeli & Gasche, 2002). The 10 most popular occupations account for over 50% of the new apprenticeship contracts per year (SERI, 2019, p. 12). Yet, over half (56%) of the approximately 240 federally recognised initial VET occupations still offer fewer than 100 apprenticeship positions annually (see Table 1-1). Hence, the aim to broaden occupational profiles through mergers did not lead to a substantive reduction in the total number of occupations, and many small occupations continued to exist.

Table 1-1. Number of new apprenticeship contracts per occupation in 2018

	Number of apprenticeship contracts per occupation						
	<100	**%**	**100–1,000**	**%**	**>1,000**	**%**	**Total**
Number of occupations	136	56.2	88	36.4	18	7.4	242
New apprenticeship contracts	3,627	4.8	28,373	37.4	43,927	57.9	75,927

Source: BFS (2018), new apprenticeship positions per occupation.

1.5. Research Puzzles

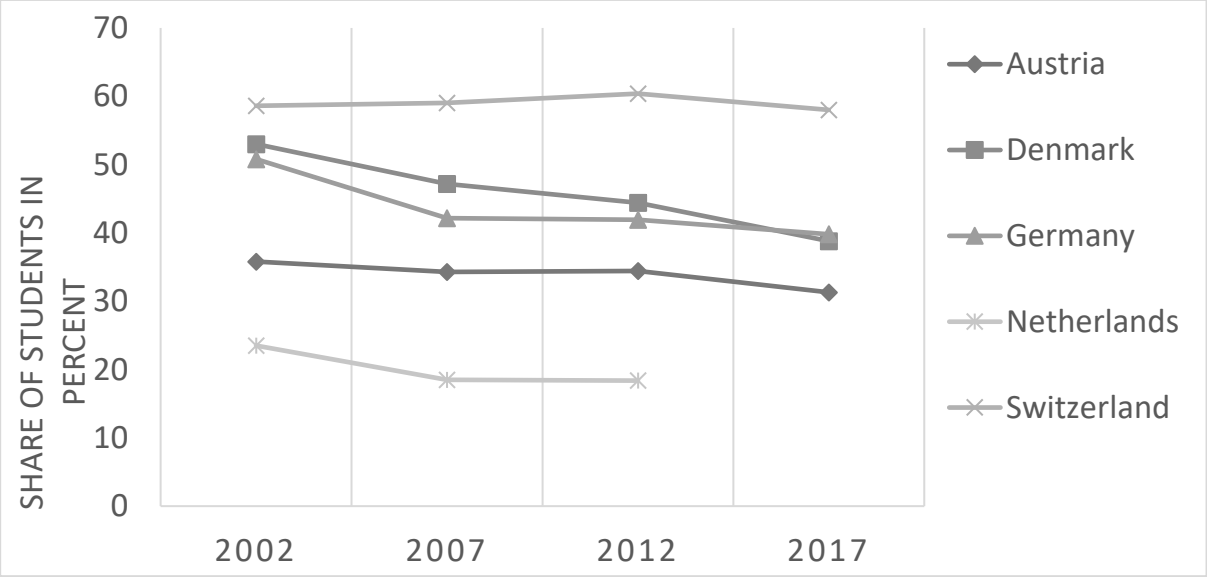
In light of debates on institutional change in collective skill formation, the transformation of employer associations, and insights into the decentralised, meso-level governance actors' role for the maintenance of institutions in the institutional work strand of literature, I derived five research puzzles, which I discuss in this section.

The Swiss Collective Skill Formation System

In contrast with other collective skill formation countries, which have lower or decreasing shares of youth in workplace- and school-based learning VET schemes (i.e. apprenticeships), the share of school-leavers entering dual VET remained relatively stable at around 60% over the last two decades in Switzerland (see Fig. 1-1). This makes Switzerland an ideal case for studying how institutions of collective skill formation can be stabilised in a changing environment.

Germany is the prototypical case of a collective skill formation system, and most of the seminal studies on collective skill formation are based on it (Culpepper, 2003; Streeck, Hilbert, Van Kevelaer, Maier, & Weber, 1987; Thelen, 2004). However, such a dominant role of the German system may lead to a bias if features that are typical of the German case, but not of other collective skill formation systems, are given too much importance. For example, recent research has shown that the role of unions is currently less decisive than the cleavage between small and large firms for the type of institutional change in collective skill formation systems (Trampusch, 2010a, 2010b). In this regard, the Swiss case raises questions about the role of neo-corporatist institutions in collective skill formation. Although it diverges from ideal-typical collective skill formation and neo-corporatism due to the weakness of its unions, in this country, the share of youth in dual apprenticeships has remained high and stable over the last two decades (see Fig. 1-1).

Figure 0-1. Participation in vocational programmes at the upper secondary level with combined school- and workplace-based learning



Sources: OECD Education at a Glance 2004, 2009, 2014; OECD.Stat (2017); values for the Netherlands missing in 2017.

Chapter 2 contributes to addressing this puzzle by comparing the role of unions in the Swiss and the German systems. Chapter 3 argues that the voluntaristic approach of Swiss public authorities to cooperation with private actors enabled the emergence of a new organisation type, which is associated with the integration of new economic sectors into the VET system. As a result, the state's allowing and actively supporting new

organisational forms facilitated adapting dual VET to the service economy, thereby reaching a stabilisation of the share of youth in dual apprenticeships.

Changing Associational Landscape

The literature on institutional change in collective skill formation has provided important insights into the adaptation of formal institutions to a changing environment (e.g. Trampusch, 2010a). However, to date, little is known about employer associations at the subnational level and their role in maintaining employer cooperation. However, the analysis of employer associations in other policy areas suggests they have a high capacity to respond strategically and adapt to their changing economic and political environment (Brandl & Lehr, 2019). Yet, these strategic adaptation processes at the subnational level may gradually undermine macro-level institutions (Behrens, 2011). However, quantitative cross-national analysis of employer associations' activities has found a positive effect of involvement in training and active labour market policies on the membership density of employer associations (Brandl & Lehr, 2019, p. 948). This is in line with the claim that employer associations' organisational development increases when the state delegates tasks to them, providing associated authority and resources (Streeck & Schmitter, 1985; Traxler et al., 2007).

The current state of the associational landscape in Swiss VET raises questions in this regard. Clearly, only a part of the intermediary associations that are active in VET governance correspond to typical neo-corporatist characteristics. Another part includes a new type of organisation, which – in contrast to the traditional associations – is typically only active in the policy domain of VET but involves very heterogeneous stakeholder groups, such as public authorities, professional associations, employers and employees. However, these associational transformations in Swiss VET seem to contribute to stabilising the VET system and adapting it to the service economy rather than undermining it. Chapters 3 and 4 contribute to shedding light on these transformations by studying the associations' characteristics through the lens of neo-corporatist concepts of *generalisability* and *governability* (Traxler, 1993; 2007) (Chapter 3) and developing the proposition that associations representing newly integrated economic sectors show *hybrid characteristics* that allow them to bridge between two institutional logics: the associational logic in traditional VET governance and the previous more state-oriented and school-based governance logic in the newly integrated sectors (Chapter 4).

Institutional Maintenance through Extension to New Sectors

In a changing political-economic environment, firms' voluntary provision of apprenticeship positions is often at stake, resulting in a limited supply of such positions for youth (e.g. Strahm, 2008; Thelen & Busemeyer, 2008). As Thelen (2012) noted, to survive, institutions need to be adapted to their changing socio-economic environment. For example, newly emerging sectors need to be integrated into the VET system to extend it to the service economy (Culpepper & Thelen, 2008), or new apprenticeships need to be created by employer associations. However, research on the integration of new economic sectors into existing VET systems and the creation of new apprenticeships is relatively rare. An early example is Culpepper's (2003) influential study on the transfer of dual VET to Eastern Germany. This study found that, even in an established sector (electronic and metal industry), such a transfer may fail if employer associations lack the capacity to foster cooperation amongst firms. Concerning the transfer to the service sector, Nicklich and Fortwengel (2017) showed the difficulties associated with introducing dual apprenticeships in the German security sector due to the lack of regulative institutional work that would associate apprenticeship with higher wages and career opportunities. Seitzl (2020) investigated the creation of apprenticeships in the information and communication technology (ICT) sector in Austria and Switzerland and emphasised the important role of an active state in these processes. Fortwengel, Gospel and Toner (2019), focusing on the institutional extension of apprenticeships to new sectors in liberal market economies, suggested that this endeavour may increase the number of apprenticeships. Yet, this rise may not be sustainable as these apprenticeships appear to be of low quality and numbers risk dropping once the state retreats or changes its policy approach.

Therefore, chapters 4 and 7 contribute to explain how the state can foster a sustainable transfer to new sectors and foster employer cooperation. Moreover, expansion can also take place from the bottom-up if VET institutions encourage employers to create new apprenticeship. Chapter 4 provides a case study of the top-down, state-led transfer of dual VET to the healthcare sector, in which the state encouraged the creation of hybrid organisational forms through *bricolage* and then stepped back again. Chapter 7 additionally shows that the strongly institutionalised Swiss VET system facilitates the bottom-up creation of new occupations by employer associations.

Institutional Work and the Survival of Small Occupations

The organisational institutionalist concept of institutional work specifies that actors use a variety of strategies to influence institutions, especially after policy reforms (Cloutier et al., 2016; Lawrence & Suddaby, 2006). Empirical research in this strand of the literature illustrates that intermediary actors at the meso-level, such as professional or business associations, often play key roles in these processes as they direct their institutional work at both internal and external audiences (Hampel et al., 2017; Micelotta & Washington, 2013). However, this strand of the literature does not relate to the systematic variation of national-level institutional contexts regarding the political-economic role of intermediary associations and their macro-level socio-economic effects (see section 1.1.). Moreover, it has mostly focused on powerful associations that defend their interests or on challengers that disrupt existing institutions. However, institutional work literature has argued that less powerful actors also engage in institutional work (Lawrence et al., 2009). However, such actors may lack political clout and material resources to promote their institutional projects or resist change (Battilana et al., 2009; Campbell, 2004). I address the question of which institutional work small occupations' associations developed to handle the reforms' requirements, especially the need to find synergies with similar small occupations to reduce the number of occupations. I conceptualise small occupations as a marginal actor group within the VET system because, in contrast to large occupations such as commercial training (Emmenegger & Seitzl, 2019), small occupations only contribute a limited number of apprenticeship positions and, thus, play a marginal role in the functioning of the overall VET system.[2] In addition, given that these occupations are trained by a small number of firms, the access to resources from their constituents is limited for intermediary associations. Consequently, it should be relatively easy to demand small occupations to merge, especially for a state agency that has the formal authority and commands substantial material resources. However, after the reform, many small occupations survived. I address this puzzle by reconstructing the institutional work of small occupations after the 2002 VET reform. Chapter 5 documents how a very small occupation, artisanal weavers, resisted the pressures to merge. Chapter 6 documents how a merger of small occupations was enacted, and the piano maker occupation thereby disrupted – but later partly re-institutionalised.

[2] In contrast to their marginal role in the VET system, these associational leaders may have a central role in their (small) organisational field and command more resources than a single member in the case of small firms or individual crafts masters.

Decentral Policy Enactment in Occupations

In processes of decentral policy enactment, attempts to change institutions may be effective or fail. Historical institutionalist literature has emphasised the importance of processes of policy enactment for the persistence or change of institutions (Streeck & Thelen, 2005; Thelen & Mahoney, 2010). In collective skill formation systems, policies are enacted at the level of occupations. The continuous revision of existing occupational training regulations is a basic process for adapting collective skill formation and has the potential to lead to transformative forms of institutional change. For example, if the content of training becomes more firm-specific, this drives collective skill formation systems towards more segmentalist forms of training (Emmenegger & Seitzl, 2019; Thelen & Busemeyer, 2008). Employer associations are essential in these occupation-level negotiations but also in fostering firms' provision of apprenticeship positions. While Culpepper (2003) highlighted that employer associations contribute to overcoming the cooperation dilemma amongst firms thanks to the circulation of information rather than normative pressure, other authors argued that capable associations mould firms' preferences and help to align them with long-term aims and public policies (Martin, 2004; Schmitter & Streeck, 1999, pp. 86–87). Thus, by distinguishing the three institutional dimensions analytically, institutional work research can contribute to this debate. After the 2002 VET reform, in a multitude of occupation-level processes, intermediary associations interpreted reform demands, handled them in their everyday work and consequently promoted or hindered the reform reaching its aims. Three case studies have documented intermediary associations' institutional work in the early 2000s, contributing to the growing literature that enriches historical institutionalist approaches with insights from the institutional work perspective. I discuss these in Chapters 5, 6, 7 and 8.

1.6. Methodological Approaches

By combining cross-sectional quantitative analysis and process-oriented case studies of intermediary associations, this dissertation examines the institutional change in the Swiss VET system from different angles. A cross-sectional analysis of intermediary associations' characteristics has helped to describe to what extent the adaptation and extension of the VET system is reflected in new organisation types and which characteristics these new organisation types display. Process-oriented case studies revealed which strategies actors used to deal with the policy reform and how they fostered or maintained employer cooperation.

Cross-Sectional Quantitative Analysis

Research on neo-corporatist associations and the influence of association-level adaptation processes on gradual institutional change has indicated the importance of studying associations' strategies, activities and structures (Behrens, 2011; Brandl & Lehr, 2019). In the case of Swiss VET, the VET literature observed that various types of organisations fulfil the role of the OdA in addition to traditional employer associations (Wettstein, Schmid, & Gonon, 2014). Yet, this observation has not been analysed systematically and raises important questions such as who is represented in the Swiss OdA and how the OdA fulfil their public tasks and represent their constituents' interests.

However, since the 1980s, there has been no systematic data collection on Swiss business associations related to VET, and the last survey amongst the associations responsible for VET occupations was conducted to evaluate cooperation with federal authorities, and the data was anonymised and not available for further research (Contrôle parlementaire de l'administration [CPA], 2015).

To fill this research gap and address my research questions, I developed indicators based on theoretically relevant dimensions derived from neo-corporatist literature, especially the work of Schmitter and Streeck (1999) and that of Traxler (1993, 2007). The data on the OdA responsible for initial VET occupations was collected mainly from organisations' statutes, their websites, the official register of occupations and training ordinances of the occupations, and registers of collective agreements and binding training funds as well as from lists of members of peak-level associations and extra-parliamentary commissions as well as participants' lists of events. This data collection strategy allowed gathering information on the full population of the OdA. I chose this strategy due to an expected low response rate, which would have yielded limited insights into the overall composition of the associational landscape. Additionally, data on host firms and apprentices, which is collected by the Federal Statistical Office, was added to the data on the OdA. The resulting combined dataset enabled me to analyse organisational characteristics and their linkages to occupations, numbers of apprentices, economic sectors and host companies' characteristics.

To map the overall associational landscape, I categorised all the OdA into organisation types along two theoretically relevant dimensions: the breadth of their field of activity

and their membership composition. The categorisation resulted in four organisation types: occupational, company, employee and VET-specific organisations. I compared the characteristics of these organisation types, their number of apprentices and host firms' characteristics using ordinary least squares (OLS) regressions on these categorical variables with VET-specific organisations – the new organisation type – as a reference category. To explore the characteristics of the OdA in newly integrated sectors, I used a second analytical approach to compare the relevant characteristics of the OdA in the new sectors (n = 7) with the OdA in traditional sectors (n = 139) using OLS and logistical regressions to account for the important difference in the group size of the two categories and heterogeneity within the categories.

Case Studies

I explored how the adaptation of the Swiss VET system affected small occupational associations based on qualitative, process-oriented case studies (Langley, 1999; Patton, 2015). Case studies are particularly apt for analysing change processes and to reveal actors' experiences in these processes. These case studies 'shed empirical light about some theoretical concepts or principles' (Yin, 2014, p. 40). The case studies of reforms in small occupations were selected through purposeful or theoretical sampling (Patton, 2015; Yin, 2014). This means cases were chosen based on their properties in relation to theoretically relevant dimensions.

Concerning case selection, two criteria were relevant. First, empirically, although small occupational groups are widespread, little is known about their reactions to VET reform. Yet, the reform contained elements that were particularly relevant to this type of occupational group. Given that the transformation or reproduction of the VET system hinges on how reforms are implemented by multiple and heterogeneous stakeholders, the impact on these marginal players is also relevant for discovering trends in the development of the system. For example, if the reform consistently leads to the disruption of small occupations, a concentration on fewer, broader occupations takes place, which could have an impact on the willingness of firms to train. Concerning theory development, the selected type of very small occupations constituted an extreme case, which was useful to probe theoretical propositions (Patton, 2015). From research on institutional entrepreneurship and work, I concluded that the ability of actors to influence institutional outcomes depends on their resource endowment, skills and social position. Thus, while marginal actors may be more innovative, they may struggle to gain

sufficient support to achieve change. Therefore, institutional work is least likely to be successful if actors with scant resources promote it. However, the puzzle then is that, in the case of the smallest occupations, different reform outcomes can also be observed: small occupations were disrupted, maintained or created. This raises the question of how associations achieved these outcomes. To investigate the commonalities and differences in small occupations' institutional work, I applied a maximum variation sampling approach (Patton, 2015).[3] Common patterns emerging from the comparison are particularly important because they emerge out of heterogeneity. While the cases were similar with regard to their size in terms of apprenticeships per year at the time of the reform (around 10 apprentices), the reform outcomes included maintaining, merging and creating new occupations. The cases I selected were piano makers, artisanal weavers and cableway mechanics. The piano makers represented a case of disruption because they merged with similar occupations. The weavers maintained their occupation, while the cableway mechanics represented a newly created small occupation.

For analysing this data, I relied on two complementary approaches: I reconstructed the processes distinguishing between internal institutional work directed at members and external work directed at public authorities and other stakeholders. This temporal ordering reconstructed how the processes unfolded and documented the key steps (Langley, 1999). Second, I analysed the content of the interviews and written communications using the types of institutional work identified by Lawrence and Suddaby (2006) as sensitising concepts (Kelle & Kluge, 2010). Thereby, I identified the institutional work of the organisations: this included justifications and explanations of their reactions to the reform that were linked to shared understandings about the aims of VET. The experts' experiences and appeals in communications to members also highlighted the normative institutional underpinnings, thus revealing socially rewarded and expected behaviours of members and firms. Due to the regulative character of the revision process, the creation of formal rules and their enforcement were also important elements in the (re-)institutionalisation processes of the three occupations. Thus, I identified institutional work that was normative, regulative or cognitive in character. For the comparative case study of the three occupations, the individual case narratives were screened for similarities and differences that could help me to address the research questions and reveal patterns of small occupations' reactions to reforms.

[3] This selection strategy is similar to Gerring's (2007, pp. 97–99) diverse case strategy, which illuminates the full range of variety on relevant dimensions.

1.7. Outline

My dissertation is composed of seven chapters that address decentral processes in the institutional maintenance of the Swiss collective skill formation system. First, three chapters are based on a newly created dataset on the characteristics of the Swiss OdA responsible for the initial VET, which I developed with Patrick Emmenegger and Lukas Graf. Second, I conducted three case studies with Carmen Baumeler and Sonja Engelage on the institutional work of intermediary associations responsible for small occupations in the process of implementing the 2002 VET reform. This work resulted in the second series of four chapters, including single case studies and a comparative case study as well as a single-authored chapter on the creation of new apprenticeships.

The first part of this dissertation presents a quantitative analysis of intermediary associations responsible for initial VET occupations. These three chapters were co-authored with Patrick Emmenegger and Lukas Graf. Chapter 2 documents the role of employees in Swiss VET, chapter 3 describes the overall associational landscape in initial VET and chapter 4 explores the hybrid characteristics of intermediary organisations in sectors that were newly integrated into the VET system.

First, a striking characteristic of the Swiss VET system, compared with the widely known German case, is the marginal role of trade unions. This contribution identifies the channels through which labour is involved in German VET and compares this with the Swiss case. The contribution documents that Swiss labour is hardly involved in the Swiss intermediary organisations responsible for initial VET occupations, which are clearly employer dominated. Building on historical research, this contribution shows that cantonal authorities took over the important public tasks of monitoring firms and organising exams early on and thus pre-empted an important role of unions in Swiss VET. Today, Swiss apprentices work more in productive tasks and spend less time in vocational schools, so the costs of training are, on average, much lower than for German firms.

The second chapter further investigates the associational landscape that exists in the current Swiss VET system. It argues that the voluntaristic approach of Swiss authorities to give labour market stakeholders the freedom to organise in organisational forms that serve them best for their involvement in VET governance facilitated the service sector transition. A new type of organisation unites heterogeneous stakeholder groups and

focuses its activities on the sole policy field of VET. This stands in stark contrast with the traditional association types, which represent firms and professionals of a sector in various policy fields and are integrated into hierarchical coordination through their membership in peak-level umbrella associations.

Diving deeper into the emergence of this new organisation type, the third chapter suggests that the organisations in the economic sectors that were newly included in the VET system have developed hybrid characteristics. Thereby, these organisations allow combining the *associational logic* that dominates the traditional apprenticeship system with the *school-based state logic* that characterised the pre-reform training in these sectors. Together, these chapters document the current state of the associational landscape in Switzerland and its surprisingly weak level of neo-corporatism, in the sense of weak union involvement, and a remarkable level of fragmentation rather than monopolistic, hierarchically coordinated associational structures.

A second part of my dissertation, which I developed with Carmen Baumeler and Sonja Engelage, focuses on the institutional work of the OdA in policy implementation. Arguably, the involvement in the administration of training and, hence, the delegation of public tasks to intermediary associations is essential for fostering their organisational capacity and employers' provision of apprenticeship positions. Yet, the last Swiss VET reform had a deep impact on this decentral occupation-level process. In particular, the federal state aimed to reduce the number of occupations by encouraging small occupational groups to merge and use synergies with similar occupations. However, the reform resulted in only a moderate reduction in the number of occupations; many small occupations survived. Building on the institutional work perspective, this part of my research zooms in on the micro-level actions that led to different outcomes of occupational revision processes: the maintenance (chapter 5), disruption (chapter 6) and creation (chapter 7) of occupations. Finally, chapter 8 identifies commonalities and differences amongst the three cases.

Chapter 5 provides a case study of the artisanal weavers' revision process after the 2002 VET reform. It contributes to research on educational governance by applying the institutional work perspective to understand how actors in complex multi-level systems coordinate action. It explains how the associational leaders developed a wide array of regulative, cultural-cognitive and normative institutional work to resist pressures to

change, mobilise voluntary work of members and maintain apprenticeship training in a very small, traditional handicraft occupation.

Conversely, in chapter 6, the case of the merger of the piano maker occupation with other musical instrument builders into a new apprenticeship contributes to research on attempts to flexibilise occupations by broadening their profiles. While the creation of this new merged occupation led to synergies in the organisation of training and a professionalisation of the associational work, the provided skills have remained similar to the original apprenticeship, and a strong occupational identity as piano makers has persisted even after a prolonged time period.

Chapter 7 shows how, through the example of the cableway mechanics, in contrast to top-down extension of VET to new sectors (see chapter 4), employers may also create new apprenticeships from the bottom up on their own initiative. Very specific, small occupations were criticised as limiting labour market mobility. Yet, in the context of lacking apprenticeship positions, public authorities were reluctant to block employer initiatives to introduce new apprenticeships, even in the case of a rather small sector. Moreover, once institutionalised, the sector-specific apprenticeships of the cableway mechanics also provided transferable skills that allowed youth to leave the sector in search of better working conditions.

Finally, the comparative findings in chapter 8 highlight the key role of highly committed individuals that mobilise substantial efforts, sometimes on an honorary basis, to keep their occupations alive or create new ones. In the case of small occupations, innovative forms of training have been adopted (e.g. centralised, bilingual VET school courses), but associations still need to mobilise substantial additional resources to realise their projects. Cultural-cognitive and normative elements, such as strong occupational identities, the widespread ideal of honorary work and the good reputation of apprenticeships and training firms, have fostered their institutional work. Therefore, in occupation-level processes, these relatively small associations act as guardians of collective skill formation and mobilise substantial resources and support for training from firms and other sources.

1. Social versus Liberal Collective Skill Formation Systems? A Comparative-Historical Analysis of the Role of Trade Unions in German and Swiss VET[4]

With Patrick Emmenegger and Lukas Graf

Similar to Peter Katzenstein's famous distinction between social and liberal forms of corporatism, we argue that there are social and liberal varieties of collective skill formation systems. We demonstrate that the German VET system is an example of a social variety with a strong (parity) role for unions in VET governance. In contrast, trade unions play a considerably weaker role in the more liberal Swiss VET system, which privileges employers' interests. The article shows that the different position of unions in VET systems has the expected consequences on a range of indicators. We further examine why unions are less important in Switzerland. It is shown how, during the important post-World War I period, differences in the institutional environment and the power resources of the union movements set Germany and Switzerland on different paths, which are still visible today.

Introduction

Collective skill formation systems have attracted considerable attention in the literature on coordinated capitalism (Thelen, 2014). Four features distinguish them from other vocational education and training (VET) systems (Busemeyer & Trampusch, 2012, pp. 14-15). First, collective systems are dual systems, where training takes place in both schools and firms. Second, firms are strongly involved in the provision and administration of training. Third, collective systems provide occupational skills that are portable, certified and standardized beyond the firm level. Finally, intermediary associations such as employer associations and trade unions participate in the administration, governance and reform of training.

[4] This is the accepted version of the article: Patrick Emmenegger, Lukas Graf, Alexandra Strebel, *European Journal of Industrial Relations* 2020, 26(3), pp. 263-278. Copyright © 2020 SAGE Publications, DOI: 10.1177/0959680119844426

In the international literature on collective skill formation systems, there is a strong focus on the German system (Hall & Soskice, 2001; Streeck, 1992; Thelen, 2004, but see Trampusch, 2010a). Given the size of Germany's economy and its central role in world markets, this focus is understandable. However, there are also other countries with collective skill formation systems. Switzerland is in many ways a prototypical collective skill formation system and with proportionally the world's largest apprenticeship system (Busemeyer & Trampusch, 2012). Given the focus on Germany, there is a risk that the literature emphasizes features of collective skill formation systems that are more characteristic of the German one rather than these systems in general.

In this article, we examine a striking difference between the German and the Swiss VET systems. Based on a comparison of these otherwise very similar cases and the first comprehensive database on the so-called Organizations of the World of Work responsible for an occupation in initial VET in Switzerland, we demonstrate that unions play a considerably weaker role in the Swiss VET system. Of course, we do not want to argue that unions do not play any role at all in the Swiss VET system. Like all collective skill formation systems, the Swiss system features a high level of social partnership, corporatist decision-making procedures and emphasizes consensus rather than conflict.

However, similar to Katzenstein's (1985) famous distinction between liberal and social forms of corporatism in small states, there are varieties of collective skill formation systems. Most notably, Germany is an example of "social" collective skill formation systems with a strong (parity) role for unions in VET governance. In contrast, Switzerland features a more liberal system with structurally privileged employers. This distinction between social and liberal systems is not yet another case of what Baldwin (2009) refers to as the "narcissism of minor differences". Unions are key actors in educational systems in general (Iversen & Stephens, 2008; Moe & Wiborg, 2017) and collective skill formation systems in particular (Busemeyer &Trampusch, 2012; Thelen, 2014). Therefore, we should also expect the German and Swiss systems to systematically differ with regard to the outcomes of their training systems.

We make three contributions in this paper. In the next section, we document the different roles of unions in the German and the Swiss VET systems. Subsequently, we show that the different position of unions has the expected consequences on a range of indicators (although we are of course not in the position to claim a causal relationship). Finally,

we examine the reasons for this puzzling difference in union involvement in VET governance. We show how, during the critical post-World War 1 period, differences in the institutional environment and the power resources of the union movements set Germany and Switzerland on different paths. Due to the path-dependent nature of most political processes (Mahoney, 2000; Thelen, 2004), these differences are still visible today. We conclude by offering some reflections on how the role of unions influences the viability of these systems in the future.

Unions in Collective Skill Formation

In this section, we compare the role of unions in the German and the Swiss collective skill formation systems. VET governance is organized differently in these two countries. The German system relies on a multi-level system of governance bodies and we demonstrate that unions are systematically represented in the relevant governance bodies at all levels, although actual practices occasionally differ from the formal rules. In Switzerland, union involvement is far less systematically regulated, not least because Switzerland does not feature a comparable system of chambers and work councils. Instead, private intermediary organizations are primarily involved through so-called Organizations of the World of Work (*OdA*). Yet, these organizations are typically employer-dominated, which leaves unions only a limited role in VET governance. Finally, we show that collective agreements play a more significant role in VET governance in Germany than in Switzerland.

"Social" collective skill formation in Germany

This section demonstrates the important role of unions in the German VET system. We first establish where union representatives are located within this system's multi-level structure. We then describe this structure and, in particular, the tasks of the work councils (firm level), the VET boards (regional chamber level), the state VET boards and the national VET board, all of which prominently include union representatives. Furthermore, the essence of the process that leads to updating VET regulations is sketched to illustrate the extent of union influence. We also outline the sectoral logics of unions and collective bargaining in Germany, which helps to understand why – compared to Switzerland – there is some (albeit limited) potential for open class conflict in the German VET context.

Embedded within a coordinated market economy (Hall & Soskice, 2001), Germany's social partners are extensively involved in the dual-corporatist structures of the VET system (Greinert, 2004; Busemeyer, 2009), characterized by well-defined cooperation between the relevant stakeholders to ensure that key decisions are based on consensus (Hippach-Schneider & Huismann, 2016; Graf, 2018). The term 'stakeholders' comprises the federal state, the regional states and the so-called social partners, consisting of employers – mostly represented by employer associations – and employees who are generally organized through the major trade union in their respective sector (Saniter & Deitmer, 2013).

German unions have been suffering from decreasing membership, but their influence in VET matters has evolved historically and remains deeply institutionalized. At the firm level, union power is secured through the presence of work councils within enterprises. Indeed, although today merely 20% of the German workforce are affiliated with unions, 77% of work council members were found to be members of the German Trade Union Federation (DGB), which is the major umbrella organization for unions in Germany (Dribbusch & Birke, 2012). The impact of unions in large firms is further expanded through directors of labour relations (*Arbeitsdirektoren*), who are mostly selected by unions (Wolf, 2017, p. 616).

Unions also benefit from their legally prescribed right to post employee representatives to the VET boards at the regional, state and federal levels. Indeed, the VET law (BBiG §77, §82, §92) explicitly suggests unions as the entities to propose employee representatives for the abovementioned boards, namely for the VET boards at the regional chamber level, VET state boards and the national-level VET main board, though it does mention the possibility of other types of employee organizations to assume that responsibility.

These boards play a decisive role in maintaining the consensus principle so crucial for the German VET system (Hippach-Schneider & Huismann, 2016). Therefore, a more comprehensive understanding of their structural and organizational characteristics is necessary. At the regional chamber level, it is the numerous chambers (divided by sectors, e.g. chambers of industry and commerce, chambers of skilled crafts) as declared "competent bodies" who are to set up legally regulated VET boards. These boards are composed of 18 members evenly distributed amongst employee and employer

representatives as well as teachers from vocational schools (§77 BBiG). At the state level, the state VET boards are built in a similar fashion, also uniformly offering two thirds of the available 18 spots to the social partners, although the last third is reserved to members of regional state governments (§82 BBiG). At the federal level and as a constitutive part of the Federal Institute of Vocational Education and Training (BIBB), the VET main board maintains the equal distribution of influence amongst the social partners and the regional states (8 spots and votes each) but, in addition, includes five federal state representatives granted a total of eight votes to be cast unanimously (§92 BBiG).

Being quasi-governmental establishments, both the state VET boards and the VET main board are built to facilitate impartiality and a fair distribution among the stakeholders, i.e. employers and employees. Even chambers as self-governing bodies, which otherwise organize and represent employer interests, are to include unions in VET governance. Hence, at all levels, unions are prominently involved. However, exercising their formal rights is not to be taken for granted by unions. For instance, the DGB is concerned that due to rising cost pressures, firms are less willing to exempt employees to participate in VET governance tasks such as auditing VET exams (DGB, 2019).

Having established where employee representatives and, more specifically, union members are located within the German VET governance system, we turn to sketching some of these boards' most relevant tasks. Following an ascending order, our description begins at the firm-level, characterized by the presence of work councils, which are concerned with observing and evaluating work-based training and with resolving potential problems with the employer. The latter is obliged to listen to any matters regarding VET that the council wishes to discuss (Dicke & Glismann, 1996, p. 14). In their central role to initiate change, unions are particularly involved in processes of adapting training regulations and framework curricula to meet evolving labour market developments (Hippach-Schneider & Huismann, 2016, p. 15). In this regard, unions require on-the-ground information on day-to-day occurrences within firms, which can ideally be secured through the presence of work councils.

Turning to the VET boards within chambers, they are authorized to set up certain rules of the game, the most important of which are the ones concerning the monitoring of the training companies and the actual training in the companies, as well as the organization

of examinations. For these regulations to be implemented, they have to be approved by the general assembly (*Vollversammlung*) of the respective chambers (Dicke & Glismann, 1996, p. 8). However, when organizing exams, chambers and their VET boards cannot autonomously define qualification requirements but ought to respect national framework curricula and training regulations. These are defined through complex processes of coordination that involve all relevant stakeholders. "As a rule, the initiative to update the content or structure of a training occupation or to develop an entirely new occupation comes from industry associations, from the top-level employer organizations, from trade unions or the BIBB" (Hippach-Schneider & Huismann, 2016, p. 38). These initiatives are then evaluated and, if approved by all relevant social partners, implemented. In this process, social partners' umbrella associations give expert opinions, collaborate with the BIBB and the respective state ministries, which are responsible for drafting compatible school curricula. Thus, the chambers' self-governance is constrained by the sovereignty of states regarding educational matters, which applies first and foremost to the school-based part of the dual apprenticeship training (Dicke & Glismann, 1996).

Unlike the chambers' VET boards, the state VET boards are not allowed to issue binding regulations. They assume a consultative role by advising the respective state governments through articulating coordinated VET positions (§83 BBiG). At the federal level, the VET main board also takes on a consultative task, as it "advises the government on fundamental issues of in-company vocational training and is involved in setting standards and designing training regulations" for occupations within the German dual system (Hippach-Schneider & Huismann 2016, p. 15). Moreover, it is responsible for deciding on various matters regarding the governance of the BIBB, which includes, for instance, to define the BIBB's significant VET research programme (§92 BBiG).

Apart from their simultaneous presence in the abovementioned boards, unions and employer associations face one another in acts of collective bargaining. In Germany, apprentice pay is part of the collective bargaining process. The German laws on tariff negotiations include debates on apprentice pay and, less commonly, the number of sector-wide training spots the involved firms have to offer in a legally binding way (Wolf 2017, p. 622). The fact that both unions and employer associations are organized in sectors facilitates the arrangement of such negotiations but inevitably renders the German system – in comparison to the Swiss one – more prone to class-conflict.

However, the consensus-principle and strong collaboration within various VET boards has, thus far, usually been effective in keeping such disagreements at bay.

"Liberal" collective skill formation in Switzerland

This section reviews the role of unions in the governance of Swiss VET. First, we discuss the important role of the Organizations of the World of Work (*OdA*) and show that these organizations are typically employer-dominated. This section builds on the first comprehensive database of these organizations created between July 2017 and May 2018 (Emmenegger, Graf & Strebel, 2018). Second, we show that collective agreements play a small role in Swiss VET. Finally, we turn to the role of non-public actors in federal-level commissions. It is here where Swiss unions play an important role, but it is mostly as veto players in a system otherwise dominated by employers.

The Swiss VET system is strongly governed by federal-level regulations, which are typically used for the strategic development of the system (Barabasch, Scharnhorst & Kurz, 2009; Gonon & Maurer, 2012). Cantons play an important role in the implementation of VET at the regional level, the provision of school-based training, the organization of exams, vocational counselling and monitoring of firms' training activities. Finally, private actors are involved in VET governance through so-called *OdA*, which is an umbrella term to denote all non-public intermediary organizations involved in VET governance.

Private intermediary organizations, i.e. *OdA*, play two key roles in the Swiss VET system. On the one hand, many *OdA* are publicly (i.e. by the federal state) recognized as responsible for at least one of the approximately 230 initial VET occupations in Switzerland. As a result, *OdA* are typically organized along occupational (and not sectoral) lines. In this function, *OdA* take care of the content definition of national training regulations and framework curricula (Barabasch et al., 2009; Gonon & Maurer, 2012). On the other hand, *OdA* are involved in the strategic development of the VET system at the federal level.

We first turn to the role of *OdA* as organizations responsible for an occupation in initial VET. By delegating content definition to *OdA*, public authorities aim to ensure that VET provides the skills the labour market needs, which is supposed to smoothen education-

to-work transitions. Importantly, *OdA must* organize and represent host companies, i.e. employer interests, but they *may also* represent employee interests (SBFI, 2018b).

There are currently 146 *OdA* publicly recognized as responsible for one or multiple occupations in initial VET. In our comprehensive survey, based on an in-depth review of the statutes and websites of all these *OdA*, we have looked at what interest groups these organizations represent. Following Höpflinger (1984), we distinguish between company associations, occupational associations, occupation-based employee organizations and industrial unions.

On the employers' side, company associations are rather straightforward employer associations, which are nationally represented by the Swiss Employer Association (SAV). In contrast, occupational associations are – from an international perspective – more unusual, but they have a long tradition in the Swiss political economy. They organize self-employed professionals (crafts) and domestic market-oriented small business owners (Höpflinger, 1984, p. 168). At the national level, the approximately 250 occupational associations are represented by the Swiss Trade Association (*SGV*). Switzerland is thus unusual in having two large peak-level employer associations, which organize different sections of the economy and are about equally strong (Kriesi & Trechsel, 2008).

On the employees' side, there is no comparable parallel structure between occupation-based employee associations and industrial unions. Nevertheless, there are two peak-level federations of unions active in VET governance: the Swiss trade union federation (*SGB*) and *Travail.Suisse*. However, this fragmentation is primarily rooted in the ideological origins of the trade union movement (social democratic vs. Christian democratic) and not in economic interests.

Among the *OdA* publicly recognized as responsible for an occupation in initial VET, the very large majority represent employer interests (97%). In contrast, only 15 *OdA* represent employee interests (10 %).[5] However, it is worth mentioning that not a single of these *OdA* is a direct member of one of the two peak-level trade union federations. Put differently, at the level of occupations, the "strong position of the [occupational] associations … and the employers [comes] at the expense of the position of trade unions,

[5] Ten *OdA* represent both employee and employer interests.

whose influence is relatively weak in comparison to the unions in Germany" (Rohrer & Trampusch ,2011, p. 148). In other words, in the case of initial VET, union involvement is the exception rather than rule.[6]

The unions' limited role in the administration, governance and reform of training at the occupational level is also reflected in the limited role of collective agreements in the Swiss VET system. In fact, collective agreements play such a small role that the most comprehensive textbook presenting the system (Wettstein, Schmid & Gonon, 2014) does not even mention them. Part of the reason for the collective agreements' insignificant role may be found in the fact that in Switzerland, the main private actors in VET governance are often organized along occupational lines rather than sectoral lines as in Germany (Emmenegger, Graf, & Trampusch, 2019). In addition, while occupational associations of employers have a long tradition and are strongly involved in VET governance, occupation-based employee associations have gradually disappeared over time with only few associations left. As a result, the occupational associations of employers often lack a counterpart on the employees' side.

Hence, in a comprehensive survey of the role of collective agreements in VET, Trampusch et al. (2010, p. 2) observe that although in Switzerland collective agreements "partially determine the apprentices' wages as well as their working conditions (in particular: vacations)", their regulation through collective agreements "is far less comprehensive and standardized" compared to Germany. In addition, they note that while there *may* be examples of sectoral training funds based on collective agreements, they are certainly dwarfed by the training funds administered by *OdA*. In our survey, we have found that 35 *OdA* manage such funds. However, given the predominance of employer interests in these organizations, the administration of these funds does not involve any trade unions. In fact, only four among the 35 *OdA* with such VET funds also represent employee interests.

Regarding their second role, *OdA* occupy a key role in the strategic development of the VET system at the federal level. Here, trade unions play a more important role because the federal state aims to avoid conflicts and foster consensus by including all relevant stakeholders in policy-making (Rüegg, 1987, pp. 11-12). These stakeholders are the two peak-level employer associations but of course also the two peak-level trade union

[6] However, unions, where they exist, are typically involved in the drafting of training regulations.

federations. For instance, together with representatives of the cantons and the federal state, these four actors meet annually to discuss strategic challenges, which reflects the general consensus-orientation of policy-making in Switzerland and the importance of social partnership. Yet, although employer and employee interests are thus represented on a basis of parity, a closer look at relevant federal-level commissions shows that the employee side is structurally disadvantaged (Farago, 1980; Ebner & Nikolai, 2010).
For instance, in the important Federal Commission on Vocational Education and Training, which provides a forum for strategic discussions with all actors involved in VET governance, nine (out of 15) seats are reserved for non-public actors. However, while of these nine seats, two each are typically reserved for the representatives of the peak-level organizations of employers and employees respectively, the remaining five seats typically go to *OdA*. Yet, as mentioned above, employer interests typically dominate these *OdA*. Other federal-level commissions show a similar picture. We thus agree with Gonon & Maurer (2012, p. 129) who observe that "employers play an important role in the development of VET, whereas trade unions have a much weaker leverage on policy formulation and implementation". Although their involvement in federal-level commissions gives trade union federations the opportunity to influence the strategic development of VET, this role is a limited one. Their minority position in these commissions as well as the unions' limited role at the occupational level leaves them the role as veto players in a system mostly aimed at avoiding conflicts and fostering consensus among all stakeholders.

In sum, unions play a rather marginal role in the Swiss VET system, which sharply contrasts with the German case. This observation begs two questions. First, how does strong union involvement influence a VET system (section 3)? Second, why do unions play an important role in the German system but not in the Swiss one (section 4)?

Does It Matter?

Broadly speaking, the political economy of skills literature (e.g. Thelen, 2004; Greinert, 2004; Busemeyer & Trampusch, 2012) argues that unions in Germany tend to have a clear preference for the promotion of general skills – as opposed to firm-specific skills – in apprenticeship training. Next to emancipatory goals, this preference is linked to a desire to decrease the dependence of workers on individual employers. Concurrently, the proportion of productive tasks in the firm relative to general schooling should ideally be relatively low. Furthermore, unions in Germany are arguing in favour of decent

apprenticeship wages. If these demands lead to net trainings costs for firms, unions prefer employers to carry such costs or, alternatively, the public purse. Not least, unions have a strong interest in apprenticeship training as an important recruitment channel.

Given the strong role of unions in the German VET system, we should expect German apprentices to attend more school-based training, to earn higher wages and to spend less time in productive tasks than their Swiss peers. In addition, we should expect German firms to shoulder a larger share of the cost of training. Fortunately, in recent years, researchers have made great progress in gathering data on these issues. In a nutshell, the available empirical evidence indeed corroborates our expectations about a "social" German and a "liberal" Swiss VET system.

In a comparative study, Dionisius et al. (2009) show that Swiss apprentices spend more time in productive tasks than German ones. They estimate that "the share of the time allocated to non-productive activities to German apprentices exceed the corresponding values for Swiss apprentices by 36%-points in the first year, 28%-points in the second year and 18%-points in the third year" (Dionisius et al., 2009, p. 12). At least part of this difference can be explained by the time apprentices spend in school-based (rather than firm-based) training. Here the average difference between Germany and Switzerland amounts to 15 days in the first year of training, 10 days in the second and 8 days in the third. Taking time spent in internal and external courses as well as internships in other establishments also into account increases the difference to 23 days in the first year, 18 days in the second and 13 days in the third year of training (Dionisius et al., 2009, p. 12). While it is difficult to draw a causal link between union involvement and time spent in non-productive tasks/school-based training, Swiss unions are long-time advocates of the expansion of school-based vocational education (Tabin, 1989, pp. 125-126; Gonon & Maurer, 2012, p. 139). In a similar vein, German unions have repeatedly emphasized the importance of general skills and school-based training (Busemeyer, 2009, pp. 160-161).

Swiss apprentices do not only spend more time in productive tasks, they also earn considerably less. In the metalworking sector, apprentice pay as a proportion of that of skilled workers is around 29.2% in Germany, but only 14.1% in Switzerland (Ryan et al., 2013). Unions play a key role in explaining this difference because apprentice pay in Germany is set by collective agreements, while it is not in Switzerland (Mühlemann

et al., 2010). In addition, German unions are continuously pushing for higher apprentice pay, while Swiss unions neither seek this role in pay setting nor advocate a general increase in apprentice pay (Ryan et al., 2013, p. 6). Rather, their main interest lies in increasing the lowest rates offered by particular firms. Unsurprisingly, given these differences in wages and time spent in productive tasks, net costs of training are substantial for German training enterprises, while training turns out to be on average *profitable* for Swiss firms. For a three-year training programme, the difference in net costs from the firms' perspectives between Germany and Switzerland amounts to, on average, 25'000 Euro (Dionisius et al., 2009, p. 21).

Why This Difference?

In this section, we examine the historical origins of the different role of unions in German and Swiss VET. To preview our argument, unions in Germany and Switzerland have similarly demanded a key role in VET governance. While the interwar period was a critical conjunction in determining the unions' role in both countries, the situation of German and Swiss unions differed in two important ways during this period. First, the German unions' ability to mobilize was considerably stronger, which implies that only the German unions had the power resources necessary to secure an important role in VET governance. In addition, in Germany, the unions' traditional ally, the social democratic party, was better represented at the political level than in Switzerland, both in the interwar period as well as later. Second, Swiss political institutions (in particular direct democracy and federalism) are such that cantonal authorities ultimately claimed the central task of monitoring firm-based training, thus pre-empting any possibility of unions playing a key role in this area. Finally, we argue that due to the path-dependent nature of political processes, these differences are still relevant today. Put differently, contingent events in the interwar period set into motion different event chains in Germany and Switzerland, which have relatively deterministic causal patterns, thus resulting in lasting differences (Mahoney, 2000, p. 511). Our comparative-historical analysis thus confirms recent scholarship on the role of critical junctures and path-dependent processes in development of skill formation policies (most notably Thelen, 2004).

The origins of VET systems can be traced back to the establishment of guilds in the Middle Ages. However, VET systems began to diverge in the 19th century, giving rise to collective, liberal, segmentalist and statist skill formation systems (Busemeyer &

Trampusch, 2012). In some way, the collective systems remained closest to traditional guild-dominated forms of training (Bonoli, 2015, pp. 32-33). These systems rely on a rather complex governance structure, based on the cooperation between several actors and are thus prone to cooperation breakdowns (Streeck, 1992). In particular, these systems survived only in countries where skills were not too openly contested across the class divide, which means that unions accepted a key role of firms in training, which was a necessary condition for the survival of strong firm-based training (Culpepper & Thelen, 2008, p. 28). More concretely, artisanal control over apprenticeship "meant that unions developed in a context in which strategies based on controlling craft labor markets were not a viable option – which in turn meant that skill formation in industry would not be contested across the class divide" (Culpepper & Thelen, 2008, p. 26). Yet, while German and Swiss unions accepted the important role of firms in the training systems, they nevertheless demanded comprehensive legislation of VET and were concerned about the apprentices' working conditions in firm-based training.

The two countries' paths began to diverge in the aftermath of the First World War. In Germany, four days after the capitulation on November 11, 1918, several employer associations and unions signed the Stinnes-Legien agreement, which paved the way for collective labour agreements and the creation of works councils. An unprecedented mobilization of the labour movement had made this famous agreement possible (Paster, 2013, pp. 72-79). In October and November 1918, worker and soldier councils had formed throughout the country. According to Sassoon (2010, p. 48), developments in Germany "approximated a revolutionary situation". In this political context, at the congress of German unions in Nuremburg in 1919, the unions also began to request a key role in VET governance and a comprehensive regulatory framework (Greinert, 1998, p. 85). Importantly, however, the German unions did not question the system as such, but rather accepted the firms' role in VET (Thelen, 2004, pp. 66-72).

Massive labour mobilization in the immediate post-war period resulted in several political breakthroughs for the labour movement in areas such as dismissal protection (Emmenegger, 2014, pp. 95-99) and unemployment insurance (Paster, 2013, pp. 95-109). In the case of VET, progress was slower. Part of the problem was the question whether terms and conditions agreed in collective negotiations applied to apprentices, which was finally settled in 1928, when the Labour Court decided that apprenticeship contracts were indeed a type of employment contract and thus subject to collective

agreements (Thelen, 2004, pp. 70-71). But at that time, the post-war mobilization had already abated (Paster, 2013). Hence, the post-war period did not bring full union participation in the oversight of firm-based training yet, but as Thelen (2004, p. 63) insists, much of the groundwork was laid in this period.

Once the next window for reform opened in the aftermath of the Second World War, German unions reiterated their demand for comprehensive legislation of VET and a key role for unions. In the post-war period, the combination of economic turmoil, left-wing empowerment and programmatic radicalization created a fertile ground for far-reaching union demands, while employers were keen on regaining political stability and thus willing to compromise (Paster, 2013, pp. 111-118; Emmenegger, 2014, pp. 54-57). German unions took advantage of this political situation to advance demands regarding the reform of the VET system. Yet, once again, "Germany's unions did not seek a complete overhaul of the country's training system, and instead returned to demands they had first articulated in 1919, fixing their hopes on legislation to guarantee organized labor full parity rights with the system" (Thelen, 2004, p. 255). In addition, vocational education and training was not one of the unions' primary objectives (Crusius, 1982, pp. 90, 95). Instead, German unions pushed, among others, for more comprehensive dismissal protection, most notably the 1951 Dismissal Protection Act (Emmenegger, 2014, pp. 108-111). Nevertheless, the laws of 1953 and 1956 allowed union representatives to participate fully in the employer chambers' internal deliberations on training, which finally gave unions a voice in VET governance (Streeck, et al. 1987, pp. 9, 18; Thelen, 2004, p. 241).

However, the German unions were not satisfied with their still limited role. In cooperation with the Social Democratic Party, they continued to push for a comprehensive legislation of VET for some time. In 1966, the Social Democrats submitted a draft law to parliament. In the same year, the elections brought for the first time in German post-war history the Social Democrats to power. The Social Democrats, as junior partner in the so-called Grand Coalition with the Christian Democrats, had to compromise (Greinert, 1998, pp. 87). Nevertheless, the resulting 1969 Vocational Education and Training Act finally contained the overarching national legislation and created new oversight structures with strong union involvement for plant-based vocational training consisting of tripartite boards, for instance, at state and national level (Thelen, 2004, pp. 241-242). Following the 1969 election, which the Social Democrats won, the new government further institutionalized workers' participation rights in the

corporate sphere, most notably the 1972 Works Constitution Act and the 1976 Co-Determination Act (Emmenegger, 2014, pp. 153-155). Hence, by the mid-1970s, German unions had institutionalized their key role in VET governance and beyond. In fact, social democratic and union strength at the time was such that some criticized the reforms as not going far enough, given demands for a reduced role of chambers as key locus of VET governance and, more generally, less influence of employers in VET governance (Busemeyer, 2009, pp. 79-83).

Switzerland adopted a comprehensive national VET act already in 1930. However, the Swiss experience differed in two key regards. First, although Switzerland moved faster than Germany, by the time the 1930 act was about to be passed, cantonal legislation had already filled much of the policy space, thus pre-empting federal regulations in certain key areas and institutionalizing the important role of cantons in VET governance (Maurer & Gonon, 2012; Bonoli, 2015). Swiss federalism is such that jurisdiction lies with the cantons unless the right to legislate is given to the federal state by a constitutional revision. Since each constitutional revision is subject to a mandatory referendum, policy change at the federal level is often delayed (Obinger, 1998). Indeed, in 1894, due to regional concerns about a centralization of power and a lack of respect for cantonal peculiarities, a majority of 53.9% of the Swiss voting population refused to grant the federal state the right to legislate in the area of VET (Bonoli, 2015, pp. 31-35).

Only 14 years later, in 1908, the federal state was given the right to develop a national framework legislation (Bauder, 2008, pp. 17-21, 26). However, in the meantime, the cantons had passed their own regulations. By 1908, already 14 out of 25 cantons had enacted their own rules (Wettstein, 1987, p. 45). After the First World War, when the expert commission began drafting the federal law, this number had increased to 22 out of 25 cantons. Among others, the cantons claimed the right to organize examinations and oversight of firm-based training (Wettstein, 1987, pp. 44-47). Hence, one of the key demands of German unions, an important role for unions in the monitoring of firm-based training, had already been taken off the table when the discussions about the new national framework legislation began.[7] In Switzerland, this task was to remain a public duty of the cantons, which is likely to make a difference. In this context, it is relevant to

[7] The Swiss unions accepted the cantonal responsibilities in the oversight of firm-based training (as well as the important role of firms in the training system), as the proposal for a first federal act by the *Arbeiterbund* in 1911 shows. We thank Lorenzo Bonoli for this point.

consider the relation between cantons and businesses. For instance, Rüegg (1987, p. 14) argues that cantonal interests are often aligned with the interests of regionally dominant economic sectors, turning cantonal VET offices into the "mouthpiece" of employer interests. Similarly, Maurer and Pieneck (2013, p. 191) argue that cantonal VET offices neither have the resources nor are they interested in monitoring firm-based training closely.

Second, although Swiss unions were active participants in the discussions on the federal regulatory framework for VET (Tabin, 1989, pp. 94-99), they had nowhere near the mobilization capacity of German unions (Emmenegger, 2014). Nor did they have the political support by an electorally strong social democratic party. The discussions were thus largely dominated by employers, in particular the Swiss Trade Association (*SGV*). For instance, Bauder (2008, p. 37) reports that for the 1930 VET act, the draft law developed by the SGV, which emphasized the important roles of cantons, occupational associations and historically grown regional structures, served as the main basis. In contrast, the parallel proposal made by the Swiss trade union federation (*SGB*), which emphasized further measures to protect apprentices from abuse, was mostly ignored in the deliberations.

However, this conflict of interests should not be overdrawn. Swiss unions were openly supportive of the VET system despite the important role it leaves to firm-based training (Tabin, 1989, p. 95; Bonoli, 2015, p. 34). In addition, despite occasional references to class struggle in the national debate on the 1930 law, the unions were in fact cooperating with occupational associations at the regional level, which indicates that the unions accepted the occupational associations' lead role in VET matters (Bauder, 2008, pp. 24-25, 43). The unions also supported the 1963 and 2002 VET acts, which extended the VET system's regulatory framework to further sectors but did not substantially strengthen the unions' role in VET governance (Wettstein, 1987, p. 58; Strahm, 2008). Yet, the unions vehemently opposed the 1978 VET act, because it aimed to introduce short-track dual training programmes with reduced school-based training, while the unions demanded a general strengthening of the role of general skills (Tabin, 1989, pp. 128-129; Ebner & Nikolai, 2010, p. 636; Berner, 2013, p. 43). However, the unions lost the subsequent referendum campaign clearly.

In sum, although social partnership characterizes the VET system in both countries, the German system awards unions a considerably stronger role. In the Swiss system, cantonal VET laws pre-empted a relevant role for unions in the monitoring of firm-based training, while Swiss unions' weaker mobilization capacity did not allow them to secure a key role in VET governance. Partly because of the key role of unions, the German system is today characterized by a considerably stronger sectoral focus and is well integrated into the collective bargaining system. In contrast, the Swiss system is still primarily organized along occupational lines with only a minority of *OdA* also concluding collective agreements. The Swiss system's occupational "logic" is likely to have further contributed to its de-politicization compared to the German system based on work councils and regional chambers. Primarily organized along sectoral lines, Swiss unions do not match up well with *OdA*. We thus observe an endogenous self-reinforcing process (Pierson, 2000), in which the Swiss system's occupational logic complicates mobilization for unions, which in turn supports the system's occupational logic and thus the acceptance of employers' privileged position.

Conclusion

Germany and Switzerland probably feature the most prototypical collective skill formation systems. However, these – in many ways – very similar systems differ in at least one crucial aspect. While the German system involves unions at all levels prominently, unions play a more marginal role in the Swiss system. The consequences of this differential involvement are as the literature on neo-corporatist interest intermediation systems would expect them to be (Streeck, 1992). In the "liberal" Swiss system, apprentices earn less and spend more time in productive tasks. In contrast, in the "social" German system, net training cost for firms is higher and apprentices spend more time in vocational schools. Finally, German unions play a central role in the monitoring of firms' training activities, while in Switzerland, this task is left to cantonal VET offices.

These differences originate in the period when trade unions became for the first time seriously interested in participating VET governance. Yet, in these crucial 1920s, the political situation in the two countries was very different. The German unions' ability to mobilize was considerably stronger, which allowed them to claim an important role in VET governance. In addition, Swiss political institutions are such that cantonal authorities claimed the central task of monitoring firm-based training at an early stage,

thus pre-empting any possibility of unions playing a key role in this area. In line with the historical-institutionalist literature on path dependency (Mahoney, 2000), these differences are still relevant today, resulting in a Swiss system that is more occupational than the German one, which is likely to have even further accentuated the employers' structurally privileged position.

This difference is not necessarily bad news for the Swiss system. Collective skill formation systems have come under pressure in recent years. Most notably, it has become increasingly difficult to mobilize firms to invest in training (Thelen, 2014). Switzerland tries to address this challenge by making its training system particularly employer-friendly. Swiss apprentices earn less and spend more time in productive tasks. Consequently, training is – on average – profitable for Swiss firms, while the net costs of training are substantial for German host enterprises. In addition, the Swiss employers' central role in VET governance suggests that they are in a good position to shape the system according to their needs.

Nevertheless, there are some checks and balances in the Swiss VET system. Instead of unions, cantonal VET offices are responsible for monitoring firms' training behaviour. Like unions, they have an interest in avoiding abuse. However, within corporatist systems, public actors are probably careful to ensure that public policies do not undermine collective action of employers. In addition, regional political institutions might be captured by regional economic interests. Yet, apprentices might also vote with their feet. If dissatisfied with the training possibilities, apprentices might increasingly opt for fully school-based VET or general academic schooling, although the extent to which apprentices have a real choice of course varies.

With regard to Germany, recent research suggests that owing to increasing deregulation of the German labour market, firms adapt their training practices by increasing the share of productive tasks of apprentices at the workplace (Jansen, et al. 2015). Thus, although unions are well represented at all levels, change in training practices may move the German system in the direction of the more liberal Swiss one. In collective skill formation systems, employers can be expected to constitute the pivotal actor. If they are forced to engage in too many compromises, far beyond what Streeck (1992) calls beneficial constraints, they might withdraw from training altogether, thus aggravating the collective action problem that any collective skill formation system faces. Hence,

these reflections could suggest that collective skill formation systems survive only if employers are given the keys to the engine room. Whether this is a price worth paying to ensure the future viability of these systems is a political question.

However, what our analysis indicates is that scholars interested in collective skill formation can only benefit from looking beyond the well-known German case to understand how the collective good of apprenticeship training can be provided even without strong union involvement. Without wanting to implicate that the Swiss experience can be easily replicated, this finding should nevertheless be relevant for the numerous policy makers around the world aiming to build up collective governance structures for apprenticeship training – even in times of declining union membership.

2. New Interest Associations in a Neo-Corporatist System: Adapting the Swiss Training System to the Service Economy[8]

With Patrick Emmenegger and Lukas Graf

Collective skill formation systems need to adapt to economic change, most notably the expansion of the service economy. However, deeply anchored in the craft and industrial sectors, these systems rely on neo-corporatist institutions to undergird firms' training provision, which are often missing in the service sector. We show that Switzerland's voluntaristic approach to interest intermediation provided the flexibility needed to extend vocational training to economic sectors without neo-corporatist institutions. Yet, these adaptations resulted in the emergence of interest associations characterised by low levels of generalisability and governability. These new associations co-exist with neo-corporatist ones, rendering the overall training system surprisingly heterogeneous.

Introduction

With the decline of the industrial sector and the expansion of the service economy, skill formation systems need to be adapted, which is particularly challenging for collective ones (Culpepper & Thelen, 2008). Originally anchored in the craft and industrial sectors, these systems rely on employers' contribution to the collective good of transferable skills, i.e. the provision of skills beyond firm-specific needs. Neo-corporatist institutions play a key role in undergirding firms' training provision (Marsden, 1999; Culpepper, 2003; Busemeyer & Trampusch, 2012). Most notably, employer associations are of crucial importance, because they define training contents in line with their members' skill needs, represent their members' interests and promote information exchange. This encourages firms' participation in training and ensures a close fit between labour market needs and training, which facilitates school-to-work transitions. Yet, newly emerging sectors often lack such capable employer associations, while in traditional sectors these

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associations are affected by liberalisation (Eichenberger & Mach, 2011), raising the question of how collective skill formation systems can be adapted to the service economy.

This question mirrors the larger debate about the adaptability of coordinated models of capitalism in the face of structural pressures (Thelen, 2014). With some scholars observing a common neoliberal trajectory, the future viability of such coordinated models has been questioned (Baccaro & Howell, 2017). Among others, coordinated models of capitalism are argued to suffer from a "manufacturing bias", making scholars wonder whether they can cope with an increasingly service sector-oriented economy (Blyth, 2003, p. 222). Importantly, comparative capitalism scholarship considers collective skill formation systems a defining feature of coordinated models of capitalism (Thelen, 2009, p. 480). Indeed, several analysts observe an increased role for the state in providing training as well as a rationing of access to employer-provided training in countries such as Austria, Denmark and Germany (Thelen, 2014; Durazzi & Geyer, 2020; Carstensen & Ibsen, 2019). Hence, challenges related to skill formation promise to speak more broadly to debates about dynamics of institutional change in advanced Western economies.

We examine the relationship between vocational education and training (VET) and neo-corporatism by exploring how collective skill formation systems can be adapted to the service economy. We focus on the associational system, which is considered crucial for fostering the provision of collective goods by private actors (Schmitter & Streeck, 1999; Culpepper, 2003) but has received comparatively little attention in the otherwise rich literature on collective skill formation. In a neo-corporatist associational system, interest associations unite firms or employees, often in specific economic sectors, and are hierarchically ordered in encompassing peak associations. These associations engage in collective interest representation regarding various policy domains, for example product or labour market issues. They are supposed to integrate broad interests and form long-term goals rather than representing narrow, short-term interests of their members. Such long-term goals can be aligned with public policy aims, for example firms' offering transferable skills.

Empirically, we focus on the Swiss case, which is a prototypical collective skill formation system (Busemeyer & Trampusch, 2012). Skill formation is a core area of

Swiss neo-corporatism with employer associations playing a key role in VET governance (Farago & Kriesi, 1986). Yet, in the early 2000s, Switzerland embarked on a major VET reform to adapt its skill formation system to the service economy and in this process also reshaped the associational system. The reform contributed to adapt VET to the service economy by integrating new economic sectors, such as the health and care sectors, and updating training in the existing VET occupations. Often, this implied founding new interest associations. We find that many of these new organisations are not traditional neo-corporatist associations but correspond to a new type of interest associations, which we call VET organisations. Unlike traditional neo-corporatist associations, these new VET organisations are interest associations exclusively focused on skill formation but bring together very diverse actors (e.g. employers, employees, public authorities, vocational schools). Today, such new VET organisations are responsible for eight of the ten most common training occupations in Switzerland. These occupations account for over 50% of all apprenticeship positions (SBFI, 2018c, p. 14) and include important service sector occupations such as clerks, care workers and sales assistants. In this way, VET organisations contribute to anchor the VET system's role in the educational landscape as roughly 60% of school-leavers continue to enter dual VET (OECD, 2017a).

We argue that the voluntarism of the Swiss interest intermediation system enabled this transformation of the associational system. This voluntarism allowed a more flexible and less demanding organisation type to emerge and assume VET governance activities in the newly integrated sectors, which in more traditional VET sectors continue to be performed by neo-corporatist association (traditional company, occupational and employee associations). Following Streeck (1997), a voluntaristic approach to cooperation emphasizes actors' perception of their economic self-interest rather than exogenous constraints. In the Swiss context, this voluntarism concerns in particular the lack of national regulations regarding the organisation type of interest associations, which contrasts with the more hierarchically organised German or Austrian systems (Rauner, 2009; Emmenegger et al., 2020). Instead of prescribing a specific organisation type, the new VET law introduced the umbrella term *organisations of the world of work* (OdA), which refers to both traditional neo-corporatist interest associations and VET organisations. Importantly, this voluntarism is not a new trait of Swiss neo-corporatism (Höpflinger 1984). However, it is only with the recent VET reform that this voluntarism led to a significant transformation of the associational system. Given the important role

of traditional neo-corporatist associations in the provision of collective goods, this transformation raises the question of how this new type of interest associations, what we call VET organisations, can still play their part.

To address this puzzle, we have compiled a comprehensive database on the 146 OdA that currently perform public policy functions in initial VET. We analyse the associational system and organisation-level characteristics of the OdA through the theoretical lens of interest intermediation theory on business and labour associations (Traxler, 1993). First, we use the concept of "generalisability" to distinguish organisation types with regard to their membership composition and domain of interest representation. In contrast to traditional associations, the new type of interest association, the VET organisation, includes heterogeneous constituencies and limits its domain to the VET policy field. Second, we show that the OdA types vary in terms of "governability" as they develop different strategies to gain autonomy from members and represent interests in VET governance. Most notably, VET organisations develop organisational autonomy by offering VET-specific services and representing their constituencies' interests outside traditional employer confederations (e.g. at events organised by government agencies). Overall, traditional neo-corporatist associations of employers and employees are still the dominant OdA types in terms of number of associations. Yet, we show that the new type of interest association is responsible for occupations with comparatively large numbers of apprentices and training firms.

Our analysis suggests that Switzerland's voluntaristic approach to interest intermediation contributed to the training systems' ability to adapt collective governance structures to the service sector. The Swiss variety of neo-corporatism provided the flexibility needed to reorganise VET in traditional sectors and extend it to economic sectors that lack a neo-corporatist tradition. However, these adaptations resulted in the emergence of a new type of organisation, alongside the traditional neo-corporatist associations. Put differently, it is precisely the associations characterised by low levels of neo-corporatism (i.e. low generalisability and governability) that allowed Switzerland to adapt its training system to the service sector. While our findings do not suggest that coordinated models of capitalism are subject to a common neoliberal trajectory, they indicate that new organisation types can be used to maintain employer cooperation.

Collective skill formation, neo-corporatism and the Swiss VET reform

In this section, we first review the relationship between neo-corporatism and collective skill formation systems. Subsequently, we discuss a reform of the Swiss VET system, which had a transformative effect on its associational landscape.

Neo-corporatist associations in collective skill formation systems

In collective skill formation systems, firms contribute to the provision of the collective good of transferable, certified skills. Yet, firms offering apprenticeship positions have to overcome a cooperation dilemma. Investing in such skills is only worthwhile if a sufficient number of other firms participate in training and do not poach skilled workers from training firms. Complex institutional arrangements secure this decentralised cooperation among firms. Interest associations of employers contribute to the administration of training (Busemeyer & Trampusch, 2012; Culpepper, 2003), labour market institutions restrain labour mobility and provide employment protection (Streeck, 1997; Acemoglu & Pischke, 1999), while collective wage bargaining institutions lead to wage compression, which makes investment in training worthwhile for firms (Busemeyer & Iversen, 2012; Thelen, 2014).

Unsurprisingly, then, collective skill formation systems are closely associated with neo-corporatist institutions (Marsden, 1999; Busemeyer & Trampusch, 2012). In an ideal-typical neo-corporatist country, hierarchically coordinated, encompassing employer and labour interest associations are systematically involved in policy-making and implementation, union membership is high and wage bargaining is coordinated (Streeck & Kenworthy, 2005). Thus, collective skill formation systems have historically developed in Austria, Germany, Denmark, the Netherlands and Switzerland, which are all neo-corporatist countries.

Yet, these countries need to adapt their skill formation systems to a changing socio-economic environment such as the expansion of the service sector (Thelen, 2014; Jensen, 2011) and related to this the increasing importance of general skills (Culpepper, 2007; Graf, 2018). Yet, it is precisely in this expanding service sector where encompassing employer and labour interest associations are often missing (Culpepper & Thelen, 2008). In parallel, beneficial constraints (Streeck, 1997) have been loosened due to the decline of centralised collective wage bargaining (Baccaro & Howell, 2017; Busemeyer & Iversen, 2012) and the (partial) deregulation of the labour market

(Emmenegger, 2014; Jansen et al., 2015). If such capable associations of labour market actors are key stakeholders in collective skill formation systems but often missing in the service sector, we face the question of how such training systems can be adapted to the service economy.

While the literature has provided important insights into how formal VET institutions were adapted in response to a changing socio-economic environment (e.g. Trampusch, 2010b; Thelen, 2014), it has paid comparatively little attention to the employer associations at the sub-national level and their role for maintaining high firm involvement in training (for comparable analyses of employer associations, but without a focus on training, see David et al., 2009; Behrens, 2011; Brandl & Lehr, 2019). However, according to interest intermediation theory, these associations of labour market actors foster the provision of collective goods (Streeck & Schmitter, 1985; Marsden, 1999), which is necessary for creating and preserving encompassing collective skill formation systems. In contrast, adopting or maintaining formal institutions for collective skill formation is not sufficient to secure cooperation because these systems rely on firms voluntarily providing training positions (Culpepper, 2003; Emmenegger, et al. 2019). Employer associations are key for creating or maintaining such cooperation and, thus, preventing the system's erosion.

Among collective skill formation systems, Switzerland features the highest participation rate with approximatively 60% of school-leavers entering dual VET (OECD, 2017a), which points to high levels of cooperation among employers. Similarly, firm census data confirms that firms remain active in VET (Müller & Schweri, 2012, p. 16). Surveys of apprenticeship positions show that the firms' total offer of training positions has increased by roughly 10% since 2009 (LINK, 2017, p. 10). At the same time, Switzerland has increasingly turned into a highly deindustrialised economy with the large majority of labour market participants now working in the service sector (Jensen, 2011). This makes the need to adapt the Swiss training system, which still strongly builds on apprenticeship training, to the service economy rather pressing.

Admittedly, Switzerland is a debated case in the neo-corporatist literature. This debate is nurtured by different approaches to conceptualising neo-corporatism. One approach focuses on associational structures (Schmitter & Streeck, 1999), while the other emphasizes the involvement of social partners in governance and a culture of consensus

(Katzenstein, 1985; Lehmbruch, 1984). In the Swiss case, this culture is clearly neo-corporatist, as there is a strong tradition of consultation of all stakeholders and consensus-based decision-making. Yet, concerning associational structures, Switzerland deviates somewhat from the theoretically expected features. For example, Swiss unions are comparatively fragmented and weak. Their limited role in VET is a case in point (Emmenegger et al., 2020). In addition, on the side of business, there is a divide between domestic market-oriented small businesses and large, export-oriented firms (Eichenberger & Mach, 2011).

Yet, traditionally, Swiss interest associations correspond to neo-corporatist expectations. For instance, previous literature on Swiss interest associations identified three main organisation types: occupational associations, which unite self-employed professionals and small firms; company associations, whose members are firms in a given industry; and employee associations such as industrial unions (Fluder et al., 1991; Höpflinger, 1984). In addition, skill formation is a core area of Swiss neo-corporatism with interest associations playing a central role in VET governance (Farago & Kriesi, 1986; Gonon & Maurer, 2012). Overall, then, there is a general consensus that Switzerland is a neo-corporatist country, although a more liberal type than, for instance, Austria (Katzenstein, 1985; Kenworthy, 2003; Trampusch & Mach, 2011).

The 2002 VET reform in Switzerland

The 2002 reform of the Swiss VET system led to a significant transformation of this associational landscape. Launched in the midst of a major apprenticeship crisis and with the aim to modernise the system, the reform preserved the essential institutional dimensions of collective skill formation (Trampusch, 2010b): the alternation of workplace and school-based training, firms' provision of apprenticeship positions and the involvement of interest associations in policymaking and implementation. Moreover, VET legislation continues to support the idea of consensus and negotiation. For instance, all major actor groups, both private and public, are, by law, defined as jointly responsible for governing the system. Social partners are therefore included in national-level commissions for further developing the VET system. Moreover, various tasks are delegated to interest associations, e.g. defining training content, providing interfirm training and managing generally binding VET funds. Yet, even at the occupational level, all stakeholders are consulted during the process of defining and updating training content. Thus, the neo-corporatist ideology of self-governance of

private actors, cooperation with the state and a culture of consensus (Katzenstein, 1985; Lehmbruch, 1984) continue as uncontested cornerstones of VET governance.

However, besides these elements of continuity, the 2002 reform also entailed important changes at the level of interest associations and occupations. Most importantly, the 2002 reform integrated training previously regulated by regional authorities or other federal departments into national VET legislation. This concerned a diverse group of economic sectors, most notably service sector occupations in areas such as health, care and arts. The reform transferred the traditional governance model of apprenticeships to these sectors, which implied creating new interest associations to take over public tasks, because such associations were typically missing in the newly integrated economic sectors (Rauner, 2009).[9]

The newly created interest associations deviate from the traditional neo-corporatist ones typically involved in VET governance because they bring together very diverse actors and focus exclusively on VET. The VET act accounted for this new diversity of interest associations by introducing the umbrella term *organisations of the world of work* (OdA). This term denotes all organisations that represent labour market actors' interests in the VET policy area, that is, traditional neo-corporatist associations as well as the new type of interest associations.

Although public authorities were strongly involved in creating new and reorganising existing occupations, they relied on a voluntaristic approach to cooperation with labour market actors, i.e. they did not prescribe an organisation type for the interest associations involved in VET governance. Voluntarism implies that cooperation occurs based on actors' perception of their economic self-interest rather than based on constraints (Streeck, 1997, pp. 302-303). With regard to OdA, we characterise federal regulations as prescribed by the 2002 VET reform as voluntaristic because they do not prescribe an organisation type for interest associations and membership of firms in these organisations is strictly voluntary. Thus, rather than obliging labour market actors to organise in a one-size-fits-all organisation type, Swiss VET legislation allows interest associations to find an individual solution for each occupation. In principle, any type of

[9] Moreover, public authorities encouraged occupations to merge to form broader occupational fields. This implied bringing together neo-corporatist associations from several occupations to define training content together. In this process, the responsible interest associations sometimes reorganised as well.

interest association can become an OdA on the condition that public authorities delegate tasks in VET governance to them, which is decided on a case-by-case basis (BBT, 2007). Hence, although the reform led to only one new organisational type (what we call VET organisations), this type was not pre-defined, but emerged bottom-up.

By including new economic sectors and reorganising existing occupations, the VET reform led to a transformation of the Swiss associational landscape. While the traditional organisation types (occupational, company and employee associations) still seem to correspond to neo-corporatist expectations, the current associational system in VET governance includes a new type of organisations, which – in contrast to the traditional associations – is typically only active in the policy domain of VET. These VET organisations have mainly been created in response or in anticipation of the 2002 VET reform, which identifies the reform as the trigger for organisational change among interest associations (see Table 3-1).[10] However, also traditional organisation types are continuously founded. Hence, the new organisation type does not simply replace others but coexists in the associational system.

Table 2-1: Founding periods of OdA by organisation type

	OdA types			
Period	Occupational association	Company association	Employee association	VET organisation
2001 – 2015	5 (16%)	7 (13%)	0 (0%)	17 (81%)
1981 – 2000	5 (16%)	9 (17%)	0 (0%)	3 (14%)
1961 – 1980	6 (19%)	7 (13%)	2 (66%)	0 (0%)
1941 – 1960	3 (10%)	4 (7%)	1 (33%)	0 (0%)
1921 – 1940	1 (3%)	4 (7%)	0 (0%)	1 (5%)
1901 – 1920	6 (19%)	11 (20%)	0 (0%)	0 (0%)
before 1900	5 (16%)	12 (22%)	0 (0%)	0 (0%)
Total	31 (100%)	54 (100%)	3 (100%)	21 (100%)

Note: Data on the founding years are missing for the remaining 37 organisations.

In this article, we argue that the voluntaristic variety of Swiss neo-corporatism enabled the country to transfer its VET system to new economic sectors and reorganise existing

[10] The main exception is the OdA Hotel & Gastro Formation, founded in 1926. However, only with the 2002 reform did VET organisations become widespread.

occupations. Although these are not the only adaptations of the Swiss VET system (Trampusch, 2010b; Gonon & Maurer, 2012), this reorganisation process seems crucial for adapting the training system to the service sector, because it resulted in the creation of new VET organisations in the most common service-sector occupations in which a large number of apprentices are trained. Moreover, the increased heterogeneity of interest associations is puzzling because traditional neo-corporatist associations are believed to play a crucial role in the provision of collective goods. To examine this transformation, this article applies concepts developed in the literature on business interest associations and labour unions to Swiss interest associations involved in VET governance. We introduce these concepts in the next section.

How associations foster cooperation

Employer associations are key in fostering the provision of collective goods by private actors. Theories of interest intermediation systems suggest that associational characteristics vary systematically, outlining the contours of ideal-typical neo-corporatist and pluralist associational systems that underpin the involvement of private interests in policymaking (Streeck & Kenworthy, 2005). This section depicts these ideal-typical characteristics. In addition, we argue that theories of interest intermediation systems can be applied to Swiss OdA. The concepts of generalisability and governability are particularly useful and are discussed in detail.

Early theories of interest intermediation systems outlined how two ideal-typical systems deal with interest associations (Schmitter & Streeck, 1999). Associations in pluralist systems (e.g. Great Britain) represent narrow interests and do not support the provision of collective goods. They are limited to organise actors with similar interests and represent these interests through lobbying. Such associations are in competition, have overlapping domains and associational systems are fragmented. Pluralist associations may be particularly capable of recruiting and binding members with similar interests. Yet, they lack the ability to form more general goals in line with public policies. Conversely, in neo-corporatist systems (e.g. Germany), interest associations contribute to the provision of collective goods (Streeck & Schmitter, 1985). In these systems, the state delegates public tasks to interest associations, which allows them to gain more autonomy and authority vis-à-vis their members. This enables them to unify diverging interests of a heterogeneous membership and develop forms of regulated self-regulation or private interest governance. These associational systems tend to be hierarchically

ordered and organisational domains do not overlap. Neo-corporatist associations fulfil important political-economic functions.

Although primarily rooted in the literature on business associations and labour unions, theories of interest intermediation systems also provide useful analytical tools for understanding Swiss OdA. As interest associations, all OdA need to address the same challenges as traditional business and labour interest associations: overcoming collective action problems and balancing members' interests and public authorities' demands (the logics of membership and influence in Schmitter and Streeck's terminology). Moreover, applying these concepts to traditional and new types of interest associations allows us to systematically analyse the variety of associational strategies used to foster employers' contributions to collective goods provision.

Our analysis of Swiss OdA focuses on two prominent concepts within theories of interest intermediation systems: generalisability and governability (Traxler, 1993, 2007). Generalisability addresses the issue of how broadly an organisation defines its domains of membership and interest representation. Governability allows understanding how interest associations manage to unify the potentially divergent interests of their members at the organisational and associational system levels.[11]

Generalisability

Generalisability relates to the breadth of interests included in and represented by an interest association. Public authorities typically prefer to delegate public tasks to encompassing associations because they cannot easily externalise negative effects of the policies they promote. Therefore, these policies are closer to collective interests (Traxler, 2007). Associations' generalisability influences their ability to foster collective action. Narrowly scoped associations find it easier to define interests because their members are more similar and interests more homogeneous. In this case, collective action is often fostered through normative means, e.g. the creation of a collective identity and norms of appropriate behaviour. Conversely, encompassing associations need to unify more heterogeneous interests and, thus, tend to use more coercive means or selective incentives to bind members (Schmitter & Streeck, 1999).

[11] Next to generalisability and governability, research often focuses on the interest associations' capacity to recruit and bind members (associability). However, we are primarily concerned with employers' participation in the provision of the collective good of certified, transferable skills, which in Switzerland is not directly linked to membership in interest associations.

Generalisability has two sub-dimensions: *membership composition* and *domain of interest representation* (Behrens & Helfen, 2009). Members may differ with regard to their type, i.e. individuals, firms or other collective actors, the sectors in which they are active or, in the case of business associations, firm size. The business association literature highlights that associations in which large firms play an important role find it easier to bind members, due to their role as highly interested actors with the ability and will to contribute disproportionally to the costs of collective goods (Traxler & Huemer, 2007). Yet, these associations may be less autonomous from members and represent mainly the interests of powerful members (Traxler & Huemer, 2007). Besides firm size, homogeneity in interests is also higher if firms stem from the same economic sector. Homogeneity in terms of firm size and economic sector may facilitate finding internal consensus but comes at the cost of less political influence (Behrens & Helfen, 2009). Regarding collective skill formation, large firms have also been identified as key actors for overcoming collective action problems and promoting transformative institutional change (Culpepper, 2007; Trampusch, 2010b).

Concerning interest representation, research on business associations distinguishes two domains: Associations active in the product market domain aim to influence tariffs, taxes, regulations for environment protection and the like. In the labour market domain, associations are involved in wage bargaining, VET and social policies. Associations may also be active in both domains, which is the most encompassing type of association. In contrast, some Swiss OdA are active only in VET and thus have a narrow domain. They limit their activities to training, which is a sub-domain of labour market policies because it determines the supply of a skilled workforce (Busemeyer & Iversen, 2012).

Governability

Governability or associations' ability to control members' behaviour is a key factor for the interest association's capacity to assume public policy functions (Streeck & Schmitter, 1985). The governability of interest associations is defined as their capacity to "unify [their members'] diverging interests" (Traxler, 1993: 678). Associations should have the capacity to "mould" their members' interests and police them (Traxler, 2007, p. 27). We distinguish two sub-dimensions that favour governability: *organisational autonomy* and *organised complexity.*

Organisational autonomy is a precondition for the association's capacity to form goals. An autonomous association influences the formation of common goals rather than just representing members' interests. Interest associations achieve organisational autonomy by diversifying their sources of income or by cooperating with the state that grants it organisational privileges (Traxler, 2007, p. 28). For example, selling services for members or state sponsorship contribute to income diversification and indirectly increase organisational autonomy. However, previous research has shown that associations often provide services for members for free as selective incentives. This option for income diversification is thus restricted (Traxler, 2007, p. 29). More importantly, the associations may derive autonomy through diverse forms of state licensing (Traxler, 2007, p. 29). They provide goods or services that are linked to state authority (Schmitter & Streeck 1999, p. 21). These so-called monopoly goods include compulsory membership or legal provisions to extend a practice to all firms in a sector rather than just the organisations' members (extension clauses). Finally, professionalisation also matters for organisational autonomy as more professional OdA are more autonomous from their members because they rely less on members', in particular firms', voluntary support and expertise (Streeck & Schmitter, 1985, p. 12; Streeck & Kenworthy, 2005, p. 450; Traxler & Huemer, 2007, p. 397).

Organised complexity refers to associational systems with the ability to "internalize as many interests as possible and to process them in a functionally coordinated way" (Traxler, 2007, p. 28). Such associational systems consist of associations with a rather narrow scope of activities and homogeneous membership at the bottom and associations with a broad scope of activities and heterogeneous membership at the top (Schmitter & Streeck, 1999). Through hierarchically organised associational systems, business or labour can speak with one voice toward public authorities and thus increase their legitimacy while integrating a broad group of stakeholders. Hierarchical associational systems (typical of neo-corporatist systems) promote interest aggregation through two mechanisms: intra-organisational and inter-organisational concertation (Streeck & Schmitter, 1985; Traxler & Huemer, 2007). Interest associations belonging to the same peak organisation should be part of intra-organisational concertation. Interest associations who are not part of the peak organisations can try to be more active in other arenas, where inter-organisational concertation takes place, e.g. at national peak-level meetings or in commissions (Traxler et al., 2007, p. 391). At the organisational level, if an interest association is not part of either form of concertation, it can hardly represent

its members' interests. Such associations have little influence on policymaking and shaping the system. At the associational system level, if several peak associations compete for interest representation towards public authorities, the systems' organised complexity is lower.

Generalisability, governability and neo-corporatism

Interest associations' generalisability varies regarding their members' characteristics and the range of policy domains they cover. Traditionally, interest intermediation theory associates encompassing associations with neo-corporatist and narrow associations with pluralist systems of interest representation. In addition, interest associations in neo-corporatist systems are expected to feature high levels of organisational autonomy and complexity (i.e. governability). Organisational autonomy allows interest associations to form collective long-term goals, while high organised complexity implies the representation of broad interests (Traxler, 1993, 2007).

Given the important role of neo-corporatist associational structures in the provision of collective goods, the current composition of interest associations active in Swiss VET governance raises the question of how these organisations can achieve the observed high level of collective good provision. In our empirical analysis, we compare the new type of interest associations to more traditional (neo-corporatist) types with regard to generalisability in terms of membership composition and interest representation. Furthermore, we analyse the OdA types' organisational autonomy and organised complexity at the organisational and associational system level. However, before turning to the empirical analysis, we briefly describe our data.

Data

Thus far, research on Swiss business associations was mostly based on qualitative approaches, for example the historical analysis of business associations (Eichenberger & Mach, 2011; Wettstein & Gonon, 2009; but see David et al., 2009). In contrast, existing datasets focus on internationally comparable data on peak business and labour interest organisations (Traxler et al., 2007; Visser, 2015). To our knowledge, no such dataset exists for lower-level organisations in Switzerland (in the domain of VET and beyond). The only recent survey among OdA was conducted in 2015 by a parliamentary commission (PVK, 2015). However, this survey aimed to evaluate the cooperation between OdA and public authorities and the data is not available for further research.

The State Secretariat for Education, Research and Innovation (SBFI) publishes a register of all federally recognised occupations with their responsible organisations, i.e. OdA (SBFI, 2018a). Based on this register, we initially estimated that there are around 600 OdA in upper secondary and tertiary-level VET. We limit our research to organisations officially recognised as responsible for an initial VET occupation at the upper secondary level as our unit of analysis because tasks of OdA in tertiary-level VET differ from the tasks in initial VET. This reduced the number of relevant organisations to 153. Furthermore, we excluded seven OdA from the analysis because they were being reorganised during the data collection period. One OdA was in the course of dissolution, one OdA was a cantonal career counselling office, which is now being replaced by a newly created OdA, and five organisations were in the process of merging into a joint OdA.

We added statistical data on apprentices and on training firms, which was collected by the Federal Statistical Office (reference year 2016, the last year for which data is available at the time of writing). This data includes information about the number of apprentices per occupation, the number of training firms and their size in terms of employees and the economic sector. The two datasets were connected through the identification number of the occupations. However, because an important part of OdA shares the responsibility for an occupation, data at the occupational level has been aggregated to the responsible OdA.

Finally, we collected new data on the organisational characteristics of OdA. Due to the prevalence of small organisations with few paid staff, we gathered data from various written sources rather than conducting a questionnaire-based survey among OdA representatives because we expected low return rates. This research strategy allowed analysing the complete population of initial VET OdA. The data collection proceeded in a structured manner. We operationalised concepts from interest intermediation theory. To ensure the quality of the data collection, we created a detailed guideline with coding rules. Data was collected from July 2017 to May 2018 from the official register of occupations and training ordinances of the occupations, the national registers of collective labour agreements and binding VET funds, member lists of extra-parliamentary commissions as well as participants' lists of federal events (all information provided by Swiss government agencies); member lists of peak associations

(provided by the peak associations); and finally from the organisations' VET ordinances, statutes and their websites. By relying on official and nation-wide databases as well as standardised legal documents (ordinances and statutes), we ensured data quality and comparability. In case of limited information provided by the organisations on their websites, we conducted additional phone interviews.

In the appendix, we provide more detailed information on all indicators used in the subsequent analysis, including their operationalisation and the specific data sources.

Empirical analysis

Our empirical analysis aims to disentangle various, coexisting patterns for fostering employer cooperation by applying the concepts of generalisability and governability to Swiss OdA. In this section, we first distinguish OdA types and discuss their generalisability. We also explore if and how the traditional associations differ from the generally newer VET organisations. Subsequently, we show that different OdA types vary in terms of governability. They develop different strategies to gain autonomy from members and to represent interests in the VET policy area. In both cases, we first present the key findings from our empirical analysis of the new OdA database, before a summary part discusses the implications of these findings from a theoretical perspective.

Generalisability

We analyse OdA along the two dimensions of generalisability: interest representation and membership. These are two elements of organisational structure that organisations may adapt and which vary substantially. Interest representation is relatively straightforward. Some OdA focus their activities on the VET domain, other OdA have a broad policy domain. Company, occupational and employee associations typically have a broad domain of activity, i.e. they develop activities in various policy domains. Conversely, VET organisations are active only in the VET domain and, thus, are less generalisable in terms of interest representation.

The question of membership is more complex. OdA may have individuals, especially professionals and craft masters, firms or other associations as members. We identified formal membership composition of OdA as defined in their statutes. Following Höpflinger (1984), we define occupational associations as including self-employed individuals and often also firms as members with voting rights. In contrast, company

associations' voting membership is defined as restricted to firms. Although some company associations originate from occupational associations, master craftsmen or skilled craftsmen no longer belong to the voting membership of these organisations. Both occupational and company associations have been subsumed under the category of business associations in earlier research on Swiss neo-corporatism (Farago & Kriesi, 1986). Employee associations have only employees as members. Finally, VET organisations often unite heterogeneous stakeholders, for example, large firms, other associations and employee associations.

We categorised all OdA into one of these four types based on the analysis of their statutes or websites. Table 3-2 shows that 46% of OdA are company associations, 26% occupational associations, 25% VET organisations and only 3% employee associations. Overall, 88% of OdA represent firms, 42% an occupational group, 10% employees and 5% training providers. VET organisations have a higher average number of stakeholder groups than occupational, company and employee associations. This indicates that while VET organisations' generalisability in terms of interest representation is low, it is high in terms of membership composition.

After defining OdA types, this section examines the differences between traditional associations and VET organisations with regard to training firms and apprenticeship provision. Although training firms are not necessarily members of OdA, they constitute the most important stakeholder group. In the Swiss VET system, only firms can offer any apprenticeship contracts, which makes them the "pivotal actors" in collective skill formation systems (Busemeyer, 2012).[12] Thus, we analyse differences in generalisability among OdA types with regard to the characteristics of the firms that train apprentices in the occupation for which the OdA is responsible.

Here and in the following, we use OLS regressions with VET organisations as reference category, which allows us to assess whether the differences between the organisation types are statistically significant despite differences in group sizes and heterogeneity within the four groups.

[12] There are no detailed data on the numbers and characteristics of member firms of OdA. However, it can be assumed that the large majority of training firms are (directly or indirectly) OdA members.

Table 2-2: OdA types: domain and membership composition

	Occupational associations	Company associations	Employee associations	VET organisations	Total
Number of OdA	38	67	5	36	146
In percent of all OdA	26%	46%	3%	25%	100
Domain	Broad	Broad	Broad	Narrow	
Stakeholder group: Firms	27	67	0	34	128
Stakeholder group: Occupational group	38	0	0	23	61
Stakeholder group: Employees	0	0	5	10	15
Stakeholder group: Public authorities	0	1	0	7	8
Stakeholder group: Training providers	1	0	0	3	4
Stakeholder groups (average number per OdA)	1.74	1.01	1	2.14	1.48

Table 2-3: Training firms' characteristics by OdA type with reference to VET organisations

	Dependent variables:			
	Share of training firms	Concentration of training firms	Concentration of	Share of training

	with less than 100 employees >= 90%	in economic sectors (Herfindahl)	apprentices in firms (Herfindahl)	firms with more than 500 employees
Independent variables (type of association):				
VET organisation	*Reference group*			
Occupational associations	0.254*	0.122*	-0.007	-1.294
	(0.107)	(0.054)	(0.054)	(1.03)
Company associations	0.162	0.07	-0.056	-0.574
	(0.095)	(0.048)	(0.048)	(0.915)
Employee associations	0.033	0.158	-0.111	4.612*
	(0.219)	(0.111)	(0.111)	(2.11)
Constant	0.167*	0.592***	0.341***	2.849***
	(0.076)	(0.039)	(0.039)	(0.738)
R^2	0.04	0.04	0.02	0.06
Number of observations (OdA)	146	146	146	146

Notes: OLS estimates, standard errors in parentheses, *** p < 0.001, ** p < 0.01, * p < 0.05.

First, firm size has been identified as an important element of generalisability (Traxler et al. 2007). To decide whether training firms are homogeneous in terms of firm size, we define, following Behrens and Helfen (2009), a threshold of 90% of training firms with less than 100 employees. Table 3-3 shows that the share of OdA with over 90% of small firms is higher in occupational associations than in VET organisations. The second element of generalisability is sectoral concentration (Herfindahl index) of training firms, which is also higher in occupational associations than in VET organisations. Concerning the prevalence of large firms or firms with a particularly high number of apprentices, we find that VET organisations have a higher concentration of apprentices in firms

(Herfindahl index) than the other OdA types but these differences are not statistically significant. Finally, occupational and company associations do not systematically differ from VET organisations with regard to the presence of large or very large firms (share of training firms with more than 500 employees). Conversely, employee associations are primarily active in occupations in which large firms play an important role in offering apprenticeship positions. However, there are only five employee associations responsible for initial VET occupations. All of them share the responsibility with employer-side organisations.

Thus far, we have established that the Swiss initial VET system includes four main OdA types, which vary with regard to membership composition and domain of interest representation. However, only occupational associations are more homogeneous with regard to training firms than VET organisations, while training firm size is larger only in case of employee associations. Next, we compare OdA types' average number of apprentices and training firms.

Concerning the provision of apprenticeships, Table 3-4 reports that VET organisations are responsible for a significantly higher number of apprentices than occupational and company associations as well as a significantly higher number of training firms.[13] In case of employee associations, the difference is not significantly different from zero, which is likely due to the small number of employee associations. Even if commercial training, which is by far the largest occupation and governed by a VET organisation, is excluded from the analysis, the results remain similar.

Table 2-4: Differences in apprenticeship provision with reference to VET organisations

	Dependent variables:	
	Number of apprentices	Number of training firms

[13] OdA may be responsible for various occupations or share responsibility for an occupation with other OdA. Occupation-level information was therefore aggregated to the responsible OdA. The numbers of apprentices and training firms were summed. For the size of the training firms in terms of employees, the average number of employees was calculated. While employee associations are never solely responsible for an occupation, only 14% of VET organisations share the responsibility with other OdA. An important part of both occupational (53%) and company (40%) associations have shared responsibilities.

Independent variables (type of association):		
VET organisation	*Reference group*	
Occupational association	-4039.8***	-1320.9***
	(1194.6)	(391.8)
Company association	-2521.0*	-807.0*
	(1061.4)	(348.1)
Employee association	-2591.4	-700.9
	(2451.3)	(804.0)
Constant	4632.8***	1597.7***
	(856.0)	(280.8)
R^2	0.08	0.08
Number of observations (OdA)	146	146

Notes: OLS estimates, standard errors in parentheses, *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

In sum, regarding generalisability, VET organisations combine a narrow domain of interest representation with a heterogeneous membership composition, while company, occupational and employee associations have broad domains but unite members of similar types. Large firms only play an important role in occupations that are co-governed by employee associations. Yet, occupational associations' training firms are more concentrated in economic sectors and they have a higher share of small training firms than VET organisations, so that they can be described as less generalisable than VET organisations. However, large firms and firms that train a large share of apprentices in an occupation, seem not to play a different role in VET organisations than in company associations. This means that large firms do not cluster in a specific organisation type and, in turn, the average VET organisation and company association includes firms of varying sizes and from different economic sectors. Put differently, they are both capable of defining training content that meets the needs of a heterogeneous group of firms. Our findings also confirm the key role of VET organisations as responsible for occupations in which a comparatively large number of apprentices are trained by a comparatively large number of firms.

Governability

Governability has two sub-dimensions: organisational autonomy and organised complexity. This section addresses them in turn. As discussed above, organisational autonomy is higher if interest associations cooperate with the state and gain access to resources and authority through this cooperation. One form of cooperation with the state is to offer so-called monopoly goods, i.e. goods backed by state authority. Examples include legal provisions to extend a practice to all firms in a sector rather than just the organisations' members or a monopoly for the provision of certain types of services. All OdA enjoy state support as – per definition – they have been publicly recognised as responsible for the public tasks associated with initial VET. Yet, they offer monopoly goods to various extents. The most important monopoly goods offered by OdA are specialised branch-level training courses, so-called interfirm courses, the management of generally binding VET funds and – in their role as employer or employee associations – negotiating collective labour agreements.

Professionalisation also matters for organisational autonomy. Yet, unfortunately, information on financial resources or paid staff of OdA is rarely made available. As an alternative, we developed an indicator based on the structured analysis of OdA websites. We assess the degree of professionalism by evaluating outreach activities and communication strategies and, more specifically, the extent to which they publish and make accessible relevant information on their websites to members and other interested parties. This information includes visions, missions and aims, statutes and membership regulations, advertising membership, and organising activities for members or offering them various services. More specifically, we distinguish between information on VET-specific services (e.g. documentation for training firms and information about occupations) and on general organisational development (e.g. mission statements or information about membership). We argue that producing and making available these documents and information is indicative of an educational organisation's financial resources and professionalised staff. However, it should be emphasized that this indicator might also capture the extent to which OdA need to formalise their structures, which is likely to be affected by size.

Table 2-5: Organisational autonomy: monopoly goods with reference to VET organisations

	Dependent variables:		
	Number of interfirm course days	Generally binding VET funds	Generally binding collective labour agreements
Independent variables (type of association):			
VET organisation	*Reference group*		
Occupational association	0.515	-0.224*	7.33e-17
	(3.20)	(0.089)	(0.075)
Company association	8.13**	0.019	0.299***
	(2.844)	(0.079)	(0.067)
Employee association	15.10*	-0.25	0.2
	(6.569)	(0.183)	(0.154)
Constant	21.097***	0.25***	-1.39e-16
	(2.293)	(0.064)	(0.054)
R^2	0.09	0.08	0.18
Number of observations (OdA)	146	146	146

Notes: OLS estimates, standard errors in parentheses, *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 3-5 reports provision of monopoly goods of OdA. Concerning the number of interfirm course days, company associations and employee associations offer significantly more course days than VET organisations. Second, 28 OdA manage a generally binding VET fund (19%). Occupational associations offer this monopoly good less often than VET organisations. Third, 21 OdA (14%) are responsible for generally binding collective labour agreements. Company associations are significantly more often parties of an agreement than VET organisations.

OdA also vary in terms of their degree of professionalisation (see Table3-6). The maximum score of our professionalisation index is 13 (7 organisation specific points and 6 VET specific
points). Concerning the overall indicator, OdA reach up to 12 points, while the average is 7.1 points. Only company associations score significantly higher than VET organisations. If the indicator is split in organisation-specific and VET-specific aspects, VET organisations reach significantly more points in terms of VET-specific professionalisation and fewer points in terms of organisation-specific professionalisation than occupational, company and employee associations.

Table 2-6: Organisational autonomy: professionalisation with reference to VET organisations

	Dependent variables:		
	Professionalisation (overall)	VET-specific professionalisation	Organisation-specific professionalisation
Independent variables (type of association):			
VET organisation	*Reference group*		
Occupational association	0.224	-1.282***	1.506***
	(0.577)	(0.308)	(0.386)
Company association	1.720**	-0.667*	2.387***
	(0.512)	(0.274)	(0.343)
Employee association	0.55	-1.661*	2.211**
	(1.183)	(0.632)	(0.792)
Constant	6.25***	3.861***	2.389***
	(0.413)	(0.220)	(0.277)
R^2	0.10	0.12	0.26
Number of observations (OdA)	146	146	146

Notes: OLS estimates, standard errors in parentheses, *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

In sum, our analysis of organisational autonomy shows rather clear patterns for the different OdA types. Company organisations gain autonomy through the provision of interfirm courses and collective labour agreements and score higher than VET organisations on organisation-specific professionalisation. Occupational organisations score lower than VET organisations on all indicators except organisation-specific professionalisation. Employee associations offer a high number of interfirm courses and score high on organisation-specific professionalisation in comparison to VET organisations. In contrast, VET organisations score high on VET-specific professionalisation and do not differ significantly from company and employee associations in the managing of generally binding VET funds. Overall company associations develop the highest level of organisational autonomy and, thus, come closest to the neo-corporatist ideal of regulated self-regulation. Yet, also VET organisations may gain some autonomy by managing VET funds and through VET-specific professionalisation.

The second aspect of governability, organised complexity, is the degree to which an organisation is integrated into a hierarchically coordinated associational system. If an organisation is integrated, it is systematically included into a broader process of formulating and representing interests through neo-corporatist channels. OdA may be members of peak associations of employers or union federations, directly appointed to federal commissions or participate in less formalised events for stakeholders in the VET policy domain. Such events are regularly organised by public authorities. At the associational system level, organised complexity reveals if a system is highly hierarchically coordinated or if there is a degree of competition between different groups of stakeholders.

First, concerning membership in peak associations, occupational and company associations are more often members of employer confederations than VET organisations (see Table 3-7). Second, only eight OdA are directly appointed to one or more of the four federal commissions concerned with VET (these commissions are EBBK, EKBV, EBMK, and EKHF). Table 3-7 shows that, overall, occupational and company associations are significantly less represented in these commissions than VET organisations. Third, VET organisations participate in networking events (the VET Stakeholder Conference and the VET Autumn Conference, 2015-2017) significantly more often than employee, occupational and company associations. Overall,

occupational and employee associations are less integrated in the interest representation system than VET organisations.

Concerning the overall associational system, our analysis reveals that 58% of OdA are not *directly* members of any peak association active in the VET policy field.[14] Interestingly, no OdA is a direct member of a labour-side peak association. 36% of OdA participated at events organised by public authorities to foster exchange among stakeholders in the VET policy domain. We calculated an overall score for participation in the network by attributing one point to each interest representation activity (maximum = 12). This score reveals that 41% of OdA do not participate at all in any of the three possible channels for interest representation, 27% in only one channel, 10% in two, while the remaining 22% represent their interests through three up to twelve activities. Thus, surprisingly, a large part of OdA (of different types) is not integrated in any of these neo-corporatist forms of interest representation, which implies a low level of organised complexity of the associational system in VET. We suspect that this might be the result of the large number of comparatively small associations in terms of number of apprentices.

The analysis of organised complexity documents that OdA types differ with regard to how they represent their members' interests through neo-corporatist channels. Company and occupational associations are integrated into traditional confederations more often than VET organisations, while VET organisations are more often directly active in federal commissions and participate more in informal events organised by public authorities. Concerning the overall associational system, organised complexity is relatively low despite the availability of various channels for interest representation. An important part of OdA does not participate in any national-level processes of formulating interests.

[14] These peak organisations are Swiss Employer Association, Swiss Trade Association, Travail Suisse and Swiss Trade Union Federation. VET organisations are sometimes "indirect" members of peak organisations. In this case, the OdA itself is not a member, yet at least one party to the joint OdA is. This is the case for 15 out of 36 VET organisations. Counting both direct and indirect memberships, 52% of OdA are members of a peak organisation.

Table 2-7: Organised complexity with reference to VET organisations

	Dependent variables:			
	Membership in peak associations	Federal commissions	Networking events	Overall score
Independent variables (type of association):				
VET organisation	*Reference group*			
Occupational association	0.368**	-0.278**	-2.367***	-2.276***
	(0.119)	(0.085)	(0.467)	(0.556)
Company association	0.851***	-0.248**	-1.293**	-0.690
	(0.106)	(0.076)	(0.414)	(0.494)
Employee association	8.96e-16	-0.278	-2.072*	-2.35*
	(0.245)	(0.175)	(0.958)	(1.141)
Constant	-9.44e-16	0.278***	2.47***	2.75***
	(0.085)	(0.061)	(0.334)	(0.398)
R^2	0.34	0.09	0.16	0.12
Number of observations (OdA)	146	146	146	146

Notes: OLS estimates, standard errors in parentheses, *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Conclusion

Against the backdrop of a changing socio-economic environment, especially the rise of the service economy, Swiss policymakers aimed to strengthen collective skill formation. Previous research on institutional change has highlighted the self-preserving character of this reform. However, the reform also led to a transformation of the associational system. Based on a voluntaristic approach to interest intermediation, i.e. the absence of prescriptions for organisation types, a new type of organisation has developed, in response to which public authorities created the umbrella term *organisations of the world of work* (OdA) to designate all interest associations fulfilling tasks in the VET system.

We have shown that Switzerland's voluntaristic approach to interest intermediation contributed to the training systems' ability to adapt collective governance structures to the service economy. In particular, it provided the flexibility needed to extend collective governance to economic sectors that lack a neo-corporatist tradition. Put differently, this voluntarism allowed a more flexible and less demanding organisation type to emerge and assume VET governance activities in the newly integrated sectors, which in more traditional VET sectors continues to be performed by neo-corporatist associations (traditional company, occupational and employee associations). This new organisation type has a narrow domain of interest representation but unites more heterogeneous stakeholder groups. This finding suggests that, more generally, interest associations may face a trade-off between these two dimensions of generalisability, i.e. narrowing down the domain of interest representation to VET may enable including heterogeneous actor groups.

The four organisation types have also developed different patterns of governability. Compared to VET organisations, occupational associations provide fewer monopoly goods to their members and their level of professionalisation is relatively low, pointing toward lower organisational autonomy. Company associations offer a larger amount of monopoly goods in the area of VET, are part of collective labour agreements and have a higher level of professionalisation than VET organisations. Still, VET organisations have developed some organisational autonomy by offering VET-specific services. These findings suggest that occupational associations are likely to represent their members' interests most loyally. In contrast, company associations developed tools to gain autonomy from their members, which should strengthen their ability to engage in negotiations. VET organisations are positioned somewhere between.

With regard to the integration of OdA in neo-corporatist interest representation, we have identified two patterns. The traditional neo-corporatist system of interest representation still plays an important role in VET governance, as occupational and company associations are often members of these confederations. Conversely, VET organisations are less integrated in this hierarchical intra-organisational coordination process. However, some of them are members of federal commissions in VET alongside the peak-level employer and union associations. In addition, VET organisations regularly participate in informal forums of exchange organised by public authorities.

In sum, our analysis has shown that the new VET organisations appear rather untypical of interest associations in a neo-corporatist system due to their narrow domain of interest representation and lacking integration into traditional neo-corporatist peak-level associations. However, the analysis has also shown that the new VET organisations have developed different strategies to "unify [their members'] diverging interests" (Traxler 1993: 678), although many of these strategies are to some extent dependent on state support. With regard to generalisability, VET organisations' exclusive focus on VET enables them to include heterogeneous actor groups.

Overall, then, the Swiss VET system is increasingly heterogenous and no longer supported by a coherent, encompassing associational system. Thus, in line with other recent studies (Behrens, 2011; Brandl & Lehr, 2019), we suggest that associations adapt to political and economic change – and with them the institutions of coordinated capitalism more generally. These gradual transformations merit analytical attention because they, over time, may also affect macro-level institutional outcomes (Streeck & Thelen, 2005). Yet, our findings do not suggest that coordinated models of capitalism are subject to a common neoliberal trajectory. Rather, they indicate that new organisation types are used to shore up employer cooperation.

The Swiss strategy to facilitate the creation of new organisation types is certainly an interesting approach to further the transfer of dual apprenticeships to new economic sectors, new occupations and new actors. This finding underlines the importance of flexible types of interest associations and enabling them to develop monopoly goods to strengthen and expand the collective type of skill formation. However, this reorganisation has also created the potential for tensions and competition for interest representation between traditional neo-corporatist peak-level associations and newly created VET organisations, which often act outside the system of peak-level associations and in direct contact with public authorities. Little surprise, then, that this transformation of the Swiss associational landscape has given rise to debates about the relationship between VET organisations and training firms as well as the need to integrate VET organisations into more traditional, neo-corporatist forms of interest representation (EBBK, 2018). Yet, for now, Switzerland has succeeded in defending the VET system's role in the educational landscape. The Swiss case thus indicates that flexible adjustments to neo-corporatist systems are feasible, but necessitate a constant balancing act, the sustainability of which can only be judged in the long run.

Appendix Chapter 3: Supplementary Tables

Table 2-8: Description of indicators

Indicator	Coding	Variable name	Data sources
OdA types	Dummy if OdA is classified as occupational association, company association, employee association, or VET organisation	occupational (dummy) company (dummy) employee (dummy) vetorg (dummy)	Classification based on "policy domain" and "membership composition"
Year of foundation	Year of foundation. If the (approximative) age is indicated, the year of foundation is calculated with the year of reference 2017 *(see 1.1.2 in guidelines)*	Jahr	OdA website and their statutes
Generalisability: Interest representation **Policy domain** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Policy field coded as narrow, if associational aims focused on VET alone *(see 1.4.6. in guidelines)*	domain (1 = narrow)	OdA statutes (if unavailable website or phone interview)
Generalisability: Interest representation **Membership composition** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Dummy variables if the following stakeholder is a member with voting rights or sponsor of the OdA: firms, professionals, public authorities, training providers *(see 1.2.3/1.2.4 in Guidelines)*	ig_firms (dummy) ig_profession (dummy) ig_employees (dummy) ig_public (dummy) ig_bildungsanbieter (dummy)	OdA statutes (if unavailable website or phone interview)
Generalisability: Interest representation **Number of stakeholder groups**	Sum of ig_firms, ig_profession, ig_employees, ig_public, ig_bildungsanbieter	ig_no	OdA statutes (if unavailable website or phone interview)

Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)			
Generalisability: Membership **Share of small training firms** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Share of training firms with less than 100 employees >= 90% (following operationalization of Behrens and Helfen [2009]) *(see codebook & do-file)*	smallfirm_dummy = 1 if sharefirms100 >= 90 calculated: sharefirms100 = (no_size_business_1 + no_size_business_2 + no_size_business_3) / no_business_aa * 100)	BfS dataset (SBG combined with BUR, provided by Federal Office of Statistics)
Generalisability: Membership **Share of large training firms** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Share of training firms with more than 500 employees *(see codebook & do-file)*	sharefirms500 = (no_size_business_9 + no_size_business_10) / no_business_aa * 100	BfS dataset (SBG combined with BUR, provided by Federal Office of Statistics)
Generalisability: Membership **Concentration of training firms in economic sectors** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Herfindahl index: concentration in sectors (NOGA first level). High values indicate high concentration	herf_sect	BfS dataset (SBG combined with BUR, provided by Federal Office of Statistics)
Generalisability: Membership **Concentration of apprentices in firms** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Herfindahl index: concentration of apprentices in firms. High values indicate high concentration	Herf_App_in_Business	BfS dataset (SBG combined with BUR, provided by Federal Office of Statistics)

Generalisability: Membership **Number of apprentices** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Number of apprentices per OdA (only dual apprenticeships)	no_app	BfS dataset (SBG combined with BUR, provided by Federal Office of Statistics)
Generalisability: Membership **Number of training firms** Sources: Behrens and Helfen (2009), Traxler (1993, 2007), Traxler and Huemer (2007)	Number of training firms per OdA (only dual apprenticeships). Note: In case of multiple training occupations, we may have counted training firms multiple times if they train in multiple occupations administered by the same OdA	no_businesses	BfS dataset (SBG combined with BUR, provided by Federal Office of Statistics)
Governability: Organisational autonomy (monopoly goods) **Number of interfirm course days** Sources: Schmitter and Streeck (1999), Streeck and Kenworthy (2005), Streeck and Schmitter (1985), Traxler (1993, 2007), Traxler and Huemer (2007), Traxler et al. (2007)	Number of interfirm course days as defined in training regulations *(see 2.1.3.1 in guidelines)*	ueK_Tage	VET ordinance of the occupation, Art. 8 (provided by OdA / State Secretariat for Education, Research and Innovation)
Governability: Organisational autonomy (monopoly goods) **Generally binding VET funds** Sources: Schmitter and Streeck (1999), Streeck and Kenworthy (2005), Streeck and Schmitter (1985), Traxler (1993, 2007), Traxler and Huemer (2007), Traxler et al. (2007)	If OdA has a generally binding VET fund, coded as 1 *(see 1.4.8. in guidelines)*	vetfund_allgemein	SBFI register of VET funds (provided by State Secretariat for Education, Research and Innovation)

Governability: Organisational autonomy (monopoly goods) **Generally binding collective labour agreements** Sources: Schmitter and Streeck (1999), Streeck and Kenworthy (2005), Streeck and Schmitter (1985), Traxler (1993, 2007), Traxler and Huemer (2007), Traxler et al. (2007)	Coded as 1 if OdA is party of a collective labour agreement *(see 1.4.7. in guidelines)*	gav_allgemein	SECO register of collective labour agreements (provided by State Secretariat for Economic Affairs)
Governability: Organisational autonomy (professionalisation) **Professionalisation** Sources: Krücken and Meier (2006), Schmitter and Streeck (1999), Streeck and Kenworthy (2005), Streeck and Schmitter (1985), Traxler and Huemer (2007)	Due to the lack of information on OdAs' financial resources or number of paid staff, we have developed an indicator based on the structured analysis of OdA websites to measure professionalisation. We collected information on VET-specific services and on general organisational development (if the item appears on the OdA website = 1). The extent to which such substantial information is provided on the organizational website reflects professionalism. Organisation-specific: mission statement (*pro_mission*) organizational chart (*pro_chart*) membership marketing (*pro_findmemb*) newsletter (*pro_newsletter*) membership request (*pro_memberrequest*) information on membership fees (*pro_memberfee*) member list (*pro_memberlist*) Vet-specific: occupational marketing (*pro_marketing)*	sum_prof (sum of all items, varies between 0 and 12) sum_prof_org_specific (sum of organisation-specific items, varies between 0 and 7) sum_prof_VET_specific (sum of VET-specific items, varies between 0 and 6)	OdA websites (own coding)

	download of VET-specific documentation (*pro_vetdocs*) sale or download of educational materials (*pro_teachdocs*) VET working groups (*pro_workgroup*) VET expert workshops (*pro_workshop*) composition of VET quality commission (*pro_vetcommission*) *(see 1.2.8. in guidelines/table with overview in hybrid OdA paper)*		
Governability: Organisational complexity **Membership in peak associations of business or labour**	Direct membership (as OdA) in any of the four important umbrella associations SAV: Schweizerischer Arbeitgeberverband SGV: Schweizerischer Gewerbeverband SGB: Schweizerischer Gewerkschaftsbund Travail Suisse *(see 1.3.3 in guidelines & do-file)*	dirpeak= dir_sav + dir_sgv + dir_sgb + dir_travail	Member lists of four VET-relevant umbrella associations of business and labour (provided by the four organisations)
Governability: Organisational complexity **Membership in federal commissions**	Coded as 1 if OdA representative is member of a commission EBBK: Eidgenössische Berufsbildungskommission EFHK: Eidgenössische Fachhochschulkommission EKBV: Eidgenössische Kommission für Berufsbildungsverantwortliche EKBM: Eidgenössische Berufsmaturitätskommission *(see 1.3.1 in guidelines&dofile)*	dircomm_sum = direbbk + direkbv + direbmk + direkhf	Published lists of commission members in four federal commissions concerned with VET (provided by State Secretariat for Education, Research and Innovation)

Governability: Organisational complexity **Participation in federal networking events**	Sum of number of OdAs' participations at events, if OdA participated = 1 *(see 1.3.2 in guidelines)*	forum_sum (sum of all participations, varies between 0 and 5)	Participant lists of national VET events from 2015 to 2017 (provided by State Secretariat for Education, Research and Innovation)
Governability: Organisational complexity **Organisational complexity overall score**	Sum of three separate indicators (membership in peak associations, membership in federal commissions, participation in federal networking events)	network = dirpeak + dircomm_sum + forum_sum	See above

3. State-Led Bricolage and the Extension of Collective Governance: Hybridity in the Swiss Skill Formation System[15]

With Lukas Graf and Patrick Emmenegger

This paper explores the extension of collective governance to sectors without collective governance tradition. We introduce the concept of state-led bricolage to analyze the recent expansion of the Swiss apprenticeship training system – in which employer associations fulfil core collective governance tasks – to economic sectors, such as health care, in which training had previously followed a school-based and state-oriented logic. Through a mixed-methods analysis, we examine the reform process that led to the creation of new intermediary organizations that enable collective governance in these sectors. In addition, we compare the organizational features of these organizations with the respective organizations in the traditional crafts and industry sectors. We find that the new organizations result from state-led bricolage. They are hybrid organizations that reflect some of the bricoleur's core policy goals and critically build on the combination of associational and state-oriented institutional logics.

Introduction

Institutional orders emphasizing collective governance have attracted considerable attention as alternatives to more market-based or state-based orders because of their ability to produce desirable socio-economic outcomes (Busemeyer, 2015; Hall & Soskice, 2001; Streeck & Kenworthy, 2005). In terms of institutional logics (Carstensen, 2017; Deeg, 2005; Friedland & Alford, 1991), collective governance relies on a specific logic that has evolved historically (Streeck & Schmitter, 1985). This associational logic has an important effect on employers' capacity to provide collective goods and contribute to social policies (Campbell, 2007; Culpepper, 2003). Yet, due to increasing competitive pressures in a globalizing economy and the decline of manufacturing as stronghold of the associational logic, systems based on employers' provision of

[15] This manuscript has been submitted to Regulation & Governance and is under review at the time of printing.

collective goods are under pressure to adjust (Martin & Thelen, 2007). Prominent examples are dual vocational education and training (VET) systems that rely on the associational logic to foster the voluntary provision of training by firms (apprenticeships). The institutional arrangements in these traditional apprenticeship systems assign employer associations a key governance role as they develop training content that fits labor market needs and foster firms' participation in training (Busemeyer & Trampusch, 2012; Thelen, 2007).

The traditional base of apprenticeship training is in crafts and manufacturing. However, these sectors are in relative decline. How can collective governance be extended to sectors without collective governance tradition? What does the transfer of the associational logic of traditional apprenticeships to new sectors imply for collective organizing in the new sectors? Which kind of reform process manifests itself in the characteristics of the newly created associations that are needed to mediate between public and private interests? Answers to these questions will pave the way for a better understanding of new forms of collective organizing outside of the sectors in which collective governance is already well established.

We argue that the state may strategically create and enable hybrid organizational forms to solve problems inherent in a policy domain. Through what we call *state-led bricolage*, the state may transfer the associational logic to sectors without collective governance tradition. In this process, the state as bricoleur develops institutional solutions by combing elements of existing institutional principles and practices in new ways, which results in institutions that are different from but potentially resemble the old ones (Campbell, 2004; Carstensen, 2017). Furthermore, given the high capacity of the state as agent of institutional change, we expect the state as bricoleur to leave a footprint on the outcome of the change process, most notably by trying to make the new institutions reflect some of the core policy goals of the state. These goals are likely to deviate from the goals of associations typically in charge of training in collectivist systems (Bonoli & Wilson, 2019). Together, these two features of the reform process should lead to hybrid arrangements, as the state's policy goals and the associational logic get partially imprinted on the logics characterizing the targeted sectors.

Empirically, our study focuses on a crucial Swiss reform in which the state took measures to stabilize the apprenticeship system by extending the associational

institutional logic to new economic sectors. While in many traditional dual VET countries the rate of apprentices relative to students has dropped in recent years, Switzerland stands out with a surprisingly high and stable rate of around 60% of all learners in their first year of upper secondary education enrolled in apprenticeships (OECD, 2017a). Yet, to achieve this stabilization, the state needed to adapt the system to socio-economic change. When in the 1990s, firms' provision of apprenticeship positions dropped dramatically, the system was reformed with the aim of maintaining it. A crucial measure was expanding the VET system to economic sectors that were not yet part of the system: agriculture, forestry, arts, the health and social care sectors (see online appendix, Table A1, for details). Yet, training in these sectors had never followed an associational logic but a state-oriented one and primarily took place in schools rather than firms. Thus, the reform addressed the challenge to transfer the associational logic of traditional apprenticeships to sectors that followed different organizing principles and lacked traditional employer associations in charge of VET.

To transfer this associational logic to the new sectors, the state sponsored the creation of new organizations to fulfil employer associations' tasks. At the formal level, authorities introduced a new umbrella term to include these organizations in the system. The new organizations as well as traditional employer associations were called "Organizations of the World of Work" (*Organisationen der Arbeitswelt*, OdA). This deliberately broad term allowed including organizations in VET governance that do not necessarily correspond to the typical organizational form of the employer associations in the VET field. Importantly, due to the expansion to new sectors amongst others, employers' participation in VET was stabilized and the apprentice rate remained high.

Based on an original survey of all 146 Swiss OdA responsible for initial VET, we compare the organizational characteristics of the New-Sector-OdA (i.e. OdA in the newly integrated sectors) to the Old-Sector-OdA (i.e. OdA in the traditional sectors for apprenticeship training). We argue that New-Sector-OdA represent hybrid forms of collective organizing, enabling the integration of important economic sectors and helping to maintain the Swiss VET system. Additionally, a case study of one key New-Sector-OdA further supports our argument that the state may act as bricoleur to overcome public policy problems and stabilize the VET system. Yet, the combination of elements of different institutional principles and practices as well as the infusion of some of the state's core policy goals make the resulting New-Sector-OdA hybrid

organizations. These organizations depend – at least initially – on the capacity of the state to act as bricoleur to encourage a large number of private actors to collectively organize in new ways – which is essential to the survival of collective governance in a changing environment. We thus identify a reform case in which elements of distinct institutional logics get blended within a new organizational form without dissolving completely.

In the next section, we develop our theoretical framework. First, we introduce the institutional logics of the state and the association and we theorize hybridity in the context of state-led bricolage. In the subsequent research design section, we operationalize hybridity and describe our methods and data. Then, we present our findings on the New-Sector-OdA through an historical account of the relevant VET reform, an exemplary case study of OdASanté, and a cross-sectional comparison of New- and Old-Sector-OdA. Finally, we offer a discussion and conclusion.

Theoretical framework: state-led bricolage and hybridity

This section develops our theoretical framework and core argument around state-led bricolage and hybrid organizations. We start by introducing the institutional logics of the state and the association as two central building blocks for our argument.

Institutional logics: the state logic and the associational logic

Each of the major institutional orders of contemporary Western societies has a key institutional logic or "a set of material practices and symbolic constructions – which constitutes its organizing principles and which is available to organizations and individuals to elaborate" (Friedland & Alford 1991, p. 248). In a similar vein, Deeg (2005, p. 172) refers to logics as "typical strategies, routine approaches to problems, and shared decision rules that produce predictable patterns of behavior by actors" within an institutional system (see also Streeck & Thelen, 2005, pp. 12-13; Carstensen, 2017, pp. 144-145). We follow here the distinction between four main institutional orders and respective logics famously made by Streeck and Schmitter (1985). The guiding principle of interaction in the logic of the *state* is hierarchical control, in the logic of the *association* it is organizational concertation, in the logic of the *market* the two authors refer to dispersed competition, and in the logic of the *community* to spontaneous solidarity.

In the context of this paper, the state logic and the associational logic are of particular relevance, which is why we introduce them in greater detail. As Streeck and Schmitter (1985, p. 6) put it, "in the ideal-typical state bureaucracy, allocational decisions are made through public policies that are enforced, with the ultimate backing of the state's monopoly on legitimate coercion, by civil servants striving to satisfy their dominant interest in career advancement and bureaucratic stability, on subjects which strive to avoid punishment". Indeed, the state logic, which Friedland and Alford (1991, p. 248) define as the "rationalization and the regulation of human activity by legal and bureaucratic hierarchies", captures well the pre-reform state-oriented logic of training in economic sectors that were not yet part of the Swiss apprenticeship training system. In these sectors, training was carried out under the leadership of regional governments, while being strongly school-oriented and characterized by weak involvement of employers and their associations (see case study below for details). Consequently, we refer to the pre-reform logic of the more school-based forms of training in the economic sectors that were to be integrated into the collective governance system of apprenticeship training as state-oriented logic.

In contrast, the associational logic traditionally characterizes apprenticeship training in collectivist systems in the industry and crafts in countries like Austria, Germany, and Switzerland (Busemeyer & Trampusch, 2012). Given that it is a more complex multi-actor logic than the state logic, we give it extended treatment here. In the associational logic, "actors are *contingently* or *strategically interdependent* in the sense that actions of organized collectivities can have a predictable and determinant effect (positive or negative) on the satisfaction of other collectivities' interests, and this induces them to search for relatively stable pacts" (Streeck & Schmitter, 1985, p. 11, emphasis in original). In this logic, coordination and networks among employers are strongly developed and provide an alternative, for instance, to coordination by the market. Importantly, the associational logic allows firms to overcome cooperation dilemma in various institutional arenas, such as industrial relations or skill formation (Culpepper, 2003).

The associational logic is characterized by the systematic involvement of employer associations and labor unions in policymaking and implementation (Streeck &

Kenworthy, 2005). Focusing on employers,[16] ideal-typical associations are membership-based with associations representing employer interests in a broad array of policy fields often along sectoral lines (Behrens & Helfen, 2009; Farago & Kriesi, 1986). For example, they negotiate collective labor agreements with unions. Typically, such associations of firms are members in higher-level umbrella associations. This allows a hierarchically structured and coordinated aggregation and representation of employer interests (Schmitter & Streeck, 1999). Umbrella associations represent employer interests in policy forums such as consultative commissions with public authorities. Moreover, in a system based on the associational logic, the state conveys public tasks to employer associations, which is thought to improve the efficiency of implementation and lower its costs (Streeck & Schmitter, 1985). This cooperation with the state is said to promote the organizational development of employer associations (Traxler & Huemer, 2007).

However, finding a balance between cooperating with the state to gain influence in policymaking and remaining faithful to members' interests is challenging for such intermediary associations (Schmitter & Streeck, 1999). For example, cooperating with the state may imply pursuing more social goals than firms would otherwise consider (Campbell, 2007). Although the associational logic increases the organizational capacity of associations, not all associations are equally developed. Many of the traditional associations have existed for a long time period (some date back to the mid-19th century), but they can vary, for instance, with regard to their degree of professionalism. For example, many associations unite small groups of firms and rely on voluntary member support, while some are highly professionalized and employ paid staff.

In countries and policy fields that follow the associational logic, employer associations capable of finding a balance between cooperation with the state and representing members' interests are crucial actors (Culpepper, 2003). Ideal-typical employer associations are characterized by a broad policy domain and have firms or individuals as direct members. They are members of national umbrella associations and responsible for collective labor agreements. Yet, the cooperation with the state allows them to bind nonmembers and the state expects them to contribute to social policy goals – although these activities may be opposed by member firms. However, such capable associations

[16] A focus on employers is warranted because of unions' weak role in Swiss VET (Emmenegger et al., 2020).

do not exist everywhere. Typically, the institutions that foster collective organizing of employers and employees have their origins in the crafts and industry sector (Thelen, 2007).

Yet, the importance of the crafts and industry sectors in terms of employment is decreasing. Moreover, economies' skill needs are changing not least due to technological change and demographic developments, which trigger an increased need of, for instance, health and care professionals (OECD, 2017b). Consequently, if the involved stakeholders want to maintain the associational logic in skill formation, they need to adapt it to these developments. Collectively governed skill formation, which combines training at the workplace and in schools, traditionally builds on associations that foster the cooperation between private actors as well as private and public actors for the administration and reform of training (Busemeyer & Trampusch, 2012; Martin & Knudsen, 2010; Campbell & Pedersen, 2007). Expanding such collectively governed skill formation to new sectors is challenging because cooperation dilemmas need to be resolved. For this purpose, capable associations that manage to nudge employers into contributing to training need to be created (Culpepper, 2003).

Theorizing hybridity and state-led bricolage

After having introduced the state-oriented logic and the associational logic, we now develop our argument how these two logics relate to each other in our empirical case.

Institutional variety and state-led bricolage

Political economies are institutionally complex, displaying a variety of institutional principles and practices (Campbell, 2010). If one sees institutions as resources to accomplish goals (Streeck & Thelen 2005), a next logical step is to understand such institutional variety as enabling institutional change processes as it provides actors with a range of institutional elements to work with (Crouch, 2005). In this context, the basic idea behind the concept of bricolage is that actors frequently develop institutional solutions by combining elements of existing institutional principles and practice in new ways, which results in institutions that are different from but potentially resemble the old ones (for a review, see Campbell, 2004). Bricolage thus typically represents change in a rather evolutionary and gradual way (Carstensen, 2017). Thereby, the related process of assemblage and adaptation can be associated with hybrid arrangements (Cleaver, 2015). An empirical example of bricolage in the field of education is the

composition of diverse characteristics and institutional elements found in dominant national models (Weick, 2001) as in the case of Luxembourg's hybrid skill formation system that combines elements of the neighboring Belgian, French, and German models (Graf & Gardin, 2018).

Carstensen (2017) highlights that bricolage is a key tool of policymakers to respond to policy challenges. He shows that in the case of disruptions to a system – in his case a financial crisis – states often resort to bricolage to address policy problems. As a result, the pre-reform institutional logic in the relevant policy field may change gradually but significantly. Like Carstensen (2017), we study a case in which bricolage is a response to a policy challenge – the complex task to extend collective governance to new economic sectors – which led policymakers to seek new policy solutions. In our empirical case, the respective policy processes are linked to policy solutions crystalized in the 2002 VET law and especially the creation of associations that are needed to extend collective governance to sectors previously governed by a state-oriented logic.

Campbell (2004, pp. 69-70) distinguishes between two types of bricolage, namely *substantive* and *symbolic* bricolage. Substantive bricolage is associated with the recombination of already available institutional principles and practices in an instrumental way to achieve substantive goals, for instance, by addressing concrete problems such as the reduction of transaction costs or the improvement of product quality. Symbolic bricolage occurs when symbolic principles or practices get recombined with the goal that the solutions developed by the actors are seen as appropriate and legitimate in a given social context. Considering that in our case (i.e. collective skill formation) apprenticeship training is already highly legitimate, we mainly focus on substantive bricolage in the following.

Importantly, it matters who the bricoleur is. The capacity of a bricoleur to creatively recombine institutional elements depends both on its social, organizational, and institutional connections to relevant institutions and actors – which enlarges the institutional repertoire available for bricolage. Furthermore, this capacity is increased by the bricoleur's tangible resources, like financial means or political clout, which are needed, for instance, to make institutional changes stick (Campbell 2004, pp. 74-77). In our empirical case, the bricoleur is not anyone, but the state. The respective Swiss state agencies are in a privileged position not only in terms of their connections to relevant

stakeholders in collective skill formation, but also in terms of the resources available to them to facilitate and maintain institutional changes. Hence, our bricoleur, the state, has a relatively high capacity to promote bricolage.

This high capacity also implies that the state can strongly influence the process of gradual change. Therefore, the result of bricolage is likely to reflect, in one way or another, core policy goals of the state, which are likely to deviate somewhat from the goals of associations typically in charge of training occupations in collectivist systems (Bonoli & Wilson, 2019). In this way, the state as a bricoleur may leave a footprint on the outcome of the change process. This, in turn, implies that the policy goals and the institutional logic of the state get partially imprinted on the respective other logic(s) – with specific consequences that we are conceptualizing in the following.

In our empirical case, the relevant institutional variety available to the bricoleur is reflected in the state-oriented logic in the VET system in the sectors to be integrated in apprenticeship training, on the one hand, and the associational logic in the traditional industry and crafts sectors, on the other hand. We analyze a case of substantive bricolage, whereby the state as the bricoleur combines the associational logic and the state-oriented logic to reach instrumental policy goals related to the reform the Swiss VET system. As the two institutional logics are being combined, this should foster hybrid arrangements (see below). Furthermore, as the bricoleur is not just any actor, but the state, we expect that it has a high capacity to facilitate bricolage. Once more, this is likely to promote hybridity as due to its strong position the state-oriented logic and respective policy goals are likely to get – at least partly – imprinted on the associational logic in the newly integrated sectors. For instance, the state (e.g. the responsible state agency) being the bricoleur may imply that societal goals are promoted beyond what would be typical associated with the traditional associational logic. Taken together, we refer to this process as *state-led bricolage*, which foresees that a state-oriented logic may feature prominently in those associations that are in charge of collective organizing in the newly integrated sectors.

Conceptualizing hybridity and state-led bricolage at the organizational level

This brings us to the challenge of how to conceptualize such hybridity more concretely. While the concept of bricolage speaks to both institutions and their organizational carriers, we focus here on the measurement of the outcomes of bricolage for the latter.

In our empirical analysis the main unit of analysis are the "Organizations of the World of Work" (OdA) as these are the key intermediary organizations within the governance of apprenticeship training in Switzerland. The OdA can be seen as the crystallizing points through which the change process related to the VET reform of 2002 is institutionalized at the organizational level. More specifically, if our argument around state-led bricolage holds water, we should observe that the newly created OdA, which are the pivotal actor in the governance of apprenticeships and result from a creative combination of the state-oriented and associational logics, are hybrid organizational forms.

Thus, to be able to test this empirically, we zoom in on the organizational level as well as the concept of hybrid organizations. Hybridity is a broad phenomenon that is observed in various social domains. Broadly speaking, one can understand hybrid organizations as entities that arise from the blending of two or more institutional logics, that is, "[h]ybrid organizations combine the institutional logics that are materialized in two or more organizational forms" (Haveman & Rao, 2006, p. 974). In this way, hybrid organizations allow overcoming strict boundaries between two institutional logics (Battilana & Dorado, 2010). Hybrid organizations can play a central role in processes of institutional change and maintenance. Crucially, while an organizational field may be exposed to considerable tensions between logics (Schildt & Perkman, 2016; Battilana & Dorado 2010), hybrid organizations can also contribute to stabilizing the relevant (sub-)field over time as they develop organizational features to accommodate heterogeneity and thus handle tensions internally (Reay & Hinings, 2009), because they can "develop structures and processes that allow them to involve a variety of stakeholders, pursue multiple and often conflicting goals and engage in divergent or (seemingly) inconsistent activities" (Mair et al., 2015, p. 733).

Although research on hybrid organizations offers significant insights into the functioning of these organizations and their contribution to manage institutional complexity and tensions – as well as the possible role of institutional entrepreneurs in combining institutional logics (Tracey et al., 2011) – the driving forces of hybridization and strategic role of state agents are not always made explicit. Yet, institutionalist research has shown that disposing of coercive authority, the state is a potential driver of organizational adaptation processes (Greenwood & Hinings, 1993). Although state-promoted hybridization may also be associated with unintended and conflictual

outcomes (Gornitzka & Maassen, 2000, p. 284), in this paper, we show that *state-led bricolage* can greatly support the strategic development of hybrid organizations at the nexus of different institutional logics and especially in policy fields that require collective governance. We thus highlight that the state has the capacity to establish hybrid organizations as a means of system development, for instance, to foster exchanges between relevant stakeholders.

In sum, we propose that the new intermediary organizations created with the 2002 VET reform through what we call state-led bricolage (New-Sector-OdA) differ from the organizational forms traditionally prevalent in the VET field (Old-Sector-OdA). We expect New-Sector-OdA to represent hybrid arrangements both due to the footprint of the bricoleur (i.e. the state) on the reform process as well as the combination of the associational logic and the state-oriented logic. In other words, we argue that New-Sector-OdA serve to extend the collective governance system by combining the state-oriented logic with the associational logic, i.e. the traditional logic in the field of apprenticeship training.

Research design: operationalization, methods, and data

In this section, we operationalize the core theoretical concepts needed to capture our empirical case and describe our methods and data.

Operationalizing hybridity

In the following, our arguments around state-led bricolage and hybrid organizations are employed to develop specific expectations for New-Sector-OdA. As a baseline for our operationalization, we refer to the three main dimensions of organizations – goal direction, boundary maintenance, and activity system (Aldrich & Ruef, 2006). These three well-established dimensions apply to any organization, irrespective of more specific organizational characteristics (Carroll & Hannan, 1995). Thus, these dimensions are equally relevant for Old- and New-Sector-OdA. By linking them to hybridity in the context of state-led bricolage, we develop our conceptual framework for analyzing hybridity in the case of new intermediary organizations in VET.

First, *goal direction* means that organizations are purposive systems (Aldrich & Ruef, 2006, p. 4) that do not just follow some random path. The respective goals or purposes can, but need not, be explicitly codified. In fact, organizations often simultaneously

integrate some of their goals explicitly and others rather implicitly. Second, organizations are maintained through the control of socially constructed *boundaries* (Aldrich & Ruef, 2006, p. 5). This also implies a distinction between members and non-members. Organizational boundaries are not fixed and can change, for instance, through processes of boundary spanning (Meyer & Rowan, 1977).

Table 3-1: Organizational dimensions, indicators, and expectations for New- and Old-Sector-OdA

Organizational dimensions	**Indicators**	**Expectations for New-Sector-OdA relative to Old-Sector-OdA**
Goal direction	(1) Policy field	More often limited to VET
	(2) Membership composition	More often including public authorities
	(3) Organization of short-track dual training	More often offering short-track training
	(4) Validation of prior learning	More often offering validation of prior learning
Boundary maintenance	(5) Organizational set-up and sponsors	More often set-up as joint venture
	(6) Membership in umbrella associations	Less often member in umbrella associations
	(7) Distance between OdA and firms	Less often direct firm membership
	(8) Membership in Federal Commissions	More often member in Federal Commissions
	(9) Participation in national VET events	More frequently participating in national VET events
Activity system	(10) Degree of professionalism	Higher degree of professionalism
	(11) Responsibility for collective labor agreements	Less often negotiating collective labor agreements
	(12) Responsibility for generally binding collective VET funds	Less often responsible for generally binding collective VET funds

Note: See online appendix for coding and data sources.

However, without sufficiently stable boundaries, an organization rapidly loses its capacity for goal orientation. Third, an *activity system* refers to a set of socially constructed routines that guide behavior. In this context, "routines" is a generic term including "forms, rules, procedures, conventions, strategies, and technologies around which organizations are constructed and through which they operate" (Aldrich & Ruef, 2006, p. 6).

By applying these three core organizational dimensions (see Table 4-1, column 1), we are in a position to develop indicators with regard to associations in the Swiss VET system (column 2). We then derive theoretical expectations of the differences between New-Sector-OdA and Old-Sector-OdA (column 3). In general, the more each of the indicators reflects hybridity, the higher is the overall degree of hybridity of the respective organization. Our core expectation is that while both Old- and New-Sector OdA enable collective governance, they differ as New-Sector-OdA display significant hybrid characteristics.

Goal direction

Concerning goal direction, we examine four indicators: policy field, membership composition, organization of short-track dual training, and validation of prior learning.

Generally speaking, associations develop and formalize their organizational goals in the form of associational aims, which are codified in their statutes. By definition, such associations represent member interests towards public authorities (Schmitter & Streeck, 1999). Yet, the *policy field* (Indicator 1) in which they pursue aims can either cover various areas or be limited to a narrower area of interest representation such as VET. The more heterogeneous the interests of an organizations' members, the more difficult it becomes to create internal consensus and to represent these interests towards external stakeholders (Traxler & Huemer, 2007). We expect that New-Sector-OdA mainly focus on the policy field of VET, as this would correspond to what the state was envisaging when setting the stage for these new intermediary organizations.

As these associations represent their members' interests, *membership composition* (Indicator 2) translates into different goal directions. Here, hybridization may be linked to the inclusion of various stakeholders in an organization (Mair et al., 2015). Owing to

their role as governance actors before the inclusion in the national VET legislation, we expect that public authorities are included in New-Sector-OdA membership.

As indicated in the previous section, it matters which actor is the driving force of a hybridization process. The goals of this key actor may come to the fore in the goals of the newly created hybrid organizations. In our case, the state was the key driver of the reform. The state aims to ensure that VET is inclusiveness-enhancing, which is not always the case for employers (Bonoli & Wilson, 2019). The Swiss VET reform introduced two inclusion-enhancing measures: The option to organize *short-track training* (Indicator 3), which lasts only two years and aims to integrate weaker students (Di Maio, Graf, & Wilson, 2019), and *validation of prior learning* (Indicator 4), which refers to the possibility for adults to gain a nationally recognized VET diploma without going through an apprenticeship, for example by formally recognizing skills they acquired on-the-job (BBV, Art. 31, al. 1). Thus, owing to state involvement in their creation, new OdA should orient their goals more often towards public goods. We thus expect them to offer more inclusion-enhancing measures such as short-track dual training and validation of prior learning than the employer-dominated Old-Sector-OdA, which might be reluctant to implement inclusion-enhancing measures.

Boundary maintenance

We examine five indicators for boundary maintenance: organizational set-up and sponsors, membership in umbrella associations, distance between OdA and firms, membership in Federal Commissions, and participation in national VET events.

Some organizational arrangements (Indicator 5) create new boundaries whereas others allow preserving pre-existing organizational boundaries. Crucially, setting up a joint venture (rather than creating a traditional association) allows the constituting organizations, i.e. organizational sponsors, to safeguard their boundaries.[17] In contrast, being member of a *higher-level umbrella association* (Indicator 6) implies being part of a system of interest representation with specific boundaries. Membership in associations affects the boundaries and identity of members (Ahrne & Brunsson, 2012). Umbrella associations are expected to be able to influence their members' behavior and contribute

[17] Joint ventures (*Interessengemeinschaften*) bring together different associations to share the responsibility for individual VET occupations. In such cases, membership of firms or individuals is usually only indirect via the associations forming the joint venture.

to the formulation of common goals (Schmitter & Streeck, 1999). The *organizational set-up* as joint venture as well as *membership in higher-level umbrella associations* thus indicate organizational boundaries. To allow for high levels of heterogeneity and, thus, to enable the bricolage of two institutional logics (i.e. associational and state-oriented) while preserving organizational boundaries, we expect New-Sector-OdA to be more often set up as joint ventures than Old-Sector-OdA. Moreover, to maintain pre-reform boundaries, we expect New-Sector-OdA to refrain from becoming members of umbrella associations. Becoming members of such national-level umbrella associations would hamper their ability to bring together employers, employees, and, crucially, public authorities.

Another important aspect of boundaries in this context is the *distance between OdA and firms* (Indicator 7). Firms are key stakeholders in the collective governance model of dual apprenticeship but were not in the other sectors. The ability to influence firms' behavior is crucial for employer associations in skill formation systems. Firms can either be direct members of OdA or only indirectly through another association that is an organizational sponsor of the OdA. Given their roots in a less employer-dominated and more school-based and state-dominated governance logic, we expect New-Sector-OdA not to include firms as direct members. Thereby, New-Sector-OdA can maintain pre-reform organizational boundaries.

A further characteristic of associations is that they are able to negotiate with public authorities. Thus, besides their members, the relationship to public authorities constitutes a decisive organizational boundary. If associations become too closely involved with public authorities, members may lose confidence in the associations' reliability with regard to interest representation. Yet, if associations have too little contact with public authorities, they may not enjoy the necessary influence to represent interests towards public authorities (Schmitter & Streeck, 1999). *Federal Commissions* (Indicator 8) are central arenas for steering the VET system. They are composed of a selected group of representatives from all stakeholder groups including state, employer, and employee representatives. Thus, OdA membership in such commissions indicates a close relationship with public authorities. Given the strong support by the state for the New-Sector-OdA, we expect them to be more often represented in Federal Commissions than Old-Sector-OdA in relative terms. Moreover, their *participation in national VET events* (Indicator 9) also indicates proximity to public authorities. National VET events

organized by the responsible government agency, the State Secretariat for Education, Research and Innovation (SBFI), provide crucial platforms for OdA to deliberate on their activities and exchange best practices. Not least due to the need to legitimize the strong support by the state, we expect New-Sector-OdA to be more regularly present at such events than Old-Sector-OdA.

Activity system

We examine three indicators for activity system: degree of professionalism, collective labor agreements, and VET funds.

The organizational development or degree of professionalism of OdA varies substantially. We assess their *degree of professionalism* (Indicator 10) by evaluating to which extent they publish and make accessible relevant information on their websites to members and other interested parties. This information includes visions, missions and aims, statutes and membership regulations, advertising membership, and organizing activities for members or offering them various services (see online appendix, Table A2, for details). We argue that the extent to which substantial information is provided on the organizational website reflects professionalism. To create a reasonably stable activity system despite the heterogeneity of the involved logics and actors (including state actors), and given their deliberate design through state-led bricolage rather than traditional evolution, a sustainable hybrid organization is expected to build on a high degree of professionalism. Thus, New-Sector-OdA are likely to display on average a higher degree of professionalism than Old-Sector-OdA.

A specific domain, in which traditional employer associations engage, is negotiating *collective labor agreements* (Indicator 11) with unions. Although, in Switzerland, VET is not tightly linked to wage coordination and unions play a minor role in VET governance (Emmenegger et al., 2020), some OdA are in charge of collective labor agreements. Given that *collective labor agreements* are a core activity for traditional employer associations but not in the integrated and originally more state-oriented sectors, we expect them to be less prevalent among New-Sector-OdA.

In contrast, although sectoral *VET funds* (Indicator 12) have a long tradition in certain sectors, only the 2002 VET act introduced the possibility to declare them generally binding. If they create generally binding VET funds, OdA rely on the coercive authority of the state, i.e. indirect state support (Traxler & Huemer, 2007). Thus, generally binding

VET funds commit all firms (not only member firms) employing a specific occupation to financially contribute to training activities. Due to the important role of the state in their creation, we expect New-Sector-OdA to develop VET funds more often than Old-Sector-OdA, which are reluctant to develop such coercive measures towards firms.

Methods and data

This section describes our mixed-methods approach. We begin by providing a historical-institutionalist account of the VET reform that led to the extension of the associational logic to the new sectors. Furthermore, we offer an in-depth case study of the development and organizational characteristics of one exemplary OdA, OdASanté. This first part of the empirical analysis serves to illustrate how the state acted as bricoleur to creatively combine the associational logic and the state-oriented logic, a process which is crystalized in the form of new hybrid intermediary associations. We select OdASanté as it represents a key example of a New-Sector-OdA, which is today responsible for one of the most prominent apprenticeship programs in Switzerland. In 2018, the health care apprenticeship was the third most common initial VET occupation offering dual training (BFS, 2019). Similar developments also occurred in very different fields such as farming or social pedagogy. While the details for each of the sectors integrated into the collective VET governance system differ, the general transition pattern is well-illustrated by the creation of OdASanté. Our case study is based on information from available secondary literature, document analysis, our new OdA database (details below), and expert interviews. Interview partners for semi-structured interviews were selected based on their expertise and practical knowledge on VET governance in Switzerland.[18]

In the second part of the empirical analysis, we carry out a cross-sectional statistical analysis of New- and Old-Sector-OdA in Switzerland, which allows us to see whether our argument around New-Sector-OdA being hybrid organizations also holds more generally. To compare hybrid features of New-Sector-OdA to Old-Sector-OdA, we analyze the complete population of Swiss OdA in charge of initial VET occupations. This population consists of 146 organizations, which are recognized by public authorities as responsible for an initial VET occupation. We collected data on these organizations from July 2017 to January 2018 from various written sources based on a structured questionnaire. To ensure the quality of the data, we developed a coding

[18] Interview CH1: Bern, 30.10.2018; CH2: Zurich, 23.11.2018; CH3: Bern, 26.11.2018; CH4: Bern, 6.12.2018.

manual with decision rules. Our data sources are the register of all federally recognized occupations with their responsible OdA, the organizations' websites, their statutes, published registers of collective labor agreements and binding VET funds, member lists of peak associations and federal commissions as well as participants' lists of events. Additionally, phone interviews were conducted with OdA publishing only limited information online.

We examine differences between New- and Old-Sector-OdA on our twelve indicators. However, a simple comparison of means does not take into account the differences in within-group variance and group sizes. We therefore use bivariate regressions to test if the observed differences in means between the New- and Old-Sector-OdA are statistically significant despite the rather small number of New-Sector-OdA and heterogeneity within the two groups. Given the properties of our dataset, this is a conservative test of the differences between the two groups. For most indicators we use logistical regression except for the indicator "participating in national events", where we use poisson regression and "degree of professionalism", where we use OLS regression. When the outcome is present in under 15% of cases, we use logistic regression adapted for rare events (see online appendix, Table A3, for the detailed regression results).

Our independent variable is the binary variable "new sector", which is coded as 1 if the OdA is responsible for an occupation in the newly integrated economic sectors. We identified these OdA based on administrative sources. Our classification of New-Sector-OdA was then confirmed by several experts in the field with whom we discussed it independently from each other. Most of our dependent variables (see online appendix, Table A2, for a detailed description of the variables) are coded as binary outcome variables taking the value 1 if the OdA shows the characteristic. The indicator "participating in national events" is a count variable, which varies from 0 to 5 participations. The indicator "degree of professionalism" is a continuous variable, which varies from 0 to 12 points.

Findings: State-led bricolage and the hybridity of New-Sector-OdA

In this section, we first offer an historical account of the VET reform that led to the extension of apprenticeship training to new sectors and provide an in-depth case study of OdASanté, a sector in which training was previously defined by a state-oriented logic.

We find that the new OdA resulted from a process of state-led bricolage and features a high level of hybridity. Second, our cross-sectional analysis of all Swiss Old- and New-Sector-OdA shows that this finding of hybridity holds more generally for the latter group.

The VET reform process and the creation of OdASanté

The important Swiss VET reform in the early 2000s expanded the associational logic to new sectors such as health care. The new VET act included all non-university vocationally oriented education and training rather than only training in the craft, industrial, and commercial sectors (BBT, 2000). This state-led reform thus concerned a diverse group of economic sectors that were so far not part of the VET system (e.g. agriculture, forestry, arts as well as the health and social care sectors). In these sectors, there had been no work- plus school-based apprenticeships governed by employer associations. Rather, training had taken various mainly school-oriented forms. In some sectors, professional associations, for example of farmers and nurses, had been involved in the development of training, but regional authorities (cantonal offices) had been the key stakeholders (Wettstein, 2020). Additionally, in these often para-public sectors, the state tends to be an important employer (even in agriculture and the arts, as state subsidies play an important role). Thus, the state and especially the cantonal offices had been key governance actors in the pre-reform setting of the concerned sectors. As explained earlier, we classify the pre-reform institutional logic in these sectors as state oriented.

Indeed, what unites the newly integrated sectors is that training was not organized in the form of dual apprenticeships but rather based on a state-oriented logic in cooperation with partners. However, otherwise, these new sectors differ significantly. With the major 2002 VET reform, the state aimed to align training in these sectors to the industrial-craft apprenticeship that is based on the associational logic. For implementing apprenticeships in these newly integrated sectors, the state agency responsible for vocational education and training promoted the creation of new training occupations. Moreover, given the key role of employer associations in the collective governance of dual apprenticeship training (Culpepper, 2003), the state provided the legal framework and assisted in the initiation of the associations responsible for these apprenticeships. In this context, one of the state's key goals was to prominently involve employers in these new associations.

Yet, rather than setting up organizations similar to the traditional associations described earlier, the state agency allowed and supported the creation of new organizational forms broad enough to combine institutional features of the state logic and the associational logic. Importantly, to describe these new organizational forms, the VET law introduced the deliberately broad term "Organizations of the World of Work" (OdA) that encompasses the variety of old and new associations in charge of VET. Once the relevant OdA were created in the new sectors, the state stepped back from its pro-active steering role to leave the space to private actors – thus contributing to the strengthening of the associational logic. Overall, we observe that in the creation of these new intermediary associations – which fulfill collective governance tasks usually delegated to employer associations in the traditional sectors – the state played a critical steering role in combining state and associational logics. In the following, our deep dive into the case of OdASanté serves to further substantiate our analysis of this reform process. We begin by tracing the pre-reform governance context for training in the health sector.

Historically, nursing training in Switzerland was primarily school-based and the most prominent entrance point for health occupations (Maurer, 2013). The respective programs were mainly focused on school diplomas, while the employers' side played a very limited role in their governance (Flury, 2004, p. 25). Cantonal health offices were responsible for securing public health, including the availability of health professionals. Together with the cantons, the Swiss Red Cross (SRC) played a relevant role in developing health care diplomas in Switzerland (Wettstein, 2020, pp. 118-119). All cantons recognized SRC diplomas and SRC monitoring ensured that training followed nation-wide standards, but training was not clearly positioned within the educational system (Bender, 2011; Spitzer & Perrenoud, 2006). However, with the growing importance of health care training, cantons were increasingly taking over responsibilities from the SRC (Bender, 2011). For instance, the intercantonal conference of health offices established a public-private partnership with the SRC.[19] The SRC's competencies included the definition of training curricula, the monitoring of the schools, and the recognition of foreign diplomas. Yet, cantonal health offices organized and financed the health training schools (BBT, 2000). Overall, on behalf of the cantons, the SRC had to carry out the will of the cantons with regard to the training (Flury, 2004, p.

[19] In Switzerland, cantons are the relevant regional bodies in diverse policy fields and cooperate through intercantonal conferences.

5). The nurses' association was involved in questions of training by cooperating with the SRC, while employers remained sidelined (Bender, 2011). However, generally speaking, the influence of professional associations was rather marginal: training in the health sector prior to the reform mainly involved cantonal health offices, the SRC, and schools (Flury 2004, p. 7). Training in the health sector was thus following a school- and state-oriented logic, while employer associations played virtually no role.

In the late 1990s, the Federal Parliament decided to integrate all non-university-based training into the VET system. Hence, training in the health sector was to be aligned to the industrial-craft apprenticeship model that is based on the associational logic. This involved handing over significant responsibility for training to the employers (Flury 2004, p. 33). While the SRC did not see another option than to agree with integrating health training in the regular education system (Bender, 2011), the SRC tried to limit the damage to their own organization and staff by trying to transfer their training section to the federal office, but this project failed. The nursing association supported the reform because it hoped to attain their aim of professionalizing nursing training (Kaufmann, 2010).

In terms of transition process, first, to anticipate the integration of health care training in the VET system, various cantons – i.e., the respective regional state agencies – developed pilot projects and created the first forms of the future health care apprenticeship (Interview CH3). Public funding was made available to finance these local projects. In these projects, the employers, such as public and private hospitals, were involved at the local level, while the SRC was also involved and issued diploma (Interview CH3). In a second phase, based on these local projects, a national health care apprenticeship was developed. Crucially, in 2000, the federal state agency responsible for VET (BBT, later renamed SBFI) was put in charge of training also in the health care sector and created a project structure for integrating this sector in the national VET framework (Project Group OdASanté, 2004, p. 4). The BBT played the overall steering role in this process as responsible agency for implementing the VET reform. It guided the major reform process that was to transfer the associational logic to a sector previously dominated by a state logic (Flury, 2004). However, in the case of health occupations, representatives of the intercantonal health office conference and the intercantonal education office conference were also involved as members of the project's steering group (BBT, 2000).

Once the new health care apprenticeship had been created, the state-led project steering group had the task of creating a new organization that would fulfil employer associations' traditional role in the Swiss VET system. This resulted in a new intermediary organization, namely OdASanté. While the project steering group was composed of both public and private actors, the Swiss Health Directors Conference, i.e. the political coordination body of the cantons in health policy, was chairing the group (Project Group OdASanté, 2004, p. 5). The lead of state actors in the transition process is also illustrated by the availability of public start-up funds for OdASanté (which otherwise is fully funded by membership fees) in this development phase (Project Group OdASanté, 2004, p. 3). While previously the SRC on behalf of the cantons had been in charge, during this transformation process other stakeholders, especially representatives of the employers in the health sector, realized that VET is an important policy field and that is worthwhile to invest in it (Flury, 2004, p. 32). In this context, we can observe that the state acted as a bricoleur in bringing together these actors and in combining the pre-reform state-logic of the newly integrated sectors with the associational logic otherwise dominant in apprenticeship training.

In line with this process of state-led bricolage, we find that OdASanté differs from the average OdA in traditional VET sectors in all three core organizational dimensions (goal direction, boundary maintenance, activity system). In the following, our application of the twelve indicators (see section 3.1) establishes that OdASanté displays organizational features reflecting hybridity.

With regard to *goal direction*, our analysis shows that OdASanté's policy field is restricted to training (Indicator 1), whereas traditional employer associations represent interests in a broad policy domain: "OdASanté is a training organization, not a strong employer or occupational association" (Interview CH1). The project team in charge for the transition process decided that this organization should include various stakeholders with diverging interests (Wettstein, 2020, p. 122): employers and occupational associations (Interview CH4), but crucially also cantonal authorities in the health domain (Indicator 2). This hints at the continued relevance of the pre-reform state-oriented logic. The nurses' association is included in OdASanté and thus continues representing nurses' interests – but was a relatively weak actor in the OdA's establishment relative to the intercantonal health office conference. The SRC was

excluded from governance, as there is no role foreseen for an NGO in the VET system. In contrast, employers – hospitals, home care nursing organizations, and nursing homes – have received a prominent role in collective governance. Their associations are included in OdASanté and are also represented in the cantonal sections of OdASanté together with cantonal VET and health offices (Interview CH4). In addition, the goal direction of OdASanté is characterized by it organizing inclusiveness-enhancing short-track training (Indicator 3) and validation of prior learning (Indicator 4).

Moving on to *boundary maintenance*, we find that OdASanté is a joint venture that allows bringing together different pre-reform stakeholders as sponsoring organizations (Indicator 5). Typically, in a joint venture, the sponsoring organizations have a broader domain of activity than the joint venture, which has a more specific task (Interview CH4). OdASanté is not member of a national-level employer association (Indicator 6). Although employer associations have gained an important role in governance, firms are only indirect members of OdASanté through their associations (Indicator 7). However, OdASanté was included as member in prestigious federal commissions – based on state invitation – alongside the national umbrella employer and employee associations (Indicator 8). Furthermore, OdASanté is an active participant in national VET events, again based on state invitation (Indicator 9).

Finally, regarding its *activity system*, OdASanté displays a high degree of professionalism (Indicator 10), which is illustrated, for instance, by its professional outreach activities and communication strategy. In contrast to traditional employer associations, it is not in charge of a collective labor agreement (Indicator 11) but OdASanté has developed a generally binding VET fund, which, as mentioned above, is coercive measure to commit all firms to training investments backed up by state authority (Indicator 12).

In sum, the case study of the creation of this major New-Sector-OdA has provided insights into both the state-led change process and the ensuing hybridity characteristics of this organizational form – especially with regard to the state as a bricoleur in the reform process and as an important pre-reform player in the integrated sectors. Next, we turn to the statistical analysis of all New- and Old-Sector-OdA, which allows us to see whether our argument around New-Sector-OdA being hybrid organizations also holds more generally.

Cross-sectional comparison of New- and Old-Sector-OdA

Our statistical analysis shows that New- and Old-Sector-OdA are clearly distinct with regard to our indicators of hybridity. Figure 1 shows group averages in percentage points for the binary variables and the means of the two groups' participation and professionalism as well as the results of our tests for statistical significance. Across almost all indicators, we find a strong confirmation for our expectation that New-Sector-OdA represent hybrid features.

Concerning the organizational dimension of goal direction, the comparison of New- and Old-Sector-OdA shows that the New-Sector-OdA limit their domain of activity more often to the policy field of VET than the Old-Sector-OdA (Indicator 1). This, as we argue, is in line with what the state was envisaging when developing the National VET Act of 2002, which sets the stage for the creation of the new intermediary organizations. This leads us to the next point, membership composition. New-Sector-OdA include public authorities in their membership more often than their counterparts (Indicator 2). Public authorities were important stakeholders in the pre-reform setting, and, thus, transferred their influence into the new governance arrangement. Furthermore, our analysis suggests that New-Sector-OdA are oriented towards public goals and, hence, offer more inclusiveness-enhancing VET, but the difference is only statistically significant for short-track training (Indicator 3) and not for validation of prior learning (Indicator 4).

More generally, these insights suggest that these hybrids govern new apprenticeships, for instance, by uniting the stakeholders typically found in traditional associations (i.e. employers) and stakeholders that had an important role in the previous institutional arrangement for training (i.e. public authorities).

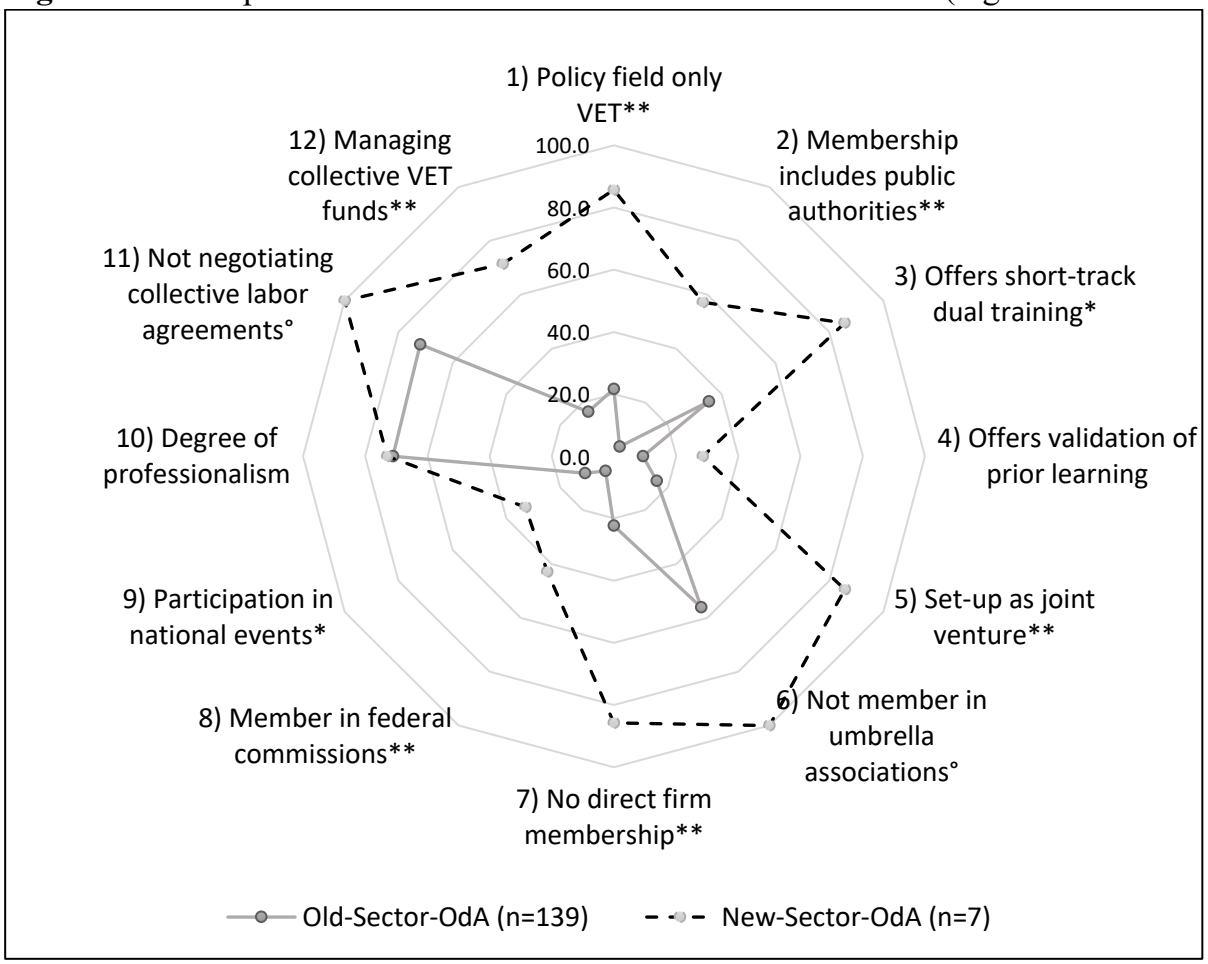
Regarding the second dimension, boundary maintenance, New-Sector-OdA are more often organized as joint ventures than as membership-based associations (Indicator 5). Their constituents are more often composed of organizational sponsors than in the case of Old-Sector-OdA. This organizational arrangement allows bringing together organizations of very different types, such as intercantonal conferences, employer associations, or employee organizations. In line with this organizational form, firms are less often direct members of New-Sector-OdA than Old-Sector-OdA (Indicator 6). This points towards the persistence of pre-reform boundaries and highlights that New-Sector-

OdA are clearly distinct from the ideal-typical associations in VET. Moreover, none of the New-Sector-OdA is member in a traditional umbrella association of employers, while 43.9% of the Old-Sector-OdA are members of such umbrella associations (Indicator 7). Thus, the New-Sector-OdA remain partly outside the existing system of interest representation in VET. Concerning the relationship with public authorities, New-Sector-OdA are more closely involved in federal commissions than Old-Sector-OdA (Indicator 8), which indicates the proximity of New-Sector-OdA to state actors. New-Sector-OdA also participate more often in national VET events than Old-Sector-OdA (Indicator 9).

These results show that New-Sector-OdA have developed organizational forms that allow them to maintain pre-reform boundaries. Moreover, New-Sector-OdA are in closer contact to public authorities than Old-Sector-OdA. Thus, a mutual approximation takes place but certain boundaries also persist.

Concerning their activity system, New-Sector-OdA have a slightly higher degree of professionalism than Old-Sector-OdA but this difference is not statistically significant (Indicator 10). Yet, an additional analysis shows that if professionalization items associated with their role in VET (6 items) are distinguished from items associated with general organizational development (7 items), New-Sector-OdA score significantly higher on VET-specific professionalization and lower on organization-specific professionalization. This is in line with our expectation that New-Sector-OdA have a strong need to become professionalized, to create a reasonably stable activity system despite the heterogeneity of the involved logics and actors (including state actors), and given their deliberate design through state-led bricolage. However, Old-Sector-OdA may be more developed as organizations due to their longer existence and broader domains of activity. Further, while 28.1% of the Old-Sector-OdA are direct partners in a collective labor agreement, New-Sector-OdA never engage in this activity (Indicator 11). This shows that these organizations limit their tasks to a specific field. Finally, New-Sector-OdA are more often responsible for collective VET funds. This difference

Figure 4-2: Comparison of New-Sector-OdA and Old-Sector-OdA (high values = more



Notes: ** $p < 0.01$, * $p < 0.05$, ° perfect match. The higher the score or percentage, the more salient are the hybrid features. Indicators 1-8, 11, 12 are binary variables: values represent group averages in %. Indicator 9 (count variable taking values from 0-5): average number of participations in national events, multiplied by ten to increase readability. Indicator 10: continuous variable; average score on professionalism index multiplied by ten to increase readability.

The results indicate that New-Sector-OdA create an activity system that enables them to fulfil their complex role in VET governance, but do not develop some of the typical, broader activities of traditional employer associations such as negotiating collective labor agreements. Moreover, the traditional employer associations appear more reluctant to introduce binding collective VET funds, which may be due to their members' resistance to coercive measures.

Summing up, in terms of the hybridity characteristics, the organizational form of New-Sector-OdA allows for heterogeneous organizational arrangements that include employers and, crucially, state actors. They focus on only one policy field and are set-

up as joint ventures rather than traditional membership-based associations. Moreover, pre-reform stakeholders are integrated into the new organizations, which do not become integrated in traditional umbrella associations, do rarely include firms directly, and do not get directly involved in negotiating collective labor agreements. More generally, our indicators point towards the strong role of the state in the process of integrating new sectors, for instance, because New-Sector-OdA contribute to inclusiveness-enhancing measures, participate in national events, and are members of federal commissions. Moreover, they rely on the state's coercive authority to overcome free-rider problems, for instance through generally binding VET funds.

Conclusion

This paper examined a major reform around a collectively governed policy field in which the provision of collective goods by private actors is promoted through an associational institutional logic. Collectively governed VET is a key policy area in which the associational logic prevails. While the organizational form of associations and their functions are well known, their core tasks are increasingly complex. In particular, the tertiarization of the economy challenges established associational systems, which have their strongholds in the second sector of the economy. How can collective governance be extended to sectors without collective governance tradition and what does the transfer of the associational logic of traditional apprenticeships to new sectors imply for collective organizing in the new sectors?

We addressed these questions using the case of a Swiss VET reform. Whereas traditional dual VET systems are increasingly under pressure, the Swiss dual VET system remains surprisingly stable. Our analysis focused on the establishment of new forms of collective organizing that support this maintenance. We have traced how the associational logic was transferred to new economic sectors through the creation of hybrid organizations. We found that these organizations provide platforms through which employers, employees, and state actors collaborate to govern apprenticeships. These new intermediary organizations developed innovative practices and structures to take up core functions of traditional associations. Thus, they represent a promising approach to establish the collective form of VET governance in the increasingly important service sector. We further find that this successful transfer hinges on the ability to develop innovative organizational features to bridge institutional logics, for example, by creating

joint ventures of stakeholders with diverging interests and limiting their policy domain to VET.

To analyze the new forms of collective governance, we introduced the concept of state-led bricolage. Combining this concept with the organizational dimensions of goal direction, boundary maintenance, and activity system, we developed indicators that also capture the degree of hybridity of the organizations in charge of governing VET. Hence, by exploring state-led bricolage as a strategy to promote change, our paper also contributes to ongoing discussions about driving forces and pathways in the emergence of hybrid organizational forms. Moving beyond studies of hybridity lacking a clear agent, we identified a state-sponsored process of bricolage that helps maintain the associational logic of apprenticeship. By operationalizing these broader conceptual dimensions, we also add to recent attempts to develop more nuanced ways to understand the opportunities and risks related to hybridity (Moser & Leipold, 2019). For instance, we observed that, while the state proactively pushed the creation of hybrid organizations, it then left them in large parts to private actors for their enactment. This indicates that having a strong state is not a necessary condition when it comes to the maintenance of such new organizational forms across whole sectors or nation-wide. Conversely, our analysis suggests that these organizations benefit from the capacity of the state to step in and out and to nudge private actors in whole sectors to cooperate in new ways.

The application of our framework has provided several insights that are potentially of broader interest. The critical institutional variety available to the bricoleur was the state-oriented logic in the VET system in the new sectors to be integrated in apprenticeship training and the associational logic in the traditional industry and crafts sectors. The state-led combination of these two logics within the newly created associations led to hybrid organizational forms fulfilling the governance tasks that are typically dealt with by traditional employer associations. Thus, we demonstrated that the state as the bricoleur can combine different institutional logics to reach an instrumental policy goal: in this case the stabilization of the Swiss VET system. Furthermore, we found that the bricoleur successfully imprinted some of its own core policy goals on the associational logic in the newly integrated sectors. In the context of this paper, such “footprints” of the bricoleur include societal goals that were promoted during the reform process, which go beyond what would typically be associated with the traditional associational logic.

Structural economic change poses a challenge to institutions that foster the provision of collective goods by private actors such as apprenticeship training and collective wage bargaining. Adapting them builds on the ability of multiple private and public stakeholders to work together. Processes of state-led bricolage may be key to bringing these stakeholders together in both innovative and sustainable ways. Our conceptualization of institutional logics and hybridity in the context of state-led bricolage in VET governance may provide inspiration for other cases. Obvious examples would be the adaptation of collectively governed skill formation to the service sector in other countries but also, more generally, the creation of new forms of collective organizing that take over governance tasks in diverse policy fields.

Appendix Chapter 4: Supplementary tables

Table 3-2: New-Sector-OdA in Switzerland

OdA	**Main pre-reform governance actors**	**Occupations**	**Number of Dual apprenticeships** (% of all in 2018)[1]
OdA Health	• Swiss Red Cross • Cantonal health offices • Nurses' association	• Health professional • Health and care assistant	11'968 (6.26) 1'939 (1.01)
OdA Social Sector	• Cantons	• Care professional • Health and care assistant	9'093 (4.76) 1'939 (1.01)
OdA Agriculture	• Farmers' association • Federal office for agriculture • Agricultural schools	• Poultry professional • Vegetables farmer • Farmer • Fruit professional • Wine grower • Wine technologist • Agricultural practitioner	13 (0.01) 86 (0.05) 2'735 (1.43) 41 (0.02) 164 (0.09) 79 (0.04) 207 (0.11)
OdA Forest	• Cantons • Federal office for the environment • Intercantonal forestry schools	• Forestry professional • Forestry practitioner	862 (0.45) 13 (0.01)
OdA Horse Occupations	• Cantons • Association of equestrians and riding schools • Association for therapeutic riding	• Groom professional • Groom practitioner	263 (0.14) 93 (0.05)
Swiss Dairy Industry Association	• Dairy associations • Federal office for agriculture • Dairy schools	• Milk technologist • Milk practitioner	308 (0.16) 39 (0.02)
OdA Dance	• No pre-existing training	• Stage dancer	19 (0.01)
Total dual apprentices in new sectors			27'913 (14.6% of all dual apprenticeships)

Sources: Literature review; translations by authors. Data on apprenticeship numbers are from BFS, *Gesamtbestand der Lernenden nach Beruf, Lehrbetriebskanton, Ausbildungstyp, Ausbildungsform, Geschlecht und Jahr*. Neuchatel: Federal Statistical Office. http://www.pxweb.bfs.admin.ch/sq/ebdd882f-e6e2-4089-91ae-b3519b8099fc (accessed: 03-June-2019). Note that in the case of OdA Dance, initially dual apprenticeship was dominant after the reform. Since 2011, however, dancing training shifted to school-based VET (in 2018, there were 124 stage dancers at VET schools).

German translations: *OdASanté*: Fachmann/-frau Gesundheit EFZ, Assistent/-in Gesundheit und Soziales EBA; *SavoirSocial*: Fachmann/-frau Betreuung EFZ, Assistent/-in Gesundheit und Soziales EBA; *AgriAliForm*: Agrarpraktiker/-in EBA, Geflügelfachmann/-frau EFZ, Gemüsegärtner/-in EFZ, Landwirt/-in EFZ, Obstfachmann/-frau EFZ, Winzer/-in EFZ, Weintechnologe/-in EFZ; *ODA Wald Schweiz*: Forstwart/-in EFZ, Forstpraktiker/-in EBA; *Organisation der Arbeitswelt Pferdeberufe Schweiz*: Pferdefachmann/-frau EFZ, Pferdewart/-in EBA; *Schweiz. Milchwirtschaftlicher Verein:* Milchtechnologe/-in EFZ, Milchpraktiker/-in EBA; *Danse Suisse*: Bühnentänzer/-in EFZ.

Table 3-3: Description of indicators used in the analysis

Indicator	Coding	Variable name	Data sources
Organizational set-up	Organizational form is coded as joint venture if OdA has few, influential sponsoring organizations and its field of activity is narrower than the field of activity of its sponsors.	Dummy_form_IG	OdA statutes (if unavailable: website or phone interview)
Policy fields	Policy field is coded as only VET if associational aims are focused on VET alone.	domain	OdA statutes (if unavailable: website or phone interview)
Degree of professionalism	13 items representing professionalism were defined: mission statement, organizational chart, occupational marketing, membership marketing, newsletter, download of VET-specific documentation, sale or download of educational materials, VET working groups, VET expert workshops, membership request, membership fees, member list, composition of VET quality commission. If the item appears on the OdA website = 1. Indicator = sum of points.	sum_prof sum of all items: varies between 0 and 12	OdA websites
Membership composition	All stakeholders included at the first or second level of organization according to statutes and statutes of organizational sponsors were listed. Categories: firms, professionals, public authorities, training providers, others.	IG_public	OdA statutes (if unavailable: website or phone interview)
Direct membership of firms	Coded as 1 if firms are: voting members, non-voting members, and/or organizational sponsors.	directfirm_dummy	OdA statutes (if unavailable: website or phone interview)
Membership in umbrella associations	Direct membership in any of the four important umbrella associations was coded as 1.	dirpeak_dummy	Data sources: member lists of four VET-relevant umbrella associations of business (Swiss Employer Association SAV, Swiss Trade Association SGV) and labor (Schweizerischer

			Gewerkschaftsbund SGB, Travail Suisse)
Responsibility for collective labor agreements	Coded as 1 if OdA is part of a collective labor agreement.	gav	Register of collective labor agreements of the State Secretariat for Economic Affairs, OdA websites, statutes
Responsibility for collective VET funds	If OdA has a generally binding VET fund, coded as 1.	vetfund_allgemein	SBFI register of VET funds
Membership in Federal Commissions	Coded as if OdA representative is member of a commission.	dircomm_dummy	Published lists of commission members in the four federal commissions concerned with VET[1]
Participation in national VET events	Sum of number of OdAs' participations at events; if OdA participated, coded as 1 (also if several representatives were present, only 1 point).	dirforum_sum sum of all participations: varies between 0-5	Participant lists of national VET events from 2015 to 2017
Organization of short-track dual training	Coded as 1 if OdA offers one or more EBA.	eba_dummy	SBFI register of occupations
Validation of prior learning	If documents for validation are available, coded as 1.	valid_dummy	SBFI register of occupations

[1]These are: Eidgenössische Berufsbildungskommission, Eidgenössische Fachhochschulkommission, Eidgenössische Kommission für Berufsbildungsverantwortliche, Eidgenössische Kommission für die Berufsmaturität

Table 3-4: Regression results of the comparison between New- and Old-Sector-OdA

	Independent variable: "new sector"			
Organizational dimensions	**Dependent variables**	**Coefficient**	**Significance (p values)**	**Estimator**
Goal direction	(1) Policy field only VET	3.08	0.005	Logistic regression
	(2) Public authorities included	2.95	0.001	Rare events logistic regression (5.48% positive cases)
	(3) Organization of short-track dual training	2.40	0.028	Logistic regression
	(4) Validation of prior learning	1.47	0.094	Rare events logistic regression (10.27% positive cases)
Boundary maintenance	(5) Organizational set-up	3.46	0.002	Logistic regression
	(6) Direct firm membership	-3.04	0.006	Logistic regression
	(7) Members in umbrella association	New sector predicts failure perfectly		Logistic regression
	(8) Member in federal commissions	2.95	0.001	Rare events logistic regression (6.76% positive cases)
	(9) Participation in national VET events	0.75	0.013	Poisson regression (count data)
Activity system	(10) Degree of professionalism	0.178	0.860	OLS
	(10a) Degree of professionalism (VET-specific)	0.185	0.022	Ordered logistic regression
	(10b) Degree of professionalism (organization-specific)	-0.841	0.164	Ordered logistic regression
	(11) Responsible for collective labor agreements	New sector predicts failure perfectly		Logistic regression
	(12) Responsible for collective VET funds	2.53	0.003	Logistic regression
No. of obs.	146			

Source: OdA database created by Patrick Emmenegger, Lukas Graf, and Alexandra Strebel

4. Der Beitrag der institutional work-Perspektive zu Educational Governance: Dezentrale institutionelle Arbeit in der Berufsbildung[20]

mit Sonja Engelage und Carmen Baumeler

Educational Governance untersucht die Steuerungsprozesse im Bildungswesen mit besonderer Berücksichtigung der Handlungskoordination verschiedener Akteurskonstellationen in komplexen Mehrebenensystemen. Verschiedentlich wurde moniert, dass insbesondere die Mikroebene des Handelns einzelner Akteure zu wenig berücksichtigt wird. Der vorliegende Beitrag schlägt daher eine Erweiterung der Educational Governance durch die institutional work-Perspektive vor, die untersucht, wie Institutionen durch die kenntnisreiche, kreative und praktische Arbeit von Individuen und kollektiven Akteuren neu geschaffen, aufrechterhalten oder verändert werden – etwa in Zeiten von Bildungsreformen. Die Erklärungskraft dieser theoretischen Perspektive wird exemplarisch demonstriert anhand der konkreten Praktiken eines Berufsverbandes in der Folge der 2004 lancierten schweizerischen Berufsbildungsreform.

Einleitung

Educational Governance untersucht „das Zustandekommen, die Aufrechterhaltung und die Transformation sozialer Ordnung und Leistungen im Bildungswesen unter der Perspektive der Handlungskoordination zwischen verschiedenen Akteuren in komplexen Mehrebenensystemen“ (Altrichter & Maag Merki, 2010, S. 22). Educational Governance reagiert damit auf den Sachverhalt, dass die von modernen, international vernetzten Gesellschaften aufgeworfenen bildungsbezogenen Probleme häufig Querschnittsthemen betreffen, die bereichsübergreifende Kooperationen erfordern (Schrader et al., 2015). Die Educational Governance etabliert damit ein Forschungsfeld,

[20] This is the accepted version of the following chapter: Strebel A., Engelage S., Baumeler C. (2019) Der Beitrag der *institutional work*-Perspektive zu Educational Governance. In: Langer R., Brüsemeister T. (eds) Handbuch Educational Governance Theorien. Educational Governance, vol 43. Springer VS, Wiesbaden. https://doi.org/10.1007/978-3-658-22237-6

das insbesondere Transformationsprozesse im Mehrebenensystem des Bildungsbereichs analysiert.

Allerdings ist Educational Governance keine neue oder konkrete Theorie. Vielmehr handelt es sich um eine besondere Sichtweise auf die Realität, die Formen der sozialen Handlungskoordination aus einer Multi-Level-Perspektive in den Blick nimmt (Kussau & Brüsemeister, 2007). Dies hat in der Bildungsforschung eine umfassende, interdisziplinäre Behandlung von aktuellen Fragen der Steuerung und Umstrukturierung des Bildungswesens stimuliert (Altrichter et al., 2007).

Verschiedentlich wurde aber kritisch angemerkt, dass in der Forschung zu Educational Governance nicht alle Ebenen des Mehrebenensystems gleichermaßen berücksichtigt, sondern hauptsächlich Phänomene auf der Makro- oder Mesoebene untersucht werden (Graβ, 2015; Schrader et al., 2015). Damit wird die Mikroebene des Handelns einzelner Akteure vernachlässigt. Da sich die Frage der Handlungskoordination aber wesentlich damit beschäftigt, „wie AkteurInnen durch bestimmte Handlungen oder Entscheidungen auf weitere Handlungen und Entscheidungen relevanter AkteurInnen Einfluss nehmen“ (Heinrich, 2007, S. 49), ist die Analyse dieser Ebene zentral. Handlungskoordination findet vorzugsweise auf der Mikroebene statt, auf der Akteure miteinander interagieren, ihre wechselseitigen Abhängigkeiten bearbeiten und so die Realisierung von Educational Governance im Alltag prägen. Die Einnahme einer Mikroperspektive ermöglicht folglich, die Handlungskoordination auf mehreren Ebenen aus der Perspektive derer zu analysieren, die letzten Endes Bildungsarbeit leisten und Reformen, die auf Änderungen von Bildungsprozessen zielen, in ihrem Alltag interpretieren, bearbeiten, umsetzen oder verweigern.

Der vorliegende Beitrag beschäftigt sich daher mit der zentralen Frage der Educational Governance: „Wie erfolgt die Handlungsabstimmung in einem Mehrebenensystem mit zahlreichen Akteuren?“ (Kussau & Brüsemeister, 2007, S. 16) aus der Perspektive des durch den soziologischen Neo-Institutionalismus geprägten *institutional work*-Ansatzes (Lawrence & Suddaby, 2006; Lawrence et al., 2009; Lawrence et al., 2013), der auf die Mikroebene fokussiert.

Der soziologische Neo-Institutionalismus, in dessen Kontext *institutional work* steht, weist eine lange Tradition in der Erforschung von Bildungsorganisationen auf (Hasse,

2016). Ein zentrales Postulat ist, dass nicht nur formale Regeln (Gesetze und Standards), sondern auch normative und kulturell-kognitive Einflüsse handlungskoordinierend sind. Kulturell-kognitive und normative Elemente wirken sich auf die Interpretation staatlicher Regulierung durch die Akteure aus und beeinflussen die Umsetzung maßgeblich. Der *institutional work*-Ansatz fragt spezifisch, wie Institutionen durch die kenntnisreiche, kreative und praktische Arbeit von Individuen und kollektiven Akteuren neu geschaffen, aufrechterhalten oder verändert werden (Lawrence & Suddaby, 2006). Er fokussiert auf die Art und Weise der Handlungskoordination verschiedener Akteure und ist daher anschlussfähig gegenüber der Educational Governance. Im Zentrum steht die Frage, wie Akteure institutionelle Arbeit leisten und Wandel mitgestalten. Insbesondere in Zeiten von Reformen sind Akteure herausgefordert, existierende Institutionen mit verschiedenen Praktiken aufrecht zu erhalten (z.B. durch Sicherstellen des Befolgens von Regeln oder durch die Reproduktion von bestehenden Normen und Glaubenssystemen), was nicht immer gelingt.

Die Educational Governance-Forschung hat sich bislang mehrheitlich auf die Schul- und Hochschulforschung fokussiert und die Berufsbildung, bis auf wenige Ausnahmen (u.a. Baumeler & Engelage, 2016; Bank et al., 2015; Klenk, 2013), als Untersuchungsobjekt vernachlässigt, obwohl diese sich besonders gut für die Analyse der Handlungskoordination in einem Mehrebenensystem eignet. Duale Berufsbildungssysteme sind ideale Objekte zur Untersuchung dezentraler Steuerung und des Zusammenspiels wirtschaftlicher Stakeholder, regionaler und nationaler Steuerungsorgane und Bildungsorganisationen, die gemeinsam das Ziel verfolgen, das öffentliche Gut Berufsbildung herzustellen. Auch hier stellt sich die generelle Frage, „auf der Basis welcher Governancestrukturen die verschiedenen Interessen ausgehandelt und entschieden und wie die Maßnahmen wirksam implementiert und umgesetzt werden können“ (Bank et al., 2016, S. 21).

Im empirischen Fokus unseres Beitrags steht daher die Rekonstruktion der konkreten Praktiken eines Berufsverbands in der Folge einer großen schweizerischen Berufsbildungsreform, welche 2004 initiiert wurde, aus der theoretischen Perspektive von *institutional work*. Wir zeigen exemplarisch auf, wie die Akteure die Umsetzung neuer gesetzlicher Vorgaben konkret bearbeiteten. Dabei gehen wir davon aus, dass die Reproduktion institutioneller Arrangements der Berufsbildung nicht automatisch erfolgte, sondern dass sie institutionelle Arbeit auf mehreren Ebenen erforderte, da die

Akteure eine Gesetzesänderung verarbeiteten und dabei auch normative und kulturell-kognitive Elemente stärkten oder neu etablierten und die Neuerungen in ihre Praktiken und Routinen einbetteten.

Der Beitrag ist wie folgt aufgebaut: Zunächst präsentieren wir die zentralen Aussagen des *institutional work*-Ansatzes und demonstrieren dann dessen Erklärungskraft samt Grenzen anhand eines empirischen Phänomens. Das präsentierte Fallbeispiel zeigt die konkrete institutionelle Bearbeitung der schweizerischen Berufsbildungsreform 2004 durch den Berufsverband der Weberinnen. Abschließend diskutieren wir, welche Erweiterung und Schärfung der *institutional work*-Ansatz der Educational Governance-Perspektive bietet.

Die *institutional work*-Perspektive

Um zu analysieren, wie Bildungsarbeit in Organisationen geleistet wird und wie Reformen konkret in die tägliche Praxis einfließen, eignet sich der soziologische Neo-Institutionalismus, in dessen Tradition auch die *institutional work*-Perspektive steht. Der soziologische Neo-Institutionalismus hat dazu beigetragen, die Handlungen von Organisationen und ihren Mitgliedern zu erklären, indem er rationale Akteur-Modelle verwirft und stattdessen den unreflektierten, routinemäßigen und als selbstverständlich empfundenen Charakter des menschlichen Handelns betont (Raviola & Norbäck, 2013). Institutionen wirken entlastend, da sie bestimmte Formen sozialen Handelns oder bestimmte Lösungsstrategien erwartbar machen, ohne dass detailliertes Wissen über Motive der Beteiligten und Begleitumstände notwendig ist (Hasse & Krücken, 2008). Sie sorgen damit für Stabilität, wirken sinnstiftend und befreien den Einzelnen von der „Bürde der Entscheidung“ (Berger & Luckmann, 1970, S. 57). Scott (2008) unterscheidet dabei drei institutionelle Dimensionen: Während regulative Institutionen Regeln und Gesetze beinhalten, die sanktioniert werden können, enthalten normative Institutionen Wertvorstellungen und soziale Verpflichtungen, deren Nichteinhaltung soziale Missbilligung zur Folge hat. Kulturell-kognitive Institutionen schließlich bestehen aus geteilten Deutungsmustern und Handlungsweisen, die wirksam sind, da sie als gegeben angenommen und nicht hinterfragt werden.

Beeinflusst durch Ideen aus Olivers (1991) Beitrag zu strategisch handelnden Organisationen und DiMaggios (1988) Konzept des institutionellen Unternehmertums sowie durch die praxisorientierte Soziologie, den Sozialkonstruktivismus und

organisationsethnographische Erkenntnisse schlugen Lawrence und Suddaby (2006) eine erweiterte Forschungsperspektive vor. Mit dem Ziel, die Aufmerksamkeit in der Analyse von Institutionen wieder stärker auf die Rolle der Akteure und ihrer Praktiken zu richten, haben sie den *institutional work*-Ansatz geprägt. Sie fokussieren auf „the purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions“ (Lawrence & Suddaby, 2006, S. 215). Der Ansatz lanciert die These, dass Institutionen durch institutionelle Arbeit individueller oder kollektiver Akteure permanent und aktiv neu geschaffen, erhalten oder verändert werden (Lawrence & Suddaby, 2006; Lawrence et al., 2011, 2009). Sie verorten diese Perspektive in praxistheoretischen Ansätzen, wie u.a. in den Arbeiten von Giddens (1984). So gehen sie davon aus, dass Institutionen durch soziales Handeln reproduziert oder verändert werden. Sie betonen dabei, dass dieses Handeln nicht losgelöst von Institutionen, aber auch nicht völlig durch sie determiniert ist.

Die handelnden Akteure werden in dieser Sichtweise aber neu als kenntnisreich konzeptualisiert und verfügen über ausgeprägte praktische Fertigkeiten und Sensibilität, die sie kreativ einsetzen können, um institutionelle Arrangements zu beeinflussen. Im Fokus steht „the creative and knowledgeable work of actors which may or may not achieve its desired ends and which interacts with existing social and technological structures in unintended and unexpected ways.“ (Lawrence & Suddaby, 2006, S. 219) *Institutional work* will dabei nicht nur intentionale Handlungen von machtvollen Akteuren untersuchen, sondern auch diejenigen identifizieren, die „nearly invisible and often mundane, as in the day-to-day adjustments, adaptations, and compromises of actors attempting to maintain institutional arrangements“ (Lawrence et al., 2009, S. 1) sind. Somit wird der Fokus auf die praktische Arbeit gelegt, durch die Akteure Institutionen reproduzieren oder verändern – und dies sowohl organisationsintern gegenüber den Mitgliedern als auch organisationsextern gegenüber dem Organisationsumfeld.

Während die Schaffung neuer Institutionen im Forschungsfeld von institutional entrepreneurship und in Untersuchungen über den Einfluss sozialer Bewegungen auf Institutionen (Fligstein & McAdam, 2001; Zietsma & Lawrence, 2010; Zietsma & McKnight, 2009) schon beachtliche empirische Aufmerksamkeit erhielten, wurde der Erhalt (*maintenance*) von Institutionen bislang nur wenig erforscht. Dies liegt daran, dass mit der Definition von Institutionen oft deren selbstreproduzierender Charakter

hervorgehoben und damit die Aufrechterhaltung von Institutionen implizit als gegeben betrachtet wird (z.B. DiMaggio & Powell, 1983; Jepperson, 1991). Lawrence und Suddaby (2006, S. 234) stellen aber fest, dass institutionelle Arbeit, welche Institutionen aufrechterhält, erhebliche Anstrengungen verlangt, vor allem dann, wenn sich das Organisationsfeld in eine neue und unerwartete Richtung weiterentwickelt, etwa durch eine Bildungsreform, wenn neue Akteure ins Feld eintreten oder sich ein technologischer oder demografischer Wandel vollzieht.

Table 4-1: Modi institutioneller Arbeit

Institutionelle Dimensionen	**Beispiele institutioneller Arbeit**
Regulativ Ziel ist die Aufrechterhaltung oder Anpassung von Gesetzen und Regeln	Neudefinition oder Änderung konstitutiver Regeln; Verwaltung, Beobachtung und Sanktionierung zur Stärkung von Regeln; Entkopplung von Belohnung und Sanktion von Regeln, um diese zu schwächen
Normativ Ziel ist die (neu-)Definition von Normen und Werten bzw. deren Stärkung oder Schwächung	Identitätskonstruktion, Veränderung normativer Assoziationen; Schaffung von Netzwerken, Reproduzieren von Normen durch Aufzeigen von positiven und negativen Beispielen; Entkopplung von Praktiken von ihrer moralischen Grundlage
Kulturell-kognitiv Ziel ist die Herstellung, Änderung oder Stärkung von Glaubenssystemen (*shared understanding*)	Einführung neuer Kategorien und Verkettungen von Ursache und Wirkung; Zerstreuung oder Untergrabung von Annahmen und Glauben über kausale Zusammenhänge; Erleichterung der Übernahmen neuer Praktiken durch Risikominimierung in Verbindung mit Innovation und Nachahmung

Quelle: Eigene Darstellung auf Grundlage von Lawrence & Suddaby, 2006 und Scott, 2008

Es ist grundlegend, die Praktiken zu analysieren, die von den handelnden Akteuren im Feld angewendet werden, um zu verstehen, wie individuelle und kollektive Akteure diese Dynamiken zu beeinflussen suchen und wie dies zu institutionellem Wandel oder zu Reproduktion beiträgt.

Anhand eines Rückblicks auf zahlreiche empirische Studien zu institutionellem Wandel und Reproduktion identifizieren Lawrence und Suddaby (2006) verschiedene Praktiken, die sie als institutionelle Arbeit klassifizieren. Sie ordnen diese Praktiken je nach Art des untersuchten Institutionalisierungsprozesses (Erschaffung, Erhalt oder Veränderung) in eine Taxonomie ein. Zudem unterscheiden sie, ob sich die institutionelle Arbeit mehrheitlich auf die regulative, normative oder kulturell-kognitive Dimension der Institutionen bezieht (siehe Tabelle 5-1).
In Bezug auf die regulative Dimension institutioneller Arbeit schaffen Akteure gemäß Lawrence und Suddaby (2006, S. 221-238) neue Regeln und Vorschriften (*advocacy*, *defining* und *vesting*), stellen die Einhaltung dieser Regeln sicher (*enabling work*, *deterrence*) oder schaffen diese ab (*disconnecting rewards and sanctions*) und belohnen oder sanktionieren entsprechendes Verhalten (*policing*). Einerseits verfolgen sie das Ziel, Regeln zu etablieren, die den Zugang zu Ressourcen ermöglichen, zum Beispiel durch die Definition verschiedener Kategorien von Mitgliedschaften. Andererseits ist diese Art institutioneller Arbeit auch geeignet, soziale Mechanismen einzuführen, zu stärken oder zu verändern, die über Belohnung und Bestrafung die Einhaltung der Regeln fördern.

Bezüglich der normativen Dimension versuchen Akteure, gemeinsame Deutungsrahmen zu entwickeln, die auf geteilten Werten und Normvorstellungen beruhen. Dabei können drei Ansatzpunkte institutioneller Arbeit unterschieden werden. Erstens kann über die aktive Etablierung kollektiver Identität das Verhältnis der Akteure zum Organisationsfeld definiert werden (*constructing identities*). Zweitens kann institutionelle Arbeit das Verhältnis zwischen den Normen und dem Organisationsfeld beeinflussen, indem Akteure die moralischen Grundwerte einer Regel stärken oder zu unterlaufen versuchen (*changing normative associations* und *disassociating moral foundations*). Das geschieht, indem sie bestimmte Praktiken als fair oder ungerecht einordnen, etwa indem sie positive oder negative Beispiele individuellen oder kollektiven Handelns bzw. Akteure öffentlich würdigen oder an den Pranger stellen (*valorizing*, *demonizing* und *mythologizing;* Lawrence & Suddaby, 2006, S. 232-233). Drittens formen Akteure eine gemeinsame Identität und geteilte Werte und Normen als Basis für die Schaffung „normativer Netzwerke“ (*constructing normative networks*); sie bestimmen also das Verhältnis der Akteure im Organisationsfeld zueinander (ebd., S. 224).

Schließlich versuchen Akteure in Bezug auf die kulturell-kognitive Dimension, aktiv Einfluss auf die Legitimationsmuster von Glaubenssystemen auszuüben. Das geschieht, indem sie zum Beispiel Annahmen über die Verkettung von Ursache und Wirkung herstellen (*theorizing*) oder neue Konzepte und Kategorien definieren. Zudem kann es hilfreich sein, wenn sie durch die Verwendung einer bestimmten Sprache und Fachtermini die Verinnerlichung von Konzepten und neuen Praktiken bei anderen Personen fördern (*embedding and routinizing*). Eine andere Art institutioneller Arbeit besteht in der Verbreitung von neuen Praktiken durch Schulungsaktivitäten oder Weiterbildungen, in denen neues Wissen und Praktiken eingeübt werden (*educating*; Lawrence & Suddaby, 2006, S. 226-228). Dabei bedeutet die Abnabelung von etablierten Praktiken zusätzlichen Aufwand und Anstrengung für die Akteure, für die der Ausgang solcher Umstellungen zudem noch häufig ungewiss ist (ebd., S. 237). Schließlich kann kulturell-kognitive institutionelle Arbeit auch darin bestehen, dass zugrundeliegende Glaubenssysteme untergraben (*undermining assumptions and belief*) oder antizipierte Risiken von Innovationen minimiert werden (*theorizing*). Nicht zuletzt können Akteure neue Handlungsabläufe musterhaft zur Verfügung stellen, welche die alten ersetzen (ebd., S. 237). Gelingt es Akteuren, veränderte Regelungen und Handlungsoptionen an die vormals bestehenden scheinbar anzugleichen (*mimicry*), kann auch das helfen, Widerständen zu begegnen und Vertrauen in neue Regeln und institutionelle Prozesse herzustellen.

Governance im komplexen Mehrebenensystem der Schweizer Berufsbildung

Im Folgenden wird die Erklärungskraft der theoretischen Perspektive von *institutional work* am empirischen Phänomen der schweizerischen Berufsbildungsreform 2004 demonstriert. Nach der Einführung in die Governancestruktur des komplexen Mehrebenensystems der Schweizerischen Berufsbildung wird die institutionelle Arbeit identifiziert, die ein Bildungsakteur, der Berufsverband der Weberinnen, geleistet hat, um die Handlungskoordination auf mehreren Ebenen zu gewährleisten und seine berufliche Grundbildung trotz existenzbedrohender Bildungsreform aufrechtzuerhalten. Dabei liegt das Interesse in der Identifizierung verschiedener Arten institutioneller Arbeit, die sich entweder an externe Anspruchsgruppen oder intern an die Mitglieder der Organisation richtet und durch die mehr oder weniger erfolgreich die Interessen der Organisation durchgesetzt werden können. So wird deutlich, wie Bildungssteuerung in der Berufsbildung funktioniert und auf welche Weise Handlungskoordination zwischen

Akteuren erfolgt. Insgesamt handelt es sich dabei um ein überraschendes Beispiel von *institutional maintenance*.

Die Schweizer Berufsbildung ist, ähnlich wie das deutsche und österreichische, ein kollektives Ausbildungssystem (Busemeyer & Trampusch, 2012), in das sowohl staatliche als auch wirtschaftliche Akteure involviert sind. Die Berufsbildung in diesen dualen Systemen ist geprägt von historisch gewachsenen institutionellen Arrangements zwischen privaten und öffentlichen Akteuren mit unterschiedlichen Zielen und Interessen. Neben mehreren administrativen Ebenen mit unterschiedlichen Akteurskonstellationen, wie etwa nationalen und regionalen Bildungsadministrationen und -organisationen, sind Stakeholder aus der Wirtschaft, zum Beispiel Kammern, Arbeitgeberverbände, Berufsverbände, Sozialpartner etc., von zentraler Bedeutung. Die gezielte Veränderung solch komplexer Arrangements ist oft schwierig. Kollektive Berufsbildungssysteme gelten daher als besonders fragil, da die ihnen unterliegenden Interessenskonflikte immer wieder hervorbrechen können.

Das besondere Merkmal kollektiv organisierter Berufsbildungssysteme ist, dass Arbeitgeber- und Berufsverbände eine entscheidende Rolle für deren Entwicklung und Umsetzung spielen. Sie übernehmen dafür zentrale Aufgaben im Berufsbildungssystem. Das Schweizer Berufsbildungsgesetz schreibt die Zusammenarbeit zwischen Staat und Wirtschaft vor. Die wirtschaftlichen Akteure werden dabei als „Organisationen der Arbeitswelt“ bezeichnet. Sie gestalten gemeinsam mit den kantonalen und Bundesbehörden das Berufsbildungssystem mit. Dies geschieht, indem Verbandsvertretungen in nationalen Arbeitsgruppen, Beiräten, etc. mitarbeiten und an nationalen Fachtagungen teilnehmen. Weiter hat der Staat den Verbänden öffentliche Aufgaben delegiert; insbesondere sind sie für die inhaltliche Definition der Berufe verantwortlich und erstellen die Curricula (Berufsentwicklung). So verfügen wichtige, bislang nur wenig erforschte Bildungsakteure wie Berufsverbände in der Schweiz über große inhaltliche Definitionsmacht. Dabei werden sie meist nicht als Bildungsakteure wahrgenommen, obwohl sie bildungsspezifische Aufgaben übernehmen und zum Teil auch als private Bildungsanbieter agieren.

Durch die Delegation der inhaltlichen Definitionsmacht an wirtschaftliche Verbände soll die Passung der Berufsbildung mit den Bedürfnissen des Arbeitsmarkts

gewährleistet werden, was als Schlüssel für die erfolgreiche Arbeitsmarktintegration der Jugendlichen gilt. Arbeitgeber- und Berufsverbände müssen dafür sowohl eng mit öffentlichen Ämtern als auch mit den ausbildenden Unternehmen zusammenarbeiten. Zudem übernehmen die Verbände wichtige Aufgaben in der eigentlichen beruflichen Bildungsarbeit. Dabei sind es insbesondere die Berufsleute, die als Berufsbildner in Betrieben, Prüfungsexperten oder Lehrpersonen an kantonalen Berufsfachschulen einen wesentlichen Beitrag zur Ausbildung von Fachkräften leisten.

Wichtig ist einerseits, dass in jedem dieser Bereiche alle Akteure (Bund, Kantone und Verbände) zusammenarbeiten müssen, und andererseits, dass je nach Aufgabenbereich andere Akteure die Hauptverantwortung tragen, die Akteurskonstellationen also ständig wechseln. Als intermediäre Organisationen müssen die Arbeitgeber-, Arbeitnehmer- und Berufsverbände Interessen ausgleichen und Kompromisse zwischen unterschiedlichen Anspruchsgruppen finden, wobei sie auch eigene Interessen entwickeln können (Schmitter & Streeck, 1999). Die Organisationen der Arbeitswelt arbeiten an der Schnittstelle zwischen ihren Berufsleuten, die ihre berufliche Tätigkeit schützen wollen, den Betrieben mit ihren je eigenen wirtschaftlichen Interessen und dem Staat, welcher die Qualität der Schweizer Berufsbildung insgesamt im Blick behält und über Modernisierung und Standardisierung die nationale und internationale Anerkennung der Berufsbildungsabschlüsse gewährleisten soll.

Die Berufsbildung in der Schweiz als lang bestehendes, komplexes institutionelles Arrangement ist besonders interessant, um die Institutionalisierungsarbeit dezentral positionierter Akteure mit wenigen Ressourcen für den Erhalt von Institutionen zu untersuchen. Im Gegensatz zu Deutschland sind die Schweizer Organisationen der Arbeitswelt kaum reguliert, die Mitgliedschaft ist für Firmen freiwillig und die Gewerkschaften sind nicht systematisch in die Erarbeitung der Bildungsinhalte involviert. Dies führt zu einer heterogenen Organisationslandschaft mit wenigen großen und einer Vielzahl kleiner Berufsverbände.

Das schweizerische Berufsbildungsgesetz wurde seit der ersten Gesetzgebung 1930 mehrmals revidiert (Wettstein et al., 2014). Die letzte Revision trat 2004 in Kraft und wurde als selbsterhaltender institutioneller Wandel charakterisiert (Trampusch, 2010b). Um das Berufsbildungssystem zu erhalten und zukunftstauglich zu machen, wurden verschiedene Anpassungen vorgenommen, ohne das System jedoch grundlegend

umzugestalten. So wurde die Qualitätsentwicklung der beruflichen Grundbildung gestärkt, indem neue pädagogische Konzepte eingeführt und als verbindlich für die inhaltliche Definition von Berufen erklärt wurden. Zudem nehmen die Bundesbehörden nun eine stärkere Rolle bei der Berufsentwicklung wahr, indem sie Berufsreformen aktiver begleiten (Berner, 2013).

Durch diese Neuerungen sahen sich vor allem kleine Berufsverbände mit einer schwierigen Situation konfrontiert. Um zu verhindern, dass sie ihre eidgenössische Berufsanerkennung verlieren, mussten sie mit ihren knappen finanziellen und personellen Mitteln höhere administrative und pädagogische Anforderungen bewältigen. Außerdem wurden sie aufgefordert, sich mit anderen Berufen zu sogenannten Berufsfeldern zusammenzuschließen, da es Bestrebungen gab, die Anzahl Berufe zu reduzieren. Unter diesen Umständen ist es umso erstaunlicher, dass es einige kleine Berufsverbände geschafft haben, ihre Organisationen und Berufe zu erhalten.

Fallbeispiel: institutionelle Arbeit des Berufsverbands „Interessengemeinschaft Weben“ in der Folge der Berufsbildungsreform 2004

Die Interessengemeinschaft Weben (IGW) ist als Berufsverband verantwortlich für die Wahrung der Interessen des Berufs „Gewebegestalterin“ und seiner Angehörigen sowie für die Organisation und Inhalte der Ausbildung. Die Organisation ist stark abhängig vom Engagement ihrer 360 Mitglieder, die sich hauptsächlich auf freiwilliger Basis und ehrenamtlich einbringen. In der Schweiz existieren heute lediglich sieben Ausbildungsbetriebe und eine Vollzeitberufsschule in der italienischen Schweiz, welche rund zehn Lernende pro Jahr im Weben als Beruf ausbilden.

Die IGW ist Teil des „Netzwerkes Kleinstberufe“, einer Plattform, die 2014 mit dem Ziel gegründet wurde, den Einfluss kleiner Berufe in der Berufsbildungspolitik durch einen verstärkten Wissens- und Erfahrungsaustausch zu erhöhen (Netzwerk Kleinstberufe, 2017). Die Fallstudie ermöglicht so Einblicke in die institutionelle Arbeit von Organisationen, welche sich mit beschränkten Mitteln und geringer Machtausstattung für den Erhalt ihrer Organisation und ihres Berufes engagieren.

Die im Folgenden präsentierte Fallstudie basiert auf Dokumenten der IGW (Jahresberichte, Skripte für Mitgliederinformation an den Jahresversammlungen, Artikeln aus der Verbandszeitschrift und Informationen von der Webseite) und auf

einem umfangreichen Experteninterview (Bogner et al., 2009) mit einer Repräsentantin der IGW, in dem sie ihr Insider-Wissen zur Verfügung stellte und detailliert organisationale Praktiken während des Reformprozesses schilderte. Der transkribierte Text des zweistündigen Gesprächs und die schriftlichen Dokumente dienten als Grundlage, um einerseits die verschiedenen Phasen des Reformprozesses näher zu beleuchten (Langley, 1999; Zietsma & Lawrence, 2010). Andererseits konnten diskursive Praktiken des Berufsverbandes gegenüber internen und externen Stakeholdern identifiziert werden. Die vorgängig beschriebenen Formen institutioneller Arbeit dienten als sensibilisierende Konzepte für die Inhaltsanalyse (Kelle & Kluge, 1999). Tabelle 5-2 gibt einen Überblick über den Berufsreformprozess und die verwendeten Modi institutioneller Arbeit, die im Folgenden detailliert beschrieben werden.

Das 2004 in Kraft getretene Berufsbildungsgesetz verlangte die Ausarbeitung neuer rechtlicher Grundlagen für sämtliche Berufe der beruflichen Grundbildung wie zum Beispiel Curricula, Prüfungsbestimmungen, etc. Für die IGW schienen die administrativen Hürden und der Aufwand für diese Arbeit zu hoch. Besonders der enge Zeitplan, der Mangel an finanziellen Ressourcen und die erwartete Mehrarbeit schienen die Anpassung des Berufs an die neuen Gesetzesvorlagen zu verunmöglichen. Gleichzeitig wurde eine für die IGW wichtige Berufsfachschule von den kantonalen Behörden geschlossen, womit einige schulbasierte Lehrstellen verloren gingen. Die IGW spielte daher mit dem Gedanken, die berufliche Grundbildung aufzugeben und Weben nur noch im Rahmen der beruflichen Weiterbildung anzubieten. Sie versuchten also, die Reform zu vermeiden, statt sie sofort umzusetzen. In den Diskussionen zur Zukunft des Weberinnen-Berufs bewerteten die Verbandsmitglieder die Wichtigkeit der Berufsbildung unterschiedlich. Einige sahen sie als entscheidend, andere monierten, dass Weberinnen auch ohne Berufsbildung sehr gute Arbeit leisten können.

In dieser Situation lancierte die IGW zuerst interne Abklärungen zu alternativen Ausbildungsmöglichkeiten und zur Arbeitsmarktintegration von kürzlich diplomierten Weberinnen. Sie stellten dabei fest, dass viele Weberinnen nach wie vor im Berufsfeld tätig sind. Außerdem erhielten sie von Stakeholdern aus der höheren Bildung und Arbeitgebern die Rückmeldung, dass die in der Grundbildung vermittelten praktischen Fähigkeiten wertvoll seien. Weiter stellten sie fest, dass andere Bildungszertifikate im Gegensatz zum eidgenössisch anerkannten Berufsbildungsdiplom nicht mit Sicherheit

das Einkommen, das bislang im Beruf erzielt wurde, garantieren können. Zudem wäre die Schaffung eines alternativen Ausbildungsgangs ähnlich aufwändig gewesen. Die Abklärungen endeten in der Etablierung eines gemeinsamen Deutungsrahmens, der auf pragmatischer Legitimität beruht und die kausalen Zusammenhänge zwischen der Berufsbildung, der Arbeitsmarktintegration und der Einkommenshöhe für die Weberinnen (*theorizing*, kulturell-kognitive institutionelle Arbeit) sowie die Relevanz der Beibehaltung der beruflichen Grundbildung für die IGW hervorhob.

Table 4-2: Zusammenfassung: Berufsreform und institutionelle Arbeit der Weberinnen

Phasen des Berufsreformprozesses	**institutional work organisationsintern: Mitglieder**	**institutional work organisationsextern: Organisationsfeld**
2004-2007: **Existenzielle Bedrohung:** - Hohe Anforderungen der Behörden an die Reformierung der Berufe - Schließung der Berufsschule	Erörterung alternativer Ausbildungsmöglichkeiten: Etablierung eines Deutungsrahmens über die Relevanz der Berufsbildung für die IGW und die Berufsleute (*theorizing*)	Versuch, die Berufsreform zu vermeiden Abklärung von Synergien mit anderen Berufsverbänden Unbeabsichtigte Konsequenz: Kontakte werden mit ähnlichen Verbänden etabliert
2008-2010: **Berufsreformprozess**	Partizipation, Konsensfindung und die diskursive Herstellung von Kontinuität zwischen Vergangenheit und Zukunft ermöglichen regulative, normative und kulturell-kognitive Anpassungen am Berufsbild	Zugeständnisse der Bundesbehörden ermöglichen den Beginn des Reformprozesses Mitwirkung der Behörden innerhalb der Reformkommission

	(*theorizing*, *constructing identities*)	
2011-2015: **Umsetzung der Reform:** Zehn Lernende beginnen neu mit der Ausbildung zur Gewebegestalterin	Schulung der Berufsleute über die neuen Regelungen und Praktiken der Berufsbildung (*educating*, *embedding and routinizing*) Mobilisierung von Mitgliedern und Ausbildungsbetrieben durch Anerkennung von bestimmten Handlungsweisen und Abwertung anderer Handlungsweisen (*valorizing and demonizing*)	Erfolglose Versuche, Behörden zu beeinflussen (*advocacy*) Schaffung einer neuen kollektiven Identität „Kleinstberufe" und des normativen Netzwerks unter den Verbänden der Kleinstberufe (*constructing identities and normative networks*) resultiert in erhöhter Sichtbarkeit und sozialer Anerkennung der Kleinstberufe sowie einem ersten Verhandlungserfolg mit kantonalen Behörden

Quelle: Eigene Darstellung

Parallel dazu folgte die IGW der Empfehlung der Behörden, abzuklären, ob sie zusammen mit anderen ähnlichen Berufen ein sogenanntes Berufsfeld gründen könnten. Es folgten mehrere Treffen mit anderen Handwerksverbänden, unterstützt von Nicht-Regierungsorganisationen, die das traditionelle Handwerk erhalten wollen. Obwohl letztlich kein Zusammenschluss zu einem Berufsfeld erfolgte, hatten diese Treffen zweierlei Effekte. Zum einen bildeten sie eine Quelle des Austauschs von Wissen und Praktiken über die Berufsbildungsreform, zum anderen wurde darin deutlich, dass auch andere Verbände mit vergleichbaren Schwierigkeiten zu kämpfen hatten. So entstanden erste Kontakte unter den Verbandsvertretungen und erste Schritte in Richtung einer gemeinsamen Identität der kleinen und im traditionellen Handwerk verankerten Berufe (*constructing networks and identities*, normative institutionelle Arbeit).

Im Jahr 2008 entschieden die Weberinnen schließlich doch, die Reform ihres Berufes als berufliche Grundbildung durchzuführen, auch da die Behörden ihrerseits die zeitlichen Vorgaben gelockert, detaillierte Leitfäden zur Durchführung der Berufsreformen erstellt und finanzielle Unterstützung zugesichert hatten. Die IGW führte den Reformprozess gemäß den von den Bundesbehörden vorgegebenen Abläufen der Berufsentwicklung durch. Dazu gehörte eine fundierte Analyse des Arbeitsmarktes und der beruflichen Handlungskompetenz und die Entwicklung und Überarbeitung der Bildungspläne. Im Ergebnis fokussierten sie die Inhalte der beruflichen Grundbildung mehr auf die Aspekte des Designs, des Kundendienstes und des Verkaufs. Somit wurden der Kern des Berufes und seine Position im Arbeitsmarkt neu ausgerichtet. Statt der praktischen Aspekte des Handwebens steht nun der kognitive Aspekt des Gestaltens im Vordergrund. Im Bewusstsein, dass die meisten Weberinnen in ökonomischen Nischen selbstständig oder in kleinen Ateliers arbeiten, wurden neue Inhalte zum Verkauf in das Berufsbild eingefügt. Dementsprechend wurde die Berufsbezeichnung von „Textilgestalterin Handweben“ zu „Gewebegestalterin“ angepasst. Dies entspricht normativer Arbeit, die Werte und Normvorstellungen definiert (*constructing identities*) und regulativer Arbeit, die diese in die rechtlichen Grundlagen in Form der Bildungsverordnung und des Curriculums einbettet.

Somit beinhaltete die Berufsreform verschiedene regulative, normative und kulturell-kognitive Veränderungen, welche von den Organisationsmitgliedern und den nationalen und kantonalen Behörden gutgeheißen werden mussten. Dies gelang einerseits dadurch, dass Mitglieder stark in den Ausarbeitungsprozess involviert waren (Mitarbeit in der sogenannten Reformkommission) und externe pädagogische Berater und Behörden als legitimierende Instanzen hinzugezogen wurden. Andererseits nutzten die Verantwortlichen interne Kommunikationskanäle, um Kontinuität mit der Vergangenheit herzustellen, etwa indem darauf hingewiesen wurde, dass in der langen Berufsbildungsgeschichte der Weberei schon verschiedene Namens- und Inhaltsänderungen etabliert wurden. Solche kulturell-kognitive institutionelle Arbeit lässt sich oft in institutionellen Veränderungsprozessen beobachten. Es geht dabei um *theorizing*, also die Herstellung und Kommunikation von Zusammenhängen, auf deren Basis ein gemeinsames Verständnis von neuen Situationen entwickelt wird.

Die anschließende Implementierung der neuen Regelungen war für die Mitglieder des Berufsverbandes, aber auch für die ausbildenden Betriebe wiederum eine große

Herausforderung. So musste Lehrmaterial gemäß der neuen inhaltlichen Ausrichtung weiterentwickelt werden, die betrieblichen und schulischen Ausbildner neu geschult und in den Betrieben Änderungen an der Ausbildungspraxis eingeführt werden.

Wie Lawrence und Suddaby (2006) in ihrer Diskussion der regulativen institutionellen Arbeit hervorheben, fördern soziale Mechanismen wie Belohnung und Sanktionen die Einhaltung von Regeln. Diese Mechanismen müssen durch die Schaffung von Kontrollinstanzen, Zugang zu Informationen und rechtliche Möglichkeiten Sanktionen einzusetzen, verstärkt werden (*enabling work* und *policing*). Solche Sanktionsmechanismen existieren auch in der Berufsbildung. Die Berufsverbände haben durch ihre enge Zusammenarbeit mit den Ausbildungsbetrieben Zugang zu Informationen über die Einhaltung gesetzlicher Vorgaben. Dadurch verfügen sie über ein gewisses Maß an Macht gegenüber den ausbildenden Betrieben und könnten zusammen mit den zuständigen kantonalen Behörden beispielweise Lehrbewilligungen entziehen, wenn ein Betrieb die berufliche Grundbildung nicht korrekt umsetzt. Da die Verbände für das Angebot an Lehrstellen aber auf die freiwillige Mitarbeit der Betriebe angewiesen sind, werden solche Maßnahmen und ein potentieller Austritt eines Betriebes häufig als zu riskant eingeschätzt.

Neben formalen Sanktionen sind aber auch informelle Arten der Belohnung und Sanktion möglich, die zur Förderung von übereinstimmenden Haltungen und letztlich auch Handlungen beitragen. Zu diesen zählen die verschiedenen Arten normativer und kulturell-kognitiver institutioneller Arbeit. In der Umsetzungsphase war unter anderem der kognitive Aspekt des *educating* wichtig. Die Berufsleute, welche die neuen Regelungen in Schulen und Betrieben umsetzen müssen, wurden weitergebildet. Dafür wurden jährlich zweitägige Trainingsworkshops und weitere Schulungen organisiert. Durch die Vermittlung der neuen Regelungen und Abläufe, inklusive ihrer Begründungen, wurden die Verantwortlichen motiviert und befähigt, diese auch an den verschiedenen Ausbildungsorten umzusetzen. Die jährliche Wiederholung der Aktivitäten diente dabei der Integration von Neuerungen in die Vereinsroutinen (*embedding and routinizing*).

Neben dieser kulturell-kognitiven institutionellen Arbeit spielten auch normative Elemente eine wichtige Rolle in der Umsetzungsphase. Das normative Fundament einer Institution wird durch die Definition besonders positiver und negativer Beispiele

gefestigt, die den Handlungsrahmen formen. Lawrence und Suddaby (2006) sprechen von „Valorisierung bzw. Dämonisierung“ von Praktiken. So wurden verbandsintern Mitglieder und Betriebe, die sich besonders für die Belange der Berufsbildung engagierten, an Mitgliederversammlungen lobend erwähnt. Mitglieder oder Betriebe, die sich nicht engagierten und nicht an den Versammlungen erschienen, dienten als negative Gegenbeispiele. Auf diese Weise wurde das normative Bild des „guten Mitglieds“ kreiert und verdeutlicht, welche Verhaltensweisen erwünscht und welche nicht akzeptiert sind. So wurde informeller Druck aufgebaut, der anstelle von formalen Sanktionen die Einhaltung von Regeln begünstigt. Diese Art institutioneller Arbeit scheint besonders wichtig in einer Situation, in der Sanktionsmechanismen zwar existieren, diese aber als kontraproduktiv eingeschätzt werden.

Um informellen Druck aufzubauen und gemeinsame Deutungsrahmen zu schaffen, musste allerdings ein intensiver, direkter Kontakt mit den Mitgliedern gepflegt werden. In den Erläuterungen der IGW-Vertretung zum Reformprozess trat dies prominent hervor. Die IGW-Verantwortlichen schufen bewusst mehr Gelegenheiten für den informellen Austausch und das Networking unter den Mitgliedern der Organisation. Solche Gelegenheiten der persönlichen Kontaktaufnahme wurden als zeitaufwändig, aber essentiell angesehen, um Konsens herzustellen. So wurde im Rahmen neuer und bestehender verbandsinterner Foren kulturell-kognitive und normative institutionelle Arbeit erfolgreich und aktiv für die Mobilisierung der Mitglieder und Betriebe genutzt.

Die institutionelle Arbeit gegenüber den Behörden gestaltete sich demgegenüber passiver und schwieriger. Die Beziehung zu den Bundesbehörden war zwar sehr direkt und persönlich, da eine Bundesvertreterin auch die Berufsentwicklung begleitete. Jedoch zeichnete sich hier vorerst keine erfolgreiche Einflussnahme ab. So wurden spezifische Anliegen der IGW zum Teil mit Verweis auf administrative Regelungen zurückgewiesen, wodurch sich die IGW als unfair behandelt wahrnahm.

Noch schwieriger gestaltete sich die Zusammenarbeit mit kantonalen Behörden. Diese finanzieren einen Großteil des Aufwands der beruflichen Grundbildung, nämlich die Berufsfachschulen und einen Teil der Kosten für überbetriebliche Kurse und Abschlussprüfungen. Konkret beschlossen die Kantone, dass die einzige Lernende aus der französischsprachigen Schweiz am deutschsprachigen Berufsfachschulunterricht teilnehmen müsse. Dadurch war die IGW gezwungen, den Unterricht bilingual

durchzuführen, was für die Lehrpersonen und den Berufsverband Zusatzaufwand zur Folge hatte. Anfragen nach zusätzlicher finanzieller Unterstützung durch die öffentliche Hand blieben aber vorerst erfolglos.

Die IGW stand mit solchen Schwierigkeiten aber nicht alleine da. Hier kamen die in der Anfangszeit etablierten Kontakte zu anderen kleinen handwerklichen Berufsverbänden wieder ins Spiel. Diese dienten zunächst dem informellen Informationsaustausch, wurden aber ab 2012 formalisiert. Dabei wurden die betroffenen Berufsverbände von verschiedenen Stakeholdern unterstützt. Dazu gehörten der Schweizerische Gewerbeverband, der sich für kleine und mittlere Unternehmen engagierte, das Bundesamt für Kultur, das sich für den Erhalt des traditionellen Handwerks einsetzte, das Eidgenössische Hochschulinstitut für Berufsbildung, das im Auftrag des Bundes die Berufsentwicklung begleitete, die Bundesbehörde selbst sowie auch die kantonale Koordinationskonferenz für die Berufsbildung (SBBK). Seit 2012 fand jährlich je eine solche nationale Tagung mit dem Ziel statt, Erfahrungen auszutauschen und Lösungsansätze zu entwickeln. 2014 wurde schließlich das „Netzwerk Kleinstberufe“ mit einer eigenen Organisationsstruktur und einem Internetauftritt gegründet. In Anlehnung an Lawrence und Suddaby (2006) entsprechen diese Entwicklungen der Schaffung einer neuen kollektiven Identität „die Kleinstberufe“ und der Etablierung eines normativen Netzwerks zwischen verschiedenen Organisationen, die gemeinsame Wertvorstellungen und Normen teilen.

Drei Jahre nach der ersten Tagung der Kleinstberufe konstatierte die IGW, dass durch das Netzwerk für die kleinen Berufe die Möglichkeit entstanden sei, mit einer Stimme und auf Augenhöhe mit den Behörden zu kommunizieren. Zusätzlich konnten die Berufsverbände der Kleinstberufe durch ihre gemeinsame Teilnahme an der Schweizerischen Berufsbildungsmesse Swiss Skills die Visibilität ihrer Berufe auch für ein breiteres Publikum erhöhen. Nicht zuletzt führte die IGW einen vor kurzem erwirkten Verhandlungserfolg mit den Kantonen auch darauf zurück, dass sie ihre Interessen im Netzwerk besser kommunizieren und durchsetzen konnten.

Diskussion: die Bedeutung von *institutional work* für die Theoriebildung der Educational Governance

Im Folgenden werden die bisher präsentierten Argumente zusammengefügt, um zu zeigen, wie Educational Governance von einer Perspektivenerweiterung in Richtung *institutional work* profitieren kann.

Educational Governance interessiert sich für die Frage, „wie erforderliche oder gewünschte Leistungen im Zusammen-, aber auch Gegenspiel der involvierten Akteure hergestellt werden, wie ihre Handlungskoordination erfolgt und auf welche Formen der Kooperation sie dabei zurückgreifen." (Graβ, 2015, S. 87) Theoretische Perspektiven machen jeweils bestimmte Phänomene sichtbar, während andere weniger beachtet werden oder unsichtbar bleiben. Die Stärke der *institutional work*-Perspektive liegt in der Sichtbarmachung der Mikroebene, die bislang in der Forschung zu Educational Governance vernachlässigt wurde. Will man nämlich genauer untersuchen, wie Handlungskoordination zustande kommt, kommt man um die Untersuchung konkreter Praktiken der handelnden Akteure nicht herum. Da die Educational Governance-Perspektive sich hier nur unzureichend scharfsichtig darstellt, sind neue institutionalistische Ansätze hilfreich, welche ihr Augenmerk gerade auf diese, von der Educational Governance unterbelichteten Aspekte der Mikroebene legen (Graβ 2015).

Der *institutional work*-Ansatz ist geeignet, um komplexe Prozesse des institutionellen Wandels detailliert darzustellen und das Verständnis der Rolle der Akteure in diesen Prozessen zu erhöhen. Wie Powell und Colyvas (2008, S. 2) konstatieren: „Institutions are sustained, altered, and extinguished as they are enacted by individuals in concrete social situations. We need a richer understanding of how individuals locate themselves in social relations and interpret their context."

Institutional work fokussiert auf die Handlungen von Individuen und kollektiver Akteure bei der Schaffung, Aufrechterhaltung und Transformation von Institutionen. Akteure sind dabei kenntnisreich, kreativ und verfügen über praktische Fertigkeiten. Ihr Handeln ist häufig unsichtbar, alltäglich und beinhaltet Anpassungen und Kompromisse, und zwar sowohl gegenüber Organisationsmitgliedern als auch gegenüber dem Organisationsumfeld. Zu ihrem Handlungsrepertoire gehören verschiedene Praktiken, die regulative, normative und kulturell-kognitive institutionelle Dimensionen tangieren. Dabei wissen sie jeweils nicht, ob sie ihr Ziel erreichen oder scheitern.

Educational Governance-Forschung betrachtet Steuerungsprozesse im Bildungswesen, hat aber die Berufsbildung bislang vernachlässigt, obwohl sich gerade hier ein ideales Analysefeld dezentraler Steuerung ausbreitet, da kollektiv organisierte Berufsbildung hauptsächlich über Aushandlungsprozesse zwischen Staat und privaten Akteuren organisiert ist. Der empirische Zugriff auf das Handeln in Form von *institutional work* erlaubt einen detaillierten Blick auf die Mikroebene des Handelns und der Handlungskoordination eines Berufsverbands bei der Verarbeitung der schweizerischen Berufsbildungsreform 2004. Eine Erweiterung von Educational Governance durch die Perspektive von *institutional work* scheint vorteilhaft, da der Alltag der Akteure und damit auch das Steuerungshandeln in seiner Komplexität besser verstanden werden kann.

Das präsentierte Fallbeispiel illustriert die Handlungskoordination auf mehreren Ebenen aus der Perspektive derer, die letzten Endes Bildungsarbeit leisten und Reformen in ihrem Alltag bearbeiten, die auf Änderungen von Bildungsprozessen zielen. Die Fallstudie der Berufsreform der Weberinnen zeigt auf, dass für das Überleben eines Kleinstberufes unter dem neuen Schweizer Berufsbildungsgesetz institutionelle Arbeit nötig wurde. Die institutionelle Arbeit zum Erhalt der beruflichen Grundbildung der Weberinnen fand vor allem organisationsintern, durch normativen Druck, Theorizing und Educating statt. Die Handlungskoordination mit Bundes- und kantonalen Behörden hingegen verlief zuerst relativ passiv. Sie war dann in der Umsetzungsphase geprägt von einigen erfolglosen Beeinflussungsversuchen. Erst die Kontakte mit anderen gleichartigen Berufsverbänden führten zur Entstehung einer neuen kollektiven Identität, die zur Bildung des Netzwerks Kleinstberufe beitrug. Durch dieses Netzwerk hat sich im Anschluss auch der Zugang zu den Behörden verbessert.

Das Überleben des Berufsverbands und der beruflichen Grundbildung Gewebegestalterin erforderte einige Anstrengung. Die identifizierten Handlungskoordinationen betrafen dabei nicht nur das Organisationsfeld, also die Mehrebenen-Kooperation mit Bund, Kantonen, und Firmen, sondern auch die Aufrechterhaltung der Organisation selbst, in dem institutionelle Arbeit auch intern gegenüber den Organisationsmitgliedern nötig war. Dabei verwendeten die Akteure eine Vielfalt von institutioneller Arbeit, die weit über das reine Belohnen oder Sanktionieren von Regeln hinausging und vor allem aktive Arbeit an normativen und kulturell-

kognitiven Institutionen beinhaltete. Verschiedene Arten von institutioneller Arbeit fanden dabei gleichzeitig statt. Die Perspektive von *institutional work* ermöglicht folglich, parallel laufende Koordinationsmechanismen innerhalb und außerhalb einer Organisation zu identifizieren. Educational Governance kann durch die verstärkte Analyse von alltäglichen Prozessen in Bildungsorganisationen und dem Fokus auf normative und kulturell-kognitive Prozesse profitieren, um Steuerungsprozesse und ihre Ergebnisse besser zu verstehen.

Institutional work verweist auf eine Vielzahl von alltäglichen Handlungskoordinationen hinsichtlich regulativer, normativer oder kulturell-kognitiver Institutionen, die sowohl organisationintern (etwa zur Überzeugung der Organisationsmitglieder bezüglich einer spezifischen Art und Weise der Bearbeitung einer Bildungsreform) als auch organisationsextern (zur Koordination auf mehreren Ebenen, im Fallbeispiel: u.a. mit Kantonen und dem Bund) verwendet werden können. Der Fakt, dass bestimmte berufliche Grundbildungen in der Folge der Berufsbildungsreform immer noch existieren, bedeutet nicht, dass die institutionelle Reproduktion mühelos gelang. Das Fallbeispiel zeigt, dass aktive Handlungskoordination auf mehreren Ebenen nötig ist, um Berufsausbildungen in traditionsreichen Berufen aufrecht zu erhalten.

Die detaillierte Mikroperspektive aus Sicht einer Organisation auf das Mehrebenensystem hat selbstverständlich auch Grenzen. Das Konzept von *institutional work* scheint bisher vor allem einen deskriptiven Nutzen zu haben: „Man hat zwar empirisch zeigen können, dass die Beeinflussung von Institutionen auf vielfältige Weise möglich ist. Man ist jedoch weit davon entfernt, prognostizieren zu können, wann Institutionalisierungsarbeit tatsächlich Wirkungen zeitigt oder welche Formen von Institutionalisierungsarbeit unter welchen Umständen zu erwarten sind“ (Möllering, 2011, S. 470). Der Fokus auf die Akteure und ihre institutionelle Arbeit sollte daher sinnvollerweise durch eine Analyse der institutionellen Merkmale und der Verteilung von Macht und Ressourcen ergänzt werden, die bestimmte Arten von institutionellen Arbeiten plausibler oder sogar notwendig machen und andere nicht (Hwang &Colyvas, 2011). Fallkonstrastierungen mit Organisationen unterschiedlicher Charakteristiken würden es erlauben, generalisierbarere Annahmen bezüglich der Verwendung von *institutional work* über unterschiedliche institutionelle Kontexte hinweg zu formulieren und so das Verständnis dynamischer Steuerung in komplexen Bildungssystemen zu verbessern.

5. The Dilemmas of Flexibilisation of Vocational Education and Training: A Case Study of the Piano Makers[21]

With Carmen Baumeler and Sonja Engelage

Dual VET systems are often praised for their labour market proximity because of economic stakeholders' involvement. However, when labour market requirements change rapidly, a lack of flexibility is attributed to them. This occurs in times of fast socio-technological change like the current digital transformation. A repeatedly proposed measure to increase system flexibility is to reduce the number of occupations and create broader occupational profiles, for example, by combining similar occupations into so-called occupational fields. However, little is known about actually establishing occupational fields.

Against this backdrop, we address the following research question: how was an occupational field created? As Switzerland attempted to merge occupations over a decade ago, we selected an information-rich and illuminative case concerning the research question: the piano makers' occupation as one of the first occupations required to merge into an occupational field called musical instrument makers together with organ builders and wind instrument makers. Based on a qualitative case study, we reconstruct the process of occupational field construction by combining expert interviews with comprehensive document analysis and present its narrative.

Based on this case study, we contribute to the understanding of VET flexibilisation by detailing occupational field creation and identifying opportunities and challenges. Here, we pay special attention to the institutional work of the affected occupational association and identify the importance of preserving its collective occupational identity. Although regulatory changes disrupted the piano makers' occupation, the occupational association reinstitutionalised it as part of the musical instrument makers'

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occupational field. Over a decade later, the piano makers reintroduced their former occupational title, which is deeply connected to their occupational identity.

The results indicate that VET reforms that promote flexibilisation by creating occupational fields encounter serious limitations in collectively governed dual VET systems. In the Swiss system, occupational associations are core collective actors that rely on their members' voluntary work. To maintain these economic stakeholders' necessary commitment to VET, their collective occupational identity, symbolized by their long-standing occupational title, needs to be preserved.

Introduction

In collective skill formation systems such as those found in Germany, Austria, and Switzerland, companies, intermediary organisations, and the state work together to provide vocational education and training (VET) (Busemeyer & Trampusch, 2012). To ensure VET is closely linked to labour market needs, state actors delegate important tasks such as the definition of occupational profiles to intermediary associations (employers' or occupational associations and trade unions), who assume an important role in administering, maintaining, and reforming these systems. These systems are also referred to as dual VET systems, because training occurs not only at school but also in companies, mostly in the form of dual apprenticeships (Gessler, 2017).

Further, dual VET systems are characterised by the occupational principle *(Berufsprinzip)*, which is a social identification and allocation instrument that ensures a close relationship between certified occupational qualifications and employment activities (Severing 2014; Hellwig 2008). Occupations impart a wide range of skills that go beyond a single firm's needs (Clarke, 2011; Clarke et al., 2013). This contrasts with, for example, liberal skill formation systems such as the United States, in which VET is not collectively organised and comparatively narrow on-the-job training aimed at immediate workplace requirements prevails.

The close connection to the labour market via integrating economic stakeholders is often seen as a strength of dual VET systems. Yet, when labour market requirements change rapidly, a lack of flexibility has recurrently been attributed to these systems. This is so, for example, during fast socio-technological change like the current digital

transformation. A repeatedly proposed measure to increase system flexibility is to reduce the number of occupations: for example, by defining core occupations or combining related training occupations into so-called occupational families or occupational fields. This should broaden occupational profiles to improve individual mobility in the labour market and increase training efficiency (Maurer & Pieneck, 2013; Seufert, 2018).

In Switzerland, the flexibilisation of dual VET was attempted in the early 2000s (Häfeli & Gasche, 2002). This allows us to examine an implemented process of flexibilisation in retrospect. As part of a major VET reform, the state administration wanted to reduce the number of occupations and to combine similar occupations into occupational fields and train them together. As the occupational associations in Switzerland are responsible for defining the occupational training content, this provoked substantial institutional work on their part. Institutional work is the purposive action of individual and collective actors aimed at creating, maintaining, or disrupting institutions (Lawrence & Suddaby, 2006). The institutional work perspective states that institutions—or, in our case, occupations—do not only need to be purposefully and actively created and maintained, but their disruption and possible reinstitutionalisation also requires extensive work.

Against this backdrop, we address the following research question: how was an occupational field created? We investigate the case of the piano makers' occupation, which had to merge with organ builders and wind instrument makers into the occupational field of musical instrument makers, as an example of flexibilisation. The long-established traditional handicraft could not uphold the legitimacy of its individual apprenticeship and lost its distinct occupational title in the merging process.

Based on this in-depth case study, we contribute to the understanding of flexibilisation and occupational fields. We detail the process of occupational field construction and identify opportunities and challenges. Here, we pay special attention to the institutional work of the affected occupational association. A key finding is the importance of preserving its collective occupational identity symbolised by its long-standing occupational title.

Conceptual Framework

Occupations and Collective Occupational Identities

Institutions are enduring elements of social life that provide templates for action, cognition, and emotion (Lawrence et al., 2011). An occupation (*Beruf*) can be conceived of as being an institution (Lawrence, 2004; Bechky, 2011). It is defined as "a formally recognized social category, with regulative structure concerning VET, qualifications, promotion and the range of knowledge, both practical and theoretical, that is required to undertake the activities that fall within it" (Clarke, 2011, p. 103). It represents a division of labour, also referring to particular wage relations, social position, and social status. Apprenticeships define the educational pathways that lead to occupations.

In collective skill formation systems, occupations are based on collective governance where consensus-oriented and time-consuming decision-making involves key sectoral stakeholders (Clarke et al., 2013). Particularly, intermediary organisations such as employer organisations and labour unions occupy a pivotal role in collective governance. Employer organisations are composed of firms or individual professionals and bring knowledge of the skills required by the current economy into the negotiation of training content. Moreover, they provide a platform for their members to exchange information and create shared understandings and normative expectations (Schmitter & Streeck, 1999). Thus, occupations are social constructs resulting from negotiation processes, rather than mere representations of activities found in the labour market (Dehnbostel, 2005; Schwarz & Bretschneider, 2014). It is not only legal regulations but also norms, values, and cultural-cognitive elements that underpin them (Nicklich & Fortwengel, 2017).

More particularly, occupations provide collective occupational identities. Identity, in general, can be understood as "a multi-dimensional classification or mapping of the human world and our places in it, as individuals and as members of collectivities" (Jenkins, 2008, p. 5). Occupational identity answers the question of who we are by way of *what we do* (Ashcraft, 2013). Occupations might be thought of as having collective selves and are distinguished by collective identities. The definition of occupational competences implies constructing an occupational image and shaping the respective professionals' individual identities: "the occupational identity project (what is it that we do?) merges with occupational image (what do we want them to think that we do?) and often entails a corresponding overhaul of individual practitioner identity (who am I?) "

(Ashcraft, 2013, p. 14). Individuals are influenced by a vocational habitus, which is informed by the respective vocational culture (Colley et al., 2003). Consequently, individuals might also develop pride in their occupational affiliation.

Flexibilisation of Dual VET

In the last century, economic and technological development has led to an increasing number of specialised occupations as a result of the differentiation and specialisation of work (Pahl, 2001). The increasing diversity of occupational profiles has repeatedly been a topic of VET policy (Maurer & Pieneck, 2013). While employers are customarily interested in VET that is closely tailored to their needs and allows apprentices to work productively as quickly as possible, narrow occupational profiles can restrict individual mobility in the labour market. Further, it is argued that constant technological change requires broader competencies. In addition, a high number of occupations in dual VET systems raise costs for the public sector, as occupation-specific offers at VET schools are mostly publicly financed. The discussions, therefore, revolve around how narrowly or broadly occupational profiles should be designed.

In the past, the social construct of "occupation" was repeatedly questioned (Wahle & Walter, 2013). As a result of labour market changes over the last forty years, the erosion of the occupational concept was discussed. In the 1970s and ’80s, flexibility was increased due to the further mechanisation of the labour market and the pluralisation of employment careers. In the 1990s, however, transformed in-company work organisation came into force, which created a demand for broader vocational qualifications. Recent debates about individualised employability were also seen as a departure from occupations as collective structural patterns of the employment system. Nevertheless, the occupational construct proved to be resistant and viable (Weiss, 2014).

Recently, demands for greater flexibility in VET have once more become popular (Seufert, 2018). It is argued that in the age of digital transformation, occupations change at high speed, new occupations emerge, and existing ones die. More recent discussions relate the flexibilisation of dual VET to reducing the number of training occupations by, for example, grouping related occupations into core occupations, structuring occupations into occupational families or occupational groups, or to a (moderate to strong) modularisation of vocational training (Brötz et al., 2008; Euler & Severing, 2006; Hess & Spöttl, 2008; Pilz, 2005; Seufert, 2018).

Constructing an occupational field is one attempt to raise flexibility and reduce complexity. An occupational field unites occupations with certain similarities concerning activity, training path, and requirements (Häfeli & Gasche, 2002). In occupational fields, the training of different occupations can be combined, but there also remains specialised content to account for the peculiarities of individual occupations (Schwarz & Bretschneider, 2014). Constructing occupational fields should provide apprentices with broad skills, improve workers' mobility within the field, and increase training and regulation efficiency. It should also improve transparency by reducing the amount of information for young people who are about to choose an occupation (Häfeli & Gasche, 2002). Further, there is discussion as to whether the merging of related occupations into occupational fields calls for a new type of didactics in VET schools (Barabasch & Baumeler, 2019).

Institutional Work and Disruption

As, in collective skill formation systems, occupations are negotiated by employer associations, trade unions, and public authorities (Severing, 2014), collective actors perform institutional work on their occupations. Therefore, flexibilisation measures of VET cannot be implemented by the state without the concerned actors' actual work.

The institutional work perspective (Lawrence & Suddaby, 2006; Lawrence et al., 2009; 2011; Lawrence et al., 2013) deals with various forms of institutional change and focuses on the role of actors in these processes. It states that institutions need to be purposefully and actively created, maintained, and disrupted, and highlights the knowledgeable, creative, and practical work of individuals and collective actors attempting to shape institutions. Institutional work involves reflexive awareness and effort and addresses cultural-cognitive, normative, and regulative institutional pillars (Scott, 2008). This theoretical perspective is especially interested in studying institutional work that is "nearly invisible and often mundane, as in the day-to-day adjustments, adaptations and compromises of actors" (Lawrence et al., 2009, p. 1).

The dissolution of a long-standing occupation is an institutional disruption process. Lawrence and Suddaby (2006) base their concept of institutional disruption work on Oliver's (1992) seminal contribution about deinstitutionalisation. She describes it as a "process by which the legitimacy of an established or institutionalized organizational

practice erodes or discontinues" (Oliver, 1992, p. 564). From her perspective, organisations fail to continually reproduce previously taken-for-granted actions. This might be the case when changes in the political field, in laws and societal values, or functional economic considerations call into question the legitimacy of a traditional practice. When the organisational environment changes, deinstitutionalisation can be a pro-active and conscious response from organisations. If they have little influence on these changes, deinstitutionalisation can also be a passive or even unconscious reaction.

Building on Oliver's contribution, Lawrence and Suddaby (2006) identified practices that actors use to disrupt institutions purposively, for example, disconnecting a practice from associated sanctions or rewards. With VET reform, such institutional disruption work occurs if the state questions certain occupations' legitimacy by redefining and re-regulating the process and requirements for designing occupational profiles.

However, it is also possible to disrupt existing institutions by developing new ones (Lawrence & Suddaby, 2006). Deinstitutionalisation might foster institutional replacement (Oliver, 1992) or "repair work", which is maintenance work carried out to undo disruption (Micelotta & Washington, 2013). Institutional replacement can also be achieved through reinstitutionalisation. Outsider-driven deinstitutionalisation, such as regulatory change, might destabilise established practices (Maguire & Hardy, 2009; Greenwood et al., 2002). Organisations may react by innovating and seeking solutions. These innovations need to be justified to gain broader acceptance and legitimacy. New ideas and practices are only fully reinstitutionalised when they become taken-for-granted as a natural and appropriate arrangement, embedded and routinised, which allows their reproduction over time.

The Swiss Context: VET Reform and Creating Occupational Fields

In the Swiss collective skill formation system, federal and regional authorities, the cantons, as well as intermediary associations of labour market stakeholders are involved in VET governance. Federal authorities are responsible for strategically developing the VET system and enacting the training ordinances, which are drafted by occupational associations. The 26 cantons organise and finance vocational schools, supervise host companies and offer career counselling. In addition to training in firms and VET schools, inter-company courses provide training in industry-specific occupational skills.

Intermediary associations are the main actors concerned with defining occupational training content. This task is delegated to them based on the assumption that they know best what the labour market needs and can ensure continuous VET adaption. Earlier research identified three types of prominent associations in Switzerland, occupational associations, which represent small firms and self-employed professionals, especially in the crafts and domestic sector of the economy; company associations, which unite a sector's firms; and employee associations (Höpflinger, 1984). Contrary to other countries, intermediary associations in Swiss VET are typically organised along occupational (not sectoral) lines: currently, 146 associations are responsible for at least one of the approximatively 240 initial VET occupations (Emmenegger et al., 2019, Jenkins, 2008). Occupational associations are, therefore, important educational actors that shape the Swiss VET system (Strebel et al., 2019; Baumeler et al., 2018).

Yet, a major vocational training reform in 2004 increased the role of the federal administration regarding content definition: the administration introduced a standardised procedure that all occupations had to follow by updating training content according to the newly introduced training standards (Berner, 2013). One objective of this process was to reduce the number of occupations.

The demand for reducing the existing 300 occupations emerged as a result of criticism of Swiss VET as being too inert, overregulated, and inflexible. This would impede its adaption to rapid employment changes. In this context, it was expected that merging occupations would bring economic, educational, and regulatory benefits. It would lead to broader basic training and less specialisation and, thereby, increase individuals' employability and mobility on the labour market (Bundesrat, 2000). It was also argued that higher numbers of apprentices per occupation and year would result in increased efficiency in training, for example, in vocational schools. The public administration assumed that because of the smaller number of training regulations, there would be less documentation and administrative work. This orientation was also informed by educational research (Häfeli & Gasche, 2002).

At the centre of the discussion were the 130 small occupations with fewer than 100 apprenticeships per year. Hence, the federal administration urged smaller occupational associations to find synergies with similar occupations and carry out parts of VET

together. This led to the disruption of various occupations and the creation of new occupational fields.

Method: Qualitative Case Study

We explore our research question by conducting a qualitative case study because we want to identify *how* a flexibilisation measure—an occupational field—was actually created. Qualitative case studies provide a methodological approach that is especially suitable to answer this question (Merriam, 2009; Patton, 2015). The aim of case study research is to conduct in-depth analysis, focussing on the participants' perspective (Harrison et al., 2017). It intends to provide a comprehensive account that helps in understanding the phenomenon. Further, qualitative approaches are suitable for the reconstruction of processes (Langley et al., 2013), and involve questions such as how institutions, or occupations, emerge, develop, or terminate over time.

We used purposeful sampling (Patton, 2015) to select a case that is information-rich and illuminative concerning the research question: the piano makers' occupation, which was one of the first occupations that needed to merge into an occupational field after the 2004 VET reform. In studying this case, we develop an in-depth understanding of the implementation of a flexibilisation measure.

Typically, case studies use various data sources (Harrison et al., 2017). First, we analysed official documents concerning VET reform to set the ground for our empirical study. Second, we conducted semi-structured expert interviews (Bogner et al., 2009; Gläser & Laudel, 2010) (see table 6-1) lasting between 47 and 127 minutes with a key representative of the occupational association and two educational consultants who advised the occupational reform process. The interview partners were selected for the following reasons: The key representative of the occupational association was their managing director and the driving force behind the establishment of the occupational field. One educational consultant was active at the time when the occupational field was founded and the other one at a later stage, at which the former occupational titles were regained. We regarded them as experts because of their specialised knowledge of the occupational reform process, which allowed us to reconstruct it.

We used an openly constructed interview guideline that encouraged interviewees to share their experiences and their interpretations of the reform process. As we asked

retrospective questions about concrete activities in the disruption of the occupation, the creation of the occupational field and the regaining of the former occupational title, we can reconstruct the process according to their point of view from 2004 until today. We analysed the interviews with regard to their perspective of key events in the process.

Although interviewees can provide information for detailing and interpreting activities over time, they also have their shortcomings (for example, forgetfulness or inaccurate detail recollection, Roulston & Myungweon, 2018). Therefore, we triangulated our data with a comprehensive document analysis (between-method triangulation, Flick, 2018). We included documents about the disruption of the piano makers' occupation and the subsequent creation of the occupational field called "musical instrument makers" from 1949 until today. Data sources were official communications (the magazines of the occupational association, website, newspaper articles, government documents, and statistical information), as well as documents that are not publicly available (minutes of meetings) (see table 6-1).

Table 5-1: Overview of the Various Data Sources

Expert Interviews	**Archival Data**
1 (127'), key representative of the occupational association during the reform process 1 (49') educational advisor of the reform process (early stage) 1 (47'), educational advisor of the reform process (later stage)	44 magazines of the occupational association (2009-2020), 28 government documents (ordinances, education plans, federal council decisions 1949-2019), 23 minutes of meetings of the musical instrument makers' Commission for Occupational Development & Quality (2010-2018), 13 newspaper articles, 2 statistical databases, website of the occupational association musical instrument makers

In total, we analysed 111 archival data. To characterise the broader context, data from two statistical databases were used to determine the number of piano makers' apprentices since 1965. The newspaper articles provided background information on the

occupation and daily work of piano makers and the international developments in the piano market.

To determine the chronology of the process, the analysis of the 28 official government documents including ordinances, education plans and federal council decisions from 1949 to 2019, allowed the identification of the time course and the outcomes of the piano makers' institutional work. Further, the analysis of the occupational association's website allowed the identification of its self-presentation and statutes. Since 2009, the occupational association has published its own magazine aimed at its member companies. Here, it was possible to find more information about the main topics of the construction of the occupational field, the opening of the VET school and the reasons for the re-implementation of the former occupational titles. Furthermore, by accessing the minutes of the musical instrument makers' Commission for Occupational Development and Quality from 2010-2018, we were able to identify further information on decisions regarding adjustments to its apprenticeship.

In combining the different longitudinal data sources, we were able to reconstruct the process of occupational field construction. While the interview data made it possible to identify the perspectives and explanations of key actors, we used the archival documents to identify the context, chronology, outcomes and main topics of the process.

First, we ordered our data chronologically and identified three main stages of the reform process (disruption of the piano makers' occupation, reinstitutionalisation within the occupational field, regaining their former occupational title). Second, we connected the different phases with the interviewees' interpretations. For each phase, we identified the major themes that were important for the process, for example how it was decided which occupations should merge to an occupational field, what kind of institutional work was needed to implement the occupational field and which processes and discussions led to the regaining of the former occupational titles. As we used a qualitative research design, it also allowed us to identify themes that emerged from the data, such as the importance of preserving the collective occupational identity. The data was collected and analysed while abiding by ethical research guidelines, such as informed consent and the preservation of anonymity (Schweizerische Gesellschaft für Soziologie, 2007).

Results

Piano making and tuning have always been a niche occupation with low numbers of apprentices. The association of the piano makers, founded in 1947, brings together around 240 piano makers and tuners from all Swiss language regions. It defines the content of vocational training, arranges expertise, and organises events and further training. Management of the association comprises mostly owners of small businesses who work on a voluntary basis.

Yet, while in the 20th century a piano still belonged in every good room, in the 1960s the Swiss had to compete with imports from the Far East. Simultaneously, modern residential construction meant larger pianos hardly found any room. Today, ten times more digital than acoustic pianos are imported into Switzerland and musical instrument makers specialising in the piano are mainly concerned with maintaining, repairing, and tuning these instruments (Grossrieder, 2018).

Disruption of the Piano Makers' Occupation

During the VET reform, the federal administration identified piano makers as one of the small occupations that should be merged into an occupational field. They informed the piano makers and tuners' association that their occupation could no longer exist if it was not integrated into an occupational field with other small craft occupations in the woodworking sector. This started the outsider-driven deinstitutionalisation process and provoked substantial institutional work of the piano makers association.

Fearing their occupation would lose its recognition, the association first discussed possibly abandoning their apprenticeship or stopping training in Switzerland and sending apprentices to a German training centre. However, they rejected the latter idea with the argument that training in Germany lasted only three years instead of four and thus would not offer the same training quality. Moreover, this training was not offered in French and, therefore, French-speaking Swiss would be left behind.

Hence, the association decided to participate in the meetings organised by the public administration to determine whether merging with other wood occupations would be possible. These first meetings revealed large differences in the individual occupational activities of the present occupations. However, the occupations that built and maintained

musical instruments showed more commonalities than other woodworking occupations. As the key representative of the piano makers remembers:

> So, we were the smallest occupations in the craft “working with wood”. (...) We were perhaps eight or ten occupations - and (the state administration) arbitrarily made this division and put it in front of us. You are in this pot. And then, there was the phase of anger and indignation. That was predicted to us in advance. Then, (…) the other occupations said, but you have 270 members. The organ builders’ association is also relatively large. And the wind instrument makers are also bigger. They all only deal with music. And we're supposed to have a common occupation? And we should learn how to tune? That's nonsense. There was a lot of debate and there was the separation. Then we said, well, then we'll found the occupational association of the musical instrument makers.

Consequently, as one of the first small occupations, the piano makers joined forces with the wind instrument makers and the organ builders to create the occupational field of the musical instrument makers, which implied founding a new umbrella occupational association. The three occupational associations, the federal administration, and the cantons agreed to this solution. Thus, they became pioneers in establishing an occupational field, which also meant that piano makers started reinstitutionalising their apprenticeship within a larger framework.

However, merging came at a high price for piano makers. The federal administration did not allow them to keep their long-standing occupational title. Instead, from then on, they were called "musical instrument makers with a specialisation in piano making and tuning". For the key representative of the piano makers, it was difficult and painful to communicate this loss of identity to members of the association:

> We are piano makers! We are not musical instrument makers! We didn't feel at home there. But we had to swallow this toad. We on the board swallowed this toad at some point and said: Okay, if there's no other way, then that's the way it is, then we'll bite the bullet. But then, we suddenly had to stand there and present it to our people as if we were deeply convinced of the whole story. That, of course, caused us trouble. That wasn't a funny situation at all.

Reinstitutionalisation Within an Occupational Field

Creating an occupational field involved merging three different occupational associations with their respective apprenticeships, which required significant institutional work. The first challenge was identifying common educational content for the different apprenticeships and determining the areas in which occupation-specific education was required. Moreover, all educational plans were to be elaborated in accordance with the new paradigm of competence orientation, introduced in the early 2000s. The public administration supported the occupational reforms financially, which allowed for developing new educational plans and teaching materials. An educational advisor was commissioned to provide support and the process was initiated in accordance with the legal requirements. As the key representative of the piano makers' association remembers:

> One of the most difficult tasks was to draw up the education ordinance and plan. We had to be competence-oriented. We knew we had to glue, drill, mill, saw, regulate (...). And we had to define the competences. We didn't know that. (...) We had to do this integration of the different occupations. We had to determine which competencies we could teach at the beginning and where it began to separate. It's like a pyramid that we have a wide stick at the beginning. We all work with wood. We all have musical history. So at the beginning, we could put all apprentices into one class and then with the years of the apprenticeship, it separated more and more. We proceeded exactly according to this scheme. That was one of the most difficult and demanding activities.

A reform commission, including representatives of the federal administration and the cantons, the presidents and examination experts of the associations, as well as some teachers and the Swiss trade association, was formed. They held detailed discussions on merging the occupations because of the novelty of the procedure.

Further, the musical instrument makers had to find a location for their new vocational school and training centre. Only the thirteenth attempt was successful. Whereas several cantons rejected an application, one canton saw the musical instrument makers' request as an opportunity to revive a semi-vacant agricultural vocational school. To equip the school with training material and a new workshop, the occupational association of the piano makers convinced private sponsors who donated a considerable amount of money.

Implementing occupational reform reached the limits of the voluntary system. As the key representative of the piano makers' association states:

> It has always gone sharp to the maximum pain threshold. So the hours we needed are simply God's wages. Everyone knew that he was doing it for his occupation. That it was like a matter of honour that you just do that. That one likes to do that. So, in the sense. But we could never hire people at the wage they actually needed. Never.

It became clear that professional management of the musical instrument makers' umbrella organisation was indispensable because the organisation's members, who had previously worked voluntarily, were no longer able to cope with the additional workload and the loss of income while doing institutional work. As one educational advisor explains:

> The piano makers are mostly sole proprietors. Few are employed in larger companies (...). If someone (…) worked for the association, then nothing happened in his business and he would earn no money.

This meant that paid staff had to be hired. However, the associations' membership fees were insufficient to finance the administration of the umbrella association. Because the VET Act newly permitted establishing a mandatory VET fund to which all companies must contribute, regardless of whether they train apprentices or not, the occupational association decided to set up such a scheme to raise additional funds. This led to some contestations and, finally, a person who did not want to pay was sued. As the key representative of the piano makers' occupational association remembers:

> There was also someone who wanted to take it to the extreme and said: I certainly won't pay anything! I don't have any employees and I don't repair anything! Then someone he didn't know brought him a trumpet and he said: Of course I can fix it! There we had the proof! Then he went to court and then came the moment of truth. Does the system work? We were anxious about this moment, because we thought if the court said no, then the whole thing would collapse like a house of cards. But the court said that's right what you did. It's quite clear, he has to pay.

In addition, the association argued that importers of musical instruments also benefitted from the good education in Switzerland. Because they had an interest in skilled workers able to maintain the instruments, the association got a levy from these firms.

Finally, the musical instrument makers' apprenticeship with five specialisations (wind instrument making, wind instrument repair, piano making, organ building, organ pipe building) came into force in 2008. Since then, the training consists of a basic study course, organised with other instrument makers, and specific learning content concerning piano making and tuning. On average, 12 apprentices per year start the musical instrument makers' apprenticeship nationwide. During their training, apprentices build an acoustic piano and thus gain in-depth knowledge of the structure and interaction of the instrument's individual parts. The lessons in the training centre are held bilingually and the learning material is available in German and French.

Regaining Their Former Occupational Title

The new VET Act stipulates that all training occupations must be reviewed and adapted at regular intervals. In 2014, a review of the apprenticeship "musical instrument maker" was carried out. Questionnaires for evaluating the apprenticeship were sent to workplace trainers, VET teachers, and examiners as well as to apprentices. The results were pleasing and the apprenticeship was rated as good to very good. Around 50% of the apprentices stayed with their companies after completing their training. However, it was criticised that still no common occupational identity as musical instrument makers had developed.

The association of the musical instrument makers decided to revise their apprenticeship and set up a new training ordinance. The most important aim was to regain their former occupational titles. Therefore, all competencies had to be newly described and approved separately for each occupation within the occupational field. The VET content did not change much and cooperation between the individual occupations continued. However, they were no longer called "musical instrument makers". Since 2020, the individual occupations have again a diploma on which their former occupational title (for example, piano maker) is written. As the key representative of the piano makers' association explains:

> Therefore, it's just - we then have our family name again. That's the most important thing that changes that way. There are several other things that change, but that was for the piano builder family and the organ builder family such a flaw. This flaw is now being abolished.

Finally, from the point of view of an educational advisor, it was possible to find synergies in cross-occupational competences (e.g., customer consulting, music history) and then train them at a common school location. However, having created an occupational field did not allow musical instrument makers more labour market flexibility because the occupational competences remained too specific, even if partially trained together:

> The public administration wants, (...) that there are synergies and that people become more mobile. But an organ builder is completely different from a piano builder. Sorry, you can't use an organ builder as a piano builder in a rush, and you won't be able to do that in the future either.

Thus, in the case of the musical instrument makers, creating an occupational field only reached one of the intended aims of the policy reform by increasing training efficiency, but there was no higher labour market mobility for trained workers.

Discussion and Conclusion

Dual VET systems are often praised for their proximity to the labour market because of economic stakeholders' involvement. Nevertheless, they are criticised for being too complex and slow in times of a rapidly changing world of work. The differentiation into many specialised occupations is regarded as being inert, regulation-intensive, and inflexible. One repeatedly proposed solution is to reduce the number of occupations. This is supposed to increase training efficiency and workers' mobility.

The case of the piano makers shows how a regulatory reform delegitimised the existence of a long-standing handicraft occupation. Although the implementation of the flexibilisation measure was influenced by pedagogical concepts, it was carried out top-down by an administrative logic. The piano makers, therefore, needed to merge with other occupations into an occupational field. Yet, the occupation did not just disappear.

Rather the piano makers' association developed institutional work to reinstitutionalise their occupation.

Once the small occupations of the piano makers, wind instrument makers and organ builders were disrupted by public administrations' request to merge, their occupational associations started developing innovative solutions. First, they established a new umbrella association and identified synergies in the training content of the individual occupations. This resulted in developing a new training ordinance. In addition, they had to establish the training infrastructure for common vocational schooling. The new training ordinance required purchasing equipment and producing bilingual teaching materials to train all Swiss apprentices together in one location. In addition, VET schoolteachers and workplace trainers had to attend further training. This preparatory work was needed for creating new training routines and embedding the musical instrument makers' apprenticeship in the existing educational landscape. Yet, creating training regulations and establishing the new infrastructure demanded too much voluntary work. This led to professionalisation of the new umbrella association for which paid staff was hired. Moreover, to finance the equipment and staff, the occupational associations needed to raise additional resources.

Importantly, the federal administration initially obliged them to abandon their traditional occupational title of piano makers in favour of the new occupational field title "musical instrument makers". However, the association members' occupational identity and pride fuelled their commitment and motivated them to work for their association voluntarily. Our case study suggests their occupational title is so important to their identity that the piano makers were ready to face additional administrative workload to re-introduce it over ten years following the creation of the occupational field. With this step, they completed their reinstitutionalisation work that finally resulted in establishing a new form of training together with other occupations that, nevertheless, leads to the traditional occupational titles.

In sum, the case study of occupational field creation revealed the following opportunities and challenges: Synergies in the area of vocational schooling, which increased efficiency, were achieved. Yet, from the perspective of the association, this increased efficiency of VET schooling was initially outweighed by the workload and need for additional financial resources for establishing the new training ordinance and

infrastructure. Moreover, the attempt to create a new collective occupational identity for musical instrument makers failed and training in this occupational field does not seem to allow for greater occupational mobility.

What can we learn from this single case study about the broader topic of flexibilisation of VET? How can the findings of the case study be transferred to other situations in different contexts (in the sense of *transferability* as a qualitative approach to generalization, Maxwell & Chmiel, 2014; Schreier, 2018)? As with every qualitative research, the presented case study is highly contextualised.

Switzerland's collective skill formation system relies heavily on the involvement of occupational associations to which central tasks are delegated (e.g., the definition of vocational curricula, responsibility for providing apprenticeships). Thus, implementing reforms to flexibilise VET requires cooperating with these associations, which may develop institutional work to resist change, maintain their position, or reinstitutionalise their occupations. Policy measures informed by educational-conceptual considerations may reach limits when the motivations of the executing actors are not considered. To reduce complexity and the number of occupations, public authorities are confronted with the specific needs of a large number of, mainly small, occupational associations. Importantly, many of these occupational associations rely on members carrying out voluntary work. Our findings suggest that members' voluntary engagement is fostered by connection to their occupational identity and pride. If their occupational identity is not preserved, occupational associations may engage in institutional work to reinstitutionalise it or, if they fail to do so, they might no longer be committed to offering apprenticeships and their members might lose their willingness to train. Consequently, if flexibilisation measures, such as the creation of occupational fields, threaten occupational identities, this may drive the system away from its voluntary character towards a system that is based on more professional, paid work—which may ultimately increase training costs.

In conclusion, the flexibilisation measure of creating an occupational field at least partially calls into question the occupational principle that underpins dual VET systems. Thus, such a policy measure cannot be implemented without considering the governance structure of the respective VET system. Occupational titles that reflect the collective identity of occupational associations respect the crucial role of these intermediary

organisations. Therefore, this case study indicates that policymakers may need to strike a balance between searching for training synergies and respecting occupational identities.

Our study points out that a reconstruction of the implementation process of other occupational fields could yield important insights for future flexibilisation measures. It highlights aspects that should first be assessed *together* with the affected occupations when initiating the implementation of new occupational fields. Where are actual benefits to be expected? What level of work and costs does such a reform trigger? Are apprentices also employable in related occupations after training in an occupational field? The consequences of not respecting or consulting occupational experts may be that the measures taken are not sufficiently labour market–oriented, and that implementation fails due to a lack of commitment on the part of those concerned. For the associations of small occupations whose existence may be threatened, this means that they must recognise important pillars of their occupational identity at an early stage and protect them accordingly, vis-à-vis the authorities. In times of reform and change, it is important that the associations involve their members in these processes to secure their commitment. Finally, it is important to emphasise that there is also something to be gained: the creation of occupational fields can certainly lead to positive experiences and synergy with other, similar occupations, and trigger a surge of professionalisation. However, as only little is known about the actual implementation of flexibilisation measures in dual VET, further research is needed to identify opportunities and challenges within the different contexts of other dual VET systems.

6. Creating Apprenticeships: The Case of the Cableway Mechanics[22]

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Collective skill formation systems thrive if employers' skill needs are reflected in apprenticeship training programmes and firms offer apprenticeship positions. Occupation-level adaptation processes underpin these systems, which offer upper-secondary level vocational education leading to hundreds of occupations. Yet, it is considered challenging to introduce new apprenticeships in sectors without training tradition. Based on the case of the newly created cableway mechanic occupation, this paper suggests that the institutional context in combination with effortful institutional work allowed a business association to introduce a small new occupation in the Swiss VET system. The cableway association mobilised firms, legitimised the new occupation towards public authorities, lobbied for more financial support, and fought to gain apprentices. Ten years after the introduction, finally, financial difficulties were overcome, and the apprenticeship institutionalised in the educational landscape.

Introduction

Occupations are embedded in their national socio-economic contexts (Clarke, Winch, & Brockmann, 2013; Busemeyer & Trampusch ,2012). In collective skill formation systems[23], the main access road to occupations are dual apprenticeships that take place in firms and are supplemented with school courses. The key asset of these systems is the close link of employment and education that fosters a relatively smooth transition from education to work (de Lange, Gesthuizen, & Wolbers, 2014; Bolli et al., 2018).

An important aspect of this link is that the apprenticeship training programmes are designed by employers in cooperation with social partners and the state and they lead to

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[23] Austria, Denmark, Germany, the Netherlands, and Switzerland have collective skill formation systems (Busemeyer & Trampusch, 2012).

nationally standardised and certified occupational titles (Busemeyer & Trampusch, 2012). Hence, institutional adaptation takes place through continuous revisions of training in specific occupations that aligns them with employers' changing skill requirements.

Albeit many advantages, collective skill formation also comes with challenges. Through their tight links to the labour market dual vocational education and training (VET) systems are particularly exposed to socio-economic transformations. Not only academisation, deindustrialisation, and technological change but also economic liberalisation might threaten the provision of collectively organised training because it lowers employers' coordination capacities (Culpepper & Thelen, 2008; Thelen, 2014). Consequently, collective skill formation systems have known various trajectories of institutional change in the last decades. Depending on the constellations of the state, employer associations, and unions in negotiations about VET policy, these reforms have led to change in the VET systems, for example a shift to more public workshop based training or the exclusion of large parts of youth from training (Durazzi & Geyer. 2020; Thelen. 2014).

In this context, Switzerland stands out as the country that maintained the highest share of youth in initial upper-secondary level dual VET (OECD, 2017a). The last Swiss VET reform in 2002 has been identified as a case of self-preserving institutional change (Trampusch, 2010a). Therefore, it promises insights into the question how the institutions of collective skill formation are maintained in a changing environment. In Swiss VET, occupations are particularly important as training is organised along occupational lines (Emmenegger, Graf, & Strebel, 2019). Dual apprenticeships lead to around 240 certified occupations over half of which are small and offer less than 100 apprenticeship positions annually (BFS, 2018).

Importantly, at the subnational level, in processes of revising or creating apprenticeship programmes, actors also promote institutional change. For example, large firms' dominance may lead to more firm-based forms of training, which discourages small firms to train (Seitzl & Emmenegge,r 2019; Thelen & Busemeyer, 2008). Hence, occupation-level negotiations about the type of the provided skills may influence the overall character of the training system.

Moreover, creating apprenticeships in sectors without training tradition requires substantial efforts. In this case, a new employer group needs to gain knowledge on VET policy and tackle the challenges associated with introducing firm-based training (Culpepper, 2003). This presupposes a high capacity of employer associations to balance members' and public authorities' interests because firms provide training on a voluntary basis (Culpepper, 2003; Schmitter & Streeck, 1999). Hence, occupations are created, adapted, or abolished through institutional work of the involved stakeholders, most importantly employer associations (Strebel, Baumeler, & Engelage, forthcoming; Nicklich & Fortwengel, 2017). Yet, setting up apprenticeship-based programmes in new sectors may fail even in well-established dual VET systems (Nicklich & Fortwengel ,2017).

Thus, in today's challenging environment for dual VET, it appears surprising that bottom-up initiatives by employer groups to introduce apprenticeships still exist. Moreover, research on the work of employer associations and their capacities to foster training at the decentralised level of occupations is still relatively scarce (Emmenegger, Graf, & Trampusch, 2019), especially for the case of small occupations. Therefore, this paper explores which institutional work employers develop to create new apprenticeships and how their work is connected to the institutional context.

Based on the case study of the cableway mechanics, I reconstruct the creation of a new apprenticeship. The case study shows that association leaders' institutional work built on cultural-cognitive elements such as widespread shared understanding about how to organise apprenticeships. Employers and employees created positive normative associations with apprenticeships based on expected improvements in quality and security and access to tertiary-level education. Additionally, public authorities supported the introduction of this training programme because it promised to offer apprenticeship positions in peripheral regions. Nevertheless, institutionalising the new apprenticeship may have failed because the employer association struggled to finance training infrastructures and convince firms and apprentices to engage in training.

This paper is structured as follows. The next section reviews existing literature on institutional change in VET, conceptualises a sociological institutionalist framework for analysing these change processes, and applies it to the Swiss VET system. Then, the methodological approach and data are discussed. The fourth section presents the case

study findings. The last section discusses these findings and concludes.

The Collective Governance of Apprenticeships

In skill formation systems based on dual apprenticeships, occupations are typically governed collectively by the state and labour market stakeholders. Their tight links to the economy and firms' skill needs are the key asset of dual VET systems. Yet, important socio-economic changes, such as deindustrialisation and liberalisation affect the stability of collective skill formation systems (Culpepper & Thelen, 2008). Typically, these changes reduce the number of apprenticeship positions offered by firms. Thus, collective skill formation systems struggle to uphold their key role in training young people and integrating them into the labour market (Carstensen & Ibsen, 2019; Di Maio, Graf, & Wilson, 2019; Thelen, 2014).

Dual VET systems rely on firms offering apprenticeship positions on a voluntary basis. Firms face a cooperation dilemma inherent in providing the collective good of vocational skills that are transferable to other firms. Prior research thus highlights the important role of employer associations to help firms overcome cooperation dilemma (Culpepper, 2003). Unsurprisingly, dual VET has historically developed in countries, in which the state cooperates systematically with business associations. In exchange for this organisational privilege, the associations should make their members comply with public policies, which is challenging (Schmitter & Streeck, 1999).

Changing institutions of collective skill formation

Comparative historical institutionalist research provides important insights into institutional change in collective skill formation systems. On the one hand, new national-level policies were introduced without altering the core of initial dual apprenticeship training, for example pathways between VET and higher education to increase permeability and maintain VET as an attractive educational option for school-leavers with good grades (Gonon & Maurer, 2012; Trampusch, 2010a). Additionally, inclusion-enhancing policies such as short-track training or learning workshops were created (Di Maio, Graf, & Wilson, 2019, Durazzi & Geyer, 2020). Moreover, key stakeholders in VET such as small, domestic-market oriented firms sided with public authorities to maintain the apprenticeship system in policy reforms so that these reforms led to self-preserving institutional change (Trampusch, 2010a).

On the other hand, institutional change processes also come to the fore at the level of occupations. In Germany, large firms' and unions' demands for high quality skills geared to the needs of the larger firms triggered the exit of small firms from this system (Thelen & Busemeyer, 2008). In the Swiss commercial sector, large firms also lobbied for more firm-specific training. Yet, small firms managed to defend their interests at least partly (Seitzl & Emmenegger, 2019). Hence, the outcomes of occupation-level negotiations affect the overall composition and characteristics of VET systems.

Previous research on introducing apprenticeships has highlighted the important role of employers for overcoming cooperation dilemma between firms (Culpepper, 2003). Introducing firm-based training is said to hinge on the circulation of information among firms–that trust their association more than the state–and the collaboration of the associations with public authorities to target wavering firms with smartly designed support. Other approaches also highlight the normative influence of business associations on firms. They argue that capable associations mould firms' preferences and help to align them with long-term aims and public policies (Martin, 2004; Schmitter & Streeck, 1999, pp. 86-87). Hence, the changes in national-level institutions underpin the bottom-up development of new occupations and this process depends on business associations' capacity to foster employer cooperation.

However, studies of employers creating new apprenticeships remain relatively scarce albeit their potential to reveal detailed insights into the adaptation of collective skill formation to socio-economic change. Moreover, these strands of literature mostly focus on formal rules and actor coalitions. Yet, recent research on collective skill formation started to bridge this literature with sociological institutionalist approaches. They distinguish regulative, normative, and cultural-cognitive elements of institutions to add to our understanding of institutional change in VET (Di Maio, Graf, & Wilson, 2019; Nicklich & Fortwengel, 2017; Powell, Bernhard, & Graf, 2012). Therefore, the next section presents an analytical framework based on a broad conceptualisation of institutions to gain insights into this process.

Analytical Framework: Institutional Work

Broadly defined, "institutions comprise regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life" (Scott, 2014, p. 71). The regulative dimension is associated with

rules and regulations that can be enforced legally, the normative dimension with norms and values, and the cultural-cognitive dimension influences behaviour through shared understandings, or cognitive templates (Scott, p. 2014). Applied to collective skill formation, rules and regulations distribute governance tasks among stakeholders. Dual apprenticeships are a valorised educational pathway, and it is expected and seen as appropriate that firms offer apprenticeship positions. In the cultural-cognitive dimension, there is a widely shared understanding how apprenticeships are organised, and they are open to a broad share of youth in all sectors of the economy (Nicklich & Fortwengel, p. 2017).

The institutional work approach argues that institutions need to be actively maintained, created, or disrupted (Lawrence & Suddaby, 2006). Actors need to mobilise material and discursive resources to affect institutional change or maintain institutions (Hampel, Lawrence, & Tracey, 2017). Institutional work research typically zooms into processes at the micro-level, for example practices in organisations. However, it conceptualises these as embedded in a broader social context (Zilber, 2009). Hence, institutions can be understood as multi-level phenomena so that national level institutions are connected to sub-national levels.

Institutional work addresses the three dimensions of institutions. Influencing regulative institutions consists in creating rules, for example through advocacy–the mobilisation of political and regulatory support. Further, regulative work may aim at installing, reinforcing, or disrupting social mechanisms, which ensure compliance, such as rewards and sanctions. Ensuring the adherence to rules may rely on policing to audit and monitor behaviour or deterrence–the threat of coercion (Lawrence & Suddaby, 2006, pp. 221-238).

Through normative institutional work, actors attempt to change or reinforce the moral foundations of a certain rule or practice. It associates certain behaviours with positive and others with negative images, for example through valorising and demonising, which contributes to maintain belief systems (ibid, pp. 232-233).

Cultural-cognitive institutional work wants to influencing meaning systems. Moving away from taken-for-granted practices implies costs for the actors: additional efforts are needed, and the outcome may be uncertain (ibid, p. 237). Means for reducing these costs

are training (educating; ibid, 226-228), reducing the perceived risks of innovation, or providing new templates for action, which can replace the existing ones (ibid, p. 237).

Distinguishing institutional work along the three dimensions can shed interesting insights into processes of institutionalisation. For example, in the case of creating new apprenticeships in the German security sector, stakeholders built on widespread normative elements to valorise the new apprenticeship but neglected the regulative aspect of associating the newly created occupation with wage gains and career perspectives. Therefore, the incentives of youth to engage in these apprenticeships remained very low and the initiative (partially) failed (Nicklich & Fortwengel, 2017). The next section discusses the Swiss regulative framework, values and widespread understandings that are deeply anchored in Switzerland to contextualise the case study.

Empirical Context: Three Institutional Dimensions in Swiss VET

The national VET act is the main regulative framework: Concerning the key stakeholders, the state secretariat for education, research and innovation (SERI) is responsible for strategically developing the system (SERI, 2019). Regional public authorities, the cantons, organise and finance VET schools, and monitor implementation in firms (SERI, 2019). Firms offer apprenticeship positions, and their associations define training content. Unions have a very limited role in Swiss VET (Emmenegger, Graf, & Strebel, 2019). Yet, it is foreseen to include employee representatives in the occupation development process, where an employee association exists (BBT, 2005b, p. 8).

The VET act was reformed in 2002. Amongst others, the reform aimed at increasing labour market mobility by broadening occupational profiles (Baumeler, Engelage, & Strebel, forthcoming; Maurer & Pieneck, 2013). Moreover, new financing mechanisms based on per capita payments potentially favour larger occupational groups (Wettstein, 2020). Additionally, employer associations were empowered to install compulsory VET funds. In this case, all companies that employ diploma holders of a certain occupation are obliged to contribute to the funds.

In the normative dimension, the public authorities actively valorised apprenticeships through promotional campaigns. These campaigns highlighted the educational pathways from VET to higher (vocational) education that were introduced in the 1990s to maintain VET attractive for school-leavers (Gonon, 2016). Moreover, a large part of the Swiss

population, especially in the German speaking part of the country, prefers the private provision of training by firms to public training workshops (Kuhn, Schweri, & Wolter, 2019).

Importantly, the Swiss VET system still offers upper-secondary level education to around 60% of a school-leaver cohort (OECD, 2017a). Apprenticeships are widespread in many economic sectors, in small and large firms (Müller & Schweri, 2012). They lead to around 240 federally recognised occupations. However, many of these occupations remain rather small. Only 18 occupations offer more than 1000, over half (56%) of them offer less than 100 apprenticeship positions annually (BFS, 2018, own calculation).

Methods and Data

To reconstruct the process of creating occupations in a specific country setting, I conducted an embedded single case study (Yin, 2014). I selected an information-rich case among potential cases of occupational creation (Patton, 2015). Between 2005 and 2016, 11 new occupations have been introduced (SERI, 2016)[24]. These new apprenticeships are mostly situated in the domestic sector of the economy. I selected the first occupation that was created by an employer association after the 2002 VET reform, the cableway mechanics, to study its development over a longer timeframe.

Case study research is particularly appropriate for analysing processes as well as the experiences of actors involved in them. Process-oriented methods study sequences of events and activities that lead to an outcome (Langley, 1999). In this case, the institutional work of the employer association that leads to a new occupation. To gain a detailed insight into the process, I used various data sources. I conducted six semi-structured, in-depth interviews with experts that were directly involved in the process (see list in the annex) (Bogner, Littig, & Menz, 2009). I contextualised these interviews with documents from the process. These include minutes of internal meetings and meetings with public authorities (22 meetings, 2004-2007), funding requests, pedagogical documents, letters to members and public authorities, and information for members on the website (checklists, templates for advertising apprenticeship positions,

[24] These are: health and social care workers, stage dancers, cableway mechanics, drainage technicians, event management employees, call center agents, public transport clerks, hearing aid acousticians, health promotion employees, catering service employees.

etc.), and survey results (2003, 2005, 2006, 2018). Finally, official publications of the business association (27 extracts from internal news (2003-2010), annual reports (2006-2016), and annual reports of the union (2003, 2005, 2011) were analysed.

To analyse the data, I used sensitising concepts derived from the institutional work approach and the literature review on the Swiss VET context. Sensitising concepts direct the researchers' attention to theoretically relevant aspects of the qualitative data without limiting the analysis to operationalised indicators (Kelle & Kluge, 2010, p. 29). The data analysis identified institutional work and supportive or hindering elements from the institutional setting. It was guided by the questions who was involved, what arguments were brought forwards, which norms and ideals are mentioned, which regulative elements played a role in the process, and what type of institutional work was mobilised. These elements were first coded using the content analysis software NVivo. In a second step, I created a detailed timeline of the process (Langley, 1999; Yin, 2014) and wrote up a thick description. Based on this analytical strategy, I identified the main phases of the process, which are presented below and illustrated with exemplary quotes from the data.

Findings: The Creation Work of Cableways Switzerland

The domestic-market oriented craft sector played an important role in the development of the Swiss VET system (Wettstein, 2020). In many sectors, apprenticeships are firmly anchored, but in the cable car sector, up to 2006, the business association Cableways Switzerland (*Seilbahnen Schweiz (SBS)*) only organised further training. Yet, in the early 2000s, it created a new apprenticeship for the occupation of cableway mechanics.

Founded in 1900, the cableway association represents companies running cableways, ski lifts, and mountain railways. It has a high organisational density as around 75% of the 500 existing companies are association members (SBS, 2006). For security reasons, the companies are obliged to employ adequately qualified staff, the technical managers. In 1984, a further training course leading to the title of certified cableway specialist (*Seilbahnfachmann*) was introduced. These technical managers build their own association (*Verein Technischer Kader (VTK)*), which counts around 700 members. Although, VTK is an employee association, it is perceived as being very close to employers and its role is clearly distinct from unions (CH3, CH4). Conversely, the transport sector union (*Schweizerischer Eisenbahner-Verband (SEV)*) has thus far not

managed to negotiate a national framework agreement on minimum wages with Cableways Switzerland (SBS, 2012).

Creating the cableway apprenticeships evolved in five steps, which are presented in the following sections: 1) developing the idea, 2) convincing firms, 3) creating federal training regulations, 4) implementing training in firms, and 5) outcomes.

Developing the idea

In the early 2000s, Cableway Switzerland's expert commission on training developed the idea of introducing a new apprenticeship. The commission, which thus far had mainly discussed further training, also included a representative of the technical manager association (employees). Employment in the sector was characterised by a tension between the highly qualified and rather well-paid technical managers and other part-time staff (CH4). The sector traditionally relied on hiring local farmers in the winter season, yet, this type of workforce started to lack as the number of farmers was decreasing and they were not available in the increasingly important summer season (CH2, CH4). Cableway firms also recruited skilled workers from other occupations, such as mechanics or electricians, and qualified them for the position of technical manager through further training. Yet, this strategy was now problematised due to a perceived increase in the complexity of cableway technology and higher security requirements. Not offering initial VET was now seen as a gap: "In our profession we always had only lateral entrants and then we concentrated on further education [...] there was a gap that was the apprenticeship" (employer association leader). In contrast, to the case of the German security apprenticeship (Nicklich & Fortwengel, 2017), initial VET was clearly conceptualised as the first step for a career in the sector.

Given that they did not train branch-specific apprentices, the workforce they were able to recruit lacked certain skills or the combination of skills that the firms needed (CH1, CH2, CH3). Recruiting skilled workers from other occupations and training them was perceived to be increasingly difficult, as further training implied high costs for the firms and required the willingness of the employees (CH2). Moreover, the initiators of the new apprenticeships started to problematise farmers' work as not fulfilling the security standards.

> He is a tinkerer from A to Z. It's not possible you want to get safely on the mountain, you understand, in agriculture you may put up with it if the combine harvester's wheel falls off. In the cableway industry you cannot put up with it (technical manager)

Thus, the stakeholders changed normative associations, they delegitimised farmers' work and associated the new form of training with improving quality and security, which should also contribute to the competitiveness of the sector: "Our director […] he always said that education is quality and quality is education and if we push education, we increase the quality for the whole industry" (employer association leader). This argument was diffused among firms through the employer associations' publications (SBS, 2005).

Once they had decided to create an apprenticeship, they visited various training centres that were run by other associations (CH2, CH3). Because they expected only a low number of apprentices, the cableways association evaluated centralised forms of training.

> We went to see other things, we went to the master builder centre […] to see how they do it with the building professions or we also looked at the possibilities of cooperation […] and we came across the small occupation of the pavement worker that is a part of road construction worker and they advised us against it because they said they have to put in practically everything in the last six months that is actually their specialty. (technical manager)

They considered different forms of organising apprenticeship training and exchanged information with other associational leaders. Finally, they concluded that building their own training centre to train all apprentices together in cable-car-specific classes would be the best solution (SBS, 2004, p. 16). The other associations made training plans, cost calculations, and other documentations available for the cableway association. The cableway association portrayed these training centres as success models in its newsletters. Thus, to introduce a new form of training, Cableways Switzerland imitated available training models. This type of institutional work–mimicry–refers to the cognitive dimension of institutions and is said to ease the adoption of new practices in institutional creation processes (Lawrence & Suddaby, 2006).

Convincing Firms

The cableway sector consists of a limited number of firms, which form a well-organised network. Cableways Switzerland aims at promoting cooperation among the firms, for example by highlighting that for skiing resorts in the Alps "the competition are the Maldives" (CH2) not their neighbours. While the business association sees progress in the cooperation between its members (CH1, CH2), the traditional competition between close skiing resorts remains a hindrance for cooperation (CH3, CH4).

Yet also the association of the technical managers played an important role for fostering the cableway network. They organised events for the technical managers, who know each other and feel "like a big family" (CH3). This tight network among employers and employees provided a platform to do the normative work of raising awareness for the necessity of training activities.

Cableways Switzerland consulted its member firms once the project was well defined. In a written survey (SBS, 2003b), the companies were asked if they would train apprentices and send them to a central training centre instead of weekly classes at cantonal vocational schools. The companies' feedback was mostly positive: Of around 400 members, 132 companies answered, 65 stated they would participate in the pilot project, and the idea of centralised training was widely accepted (98 yes) (SBS, 2003a).

Nevertheless, companies mentioned obstacles for their participation in training: their small size, lacking infrastructures, and seasonal employment. Some companies favoured continuing to offer further training courses for diploma holders of other occupations. However, based on the survey results, Cableways Switzerland expected 15 to 20 apprentices per year and the association's board decided to pursue the project.

It was expected that small firms would not be able to offer apprenticeship positions but would recruit the cableway mechanics trained by the larger firms (CH3). Therefore, a training fund was created to solidarise the costs among all firms: "not only the small ones should profit but that they pay their due [...] out of solidarity the vocational training fund has actually been set up" (technical manager). Yet, rather than introducing a compulsory training fund according to the new VET act, the association preferred a voluntary fund.

> There are two possibilities one legal and we said no legal we don't want and because of this we have done it voluntarily [...] and these [funds] are only used for this training and this was immediately accepted in the General Assembly. (employer association leader)

The association leaders were reluctant to introduce coercive measures enforceable by public authorities, they preferred to use associational self-regulation (Schmitter & Streeck, 1999) and normatively associated the training fund with solidarity among firms. In 2004, the general assembly voted in favour of the new apprenticeships and the training fund (SBS, 2005, p. 35).

Gaining Approval for the Training Regulations

In a next step, the new apprenticeship needed to be designed and gain public authorities' approval. Cableways Switzerland brought together vocational teachers from the school that offered further training, technical managers, and firm representatives. They designed a curriculum composed of elements from various occupations and added cableway specific content to it (CH2, CH3). Again, available models facilitated the association's institutional creation work. The resulting occupation appears as very industry specific with a profile designed to fit cableway companies' needs as closely as possible raising the question of the labour market mobility of the future cableway mechanics. However, although they were about to create a small occupation in a context in which public authorities aimed to broaden occupational profiles and reduce the number of occupations (Bundesrat, 2000), public authorities did not hinder the association.

In contrast, the association representatives perceived the public authorities as supportive, for example, public authorities financed an educational consultant to help design the curriculum according to the new standards introduced by the VET act (CH1, CH3). Moreover, the self-conception of the initiators was that they–as employer association–had a need and the state agency's task was to support them: "the group that initiated this also pursued it with a certain tenacity, I think they probably said, this is what we want and now the [state agency] must help" (training manager).

This reflects the legitimacy employer associations enjoy because the national regulations delegate the task of defining training content to them. However, some

conditions needed to be fulfilled. Most importantly, the cableway association convinced authorities that they had a unique skill need. They also showed that a sufficiently large number of training firms (around 60 firms according to their survey) and a labour market for the future cableway mechanics existed (CH1, CH5). Moreover, further training in the sector was available, which is important for the authorities' aim to have no initial VET occupation without a possibility to continue education and training (CH5, CH6).

In contrast to the German and Austrian VET systems, unions play only a minor role in the Swiss system. Traditionally, employers consulted unions on a voluntary basis in the process of defining training content (Berner, 2013) but unions did not occupy key positions in monitoring training firms or organising VET in training workshops as German or Austrian unions do (Durazzi & Geyer, 2020; Emmenegger et al., 2019). Yet, in the case of the cableways, the new standardised procedure for occupation development (BBT, 2005b) gave unions more weight: "They said otherwise we don't do apprenticeship if there is no trade union representative" (union representative). The union largely approved of the new apprenticeship because it raised the hope that trained workers would be paid better (CH4). Moreover, the apprenticeship was thought to improve the work safety in cableway firms.

> With the apprenticeship you could say "you who did the apprenticeship, make the revisions and so on". They get more pay that was my motivation because the whole story about working time was a big question and afterwards safety in general. (union representative)

However, the unions' influence remained very limited. In particular, the low pay of apprentices in Switzerland and their productive work in the companies in the later phases of the apprenticeship are perceived as something normal that has always been the case (CH4). Hence, taken-for-granted assumptions hindered the union to formulate more extensive demands, even once they were at the table in negotiations about training.

At the time, the lack of apprenticeship positions was the dominant concern of the political stakeholders in VET (Strahm, 2008). Public authorities hoped that this apprenticeship would create new possibilities for youth in mountain regions where they would not find other apprenticeship positions in technical fields (CH5). Hence, in the consultation procedure among cantons and other stakeholders, the feedback was mainly

positive: “We are pleased to expand the range of apprenticeship places on offer in mountain and peripheral regions with these new basic vocational training courses” (BBT, 2005a, p. 1).

Additionally, the cableway association took over the full responsibility for the school-based part of training, which would take place in their new training centre. Organising and financing the school-based part of training is a cantonal task, by taking it over, the association limited the financial risk for the cantons. Hence, for different reasons, all stakeholders consented to the introduction of the new apprenticeship. The federal authorities approved the new training regulations in January 2006.

Implementing Apprenticeships

Against expectations, implementing training in firms proved to be difficult. The initiators’ calculations had foreseen at least 20 apprentices per year. Starting with only few apprentices caused financial problems: “and then afterwards with this reform everything was only per apprentice with eight apprentices what do you do?” (association leader). The association was supported by local politicians that helped to negotiate an increase in the public contribution for the initial years.

> Who really helped us very well it was the State Councillor [name] before he was mayor in [the training centre municipality] and he really helped us because somewhere it was on the edge because after this reform we suddenly had a gap of I don't know, I believe over half a million. (association leader)

Moreover, they raised further funds and materials for example from suppliers. The first years were marked by financial problems: “but there have been a few sleepless nights. […]. We have too few apprentices, what to do now?” (training manager). Yet, giving up was not considered an option (CH1, CH3). The initial investment had been high already and the initiators were deeply convinced of their project.

Conflicts between regions were identified as one of the causes for the lack of apprentices. Firms from the South Eastern part of the country, the Grisons, hesitated to start apprenticeships because the training centre was too far away (CH1, CH2, CH3).

> I mean it was of course a change for everyone if you have to send the apprentices

> to [the training centre] practically every second week in the first year of their apprenticeship you have to be used to that. (technical manager)

Yet, once other firms had made first experiences with the new form of training and with additional lobbying efforts from the association, these firms also started offering apprenticeship positions.

Cableways Switzerland monitored the implementation in firms through regular surveys. It also organised information events for the potential training firms, produced guidelines that spelled out each step needed to start training, and diffused information on the advancement of the apprenticeship project in internal newsletters and via press releases. This form of educating institutional work (Lawrence & Suddaby, 2006) should build up the knowledge needed to enact the new training practices.

The internal newsletters also diffused calls for firms to offer apprenticeships and increased normative pressure on firms by naming each firm that offered apprenticeships (SBS 2007, 5) and asking firms to invest in the training of skilled workers.

> Unfortunately, a total of only 39 companies offer 57 apprenticeships [...]. However, this is not enough to ensure the financing of the training centre. It is in the interest of our industry to train qualified specialists. (SBS, 2010, p. 1)

Thus, although firms had been initially supportive of the idea to introduce new apprenticeships, once they needed to offer apprenticeship positions, they only slowly started to do so.

A second problem definition was that potential apprentices did not know the occupation and companies struggled to find young people interested in the new apprenticeship: ‘They [the firms] called me “I can't get an apprentice” and five years ago we started to really strengthen the marketing’ (training manager). The cableway association started a promotional campaign: it participated in events where apprenticeships are presented to school-leavers, contacted career counsellors, and visited schools (CH1, CH3).

Moreover, it was argued that parents, teachers, and apprentices perceived the initially chosen occupational title “cableway man” (*Seilbahner*) as unattractive. Instead of

conferring the high, technical requirements of the apprenticeship, it was associated with unqualified staff. Hence, federal authorities were asked to change the occupational title to cableway mechanic to highlight the technical aspect of the occupation (CH1, CH5) and change negative normative associations with the occupational title.

> And then afterwards, with the help of [a state agency representative], we really stepped on the gas, and then we got a name that sounds a bit sexier, cableway man, that's so not cool. (training centre manager)

Hence, marketing made the new occupation known among potential apprentices and diffused a positive image of a versatile mechanic working "where other people spend their holidays" (CH1).

The cableway association had also created clever regulations. Recently graduated apprentices can easily access the branch-specific higher-level vocational training to become certified cableway specialists and these courses include the qualification required to train apprentices. 'We must have about a dozen former apprentices who said "Now, I want an apprentice" and that has a knock-on effect' (training manager).
Since 2011, the number of apprentices has been rising. Finally, in 2016, the aim of training around one hundred apprentices at the training centre was reached.

Outcomes: Professionalisation and Mobility

The cableway association managed to overcome initial hurdles and now belongs to the large group of small occupations in Switzerland that train less than 100 apprentices per year. Often apprenticeship training is defined as successful if training firms retain their graduates (e.g., Culpepper, 2003). Moreover, creating new apprenticeships is associated with occupational closure (e.g., Nicklich & Fortwengel, 2017): access to certain jobs is limited to the diploma holders of the occupation. However, currently, the apprentices only supply a part of the labour force in the sector and develop substantial labour market mobility. The responsible persons for training argue that it is normal that a part of the apprentices leave after apprenticeship, and some may return to cableway companies at a later stage in life (CH1, CH3). The many pathways that are open after apprenticeships are even an argument in favour of the apprenticeship (CH1). In contrast, from a union perspective, low wages in the sector also provide a reason for leaving.

> The lift builder also needs people in Zermatt and St. Moritz […] and then he suddenly earns 2000 francs more than when he works for the cableway then of course this also puts pressure on the wages at the cableway companies this is actually a good story from a union perspective. (union representative)

A recent survey[25] among former apprentices gives further insights into their career paths (SBS, 2018). Indeed, 56% of the respondents (55 former apprentices) engaged in further training, predominantly to become certified cableway specialists. Four apprentices are passing a vocational baccalaureate to access higher education and four already entered higher education. 16 respondents left the sector on average one year after the apprenticeship. Some of them report working conditions as reason to leave, for example, lacking workplace safety, working schedules, salaries, lacking recognition from employers, too much responsibility, or physical strain.

In sum, although the apprenticeship was tailored to the specific skill needs of the sector, the acquired skills are transferable to other sectors and thus allow labour market mobility. For the cableway companies, retaining apprentices can be challenging as they find better working conditions outside the sector. Nevertheless, a significant part of the apprentices remains in the sector and professionalises work in cableway companies.

Discussion and Conclusion

Business associations are key governance actors in collective skill formation systems. Yet, in a changing socio-economic environment, creating apprenticeship programmes and offering transferable training seems increasingly difficult. Employers' capacity to formulate skill needs and cooperate with the state is essential to maintain these systems, which are particularly successful in integrating youth into the labour market. Because the Swiss VET system has proved to be surprisingly robust, this study gives a detailed insight into the decentralised cooperation of employers and employees to introduce a new apprenticeship in Switzerland.

Notwithstanding the favourable institutional context, the employer association needed to mobilise substantial efforts–institutional work–and additional resources to create new apprenticeships. Widespread knowledge about apprenticeships facilitated cognitive

[25]This online survey was conducted by the training center among former apprentices in 2018 (SBS, 2018), it is not statistically representative.

institutional work as the cableway association could imitate existing training models. The association's well-established cooperation with member firms and management-level employees supported normative institutional work, for example appealing to the solidarity among firms that should contribute to training through a new VET fund, which was not made compulsory. Yet, although firms were positive towards the new apprenticeship, the association needed to use various strategies to make them train, for example educating institutional work, monitoring, and increased normative pressure.

Moreover, the state agency may have acted as a gatekeeper for introducing apprenticeships, yet its aim to increase the number of apprenticeship positions prevailed over the wish to broaden occupational profiles. The threshold for creating new occupations seems relatively low if an employer association claims a skill need. These employer associations then receive organisational and financial support. Moreover, in the case of the cableways, the association successfully mobilised its political network to gain further public contributions to address initial financial difficulties. Hence, the legitimacy of employers' primordial role in VET and their political networks may be a key reason for the persistence of a multitude of small occupations in Switzerland.

Conversely, although unions were invited to the process, their influence remained limited. Low apprenticeship wages and productive work of apprentices appear as widely accepted also by the union, which rather focused on improving workplace safety.

Importantly, not only firms but also potential apprentices needed to be convinced of engaging in training. While there were no wages associated with the new occupational title (see Nicklich & Fortwengel, 2017), internal career paths to become technical managers were foreseen for the apprentices. Additionally, the possibility to engage in higher education after initial VET made this training option more attractive for apprentices.

Finally, the apprenticeship was tailored to cableway companies, yet the apprentices' skills proofed to be transferable to firms outside the sector, thus allowing them to leave in search for better working conditions. However, the cableway companies may already profit from apprentices' productive work during the apprenticeship (CH3, CH4) and thus continue to offer training.

This case study complements research on national-level institutional change. It suggests

that the policy of increasing permeability to higher education facilitates promoting apprenticeships among school-leavers. Yet, while the state agency financially supported creating training regulations, new financing rules based on per capita payments, also put a hurdle in the associations' way. Indeed, an important factor that allowed developing a new occupation were the associational resources and its capacity to develop institutional work to mobilise additional support. In this view, relatively small associations with a high membership density may be particularly apt to develop monitoring and normative work towards firms. In turn, such associations may profit from developing training activities as these are associated with public support and contribute to build organisational capacity.

This analytical approach identified hindering and enabling factors in the development of apprenticeship-based training programmes that may also be valid outside the Swiss context. Prior research highlights that business associations, which are key to introduce apprenticeships, develop where firms meet state interventions or strong labour (Schmitter & Streeck, 1999). While internationally mobile firms may circumvent state regulations (but see Unterweger, 2020), firms bound to the domestic market may encounter more incentives to create associations and, as a consequence, develop the capacity to be active in vocational training.

The case study illustrates the important role of normative and cultural-cognitive aspects that foster the private provision of training. In institutional contexts, in which apprenticeships are not valorised and widespread, policymakers willing to promote firm-based training should therefore focus on enabling employer associations to develop strong networks with firms and employees, providing them with sufficient resources, and templates for action. Given that associations tend to design sector-specific curricula, state actors should make sure that apprenticeships are linked to the educational system and that skills can be transferred outside the sector. These results, based on a single embedded case study, certainly have limits. Further research could contrast these findings with occupational creation in other countries or larger sectors. Especially the case of sectors in which employers are not yet organised in associations promises to provide further insights into fostering employer cooperation for training.

Appendix Chapter 7

Table 6-1: List of interviews

Abbreviation	**Date**	**Place**	**Duration (h:min)**
CH1	28.06.2017	Zollikofen	01:10
CH2	28.11.2017	Zollikofen	00:56
CH3	12.02.2018	Luzern	01:18
CH4	16.07.2019	Zollikofen	00:56
CH5	30.07.2019	Phone interview	00:30
CH6	06.08.2019	Bern	00:58

7. Governing Occupations: How Small Occupations Dealt with the Swiss VET Reform[26]

With Carmen Baumeler and Sonja Engelage

Occupational associations are key intermediaries in the governance of collective skill formation systems. To create an effective vocational education and training (VET) policy, reforms need to be implemented in occupations. Occupational associations influence reform implementation through institutional work aimed at the regulative, normative, and cognitive elements of institutions. The 2002 reform in Switzerland adapted the VET system to preserve it in a changing labour market environment. Yet, the reform challenged small occupations because they were meant to merge to broaden occupational profiles. Our qualitative comparative case study explores how three associations of small occupations—piano makers, weavers, and cable car mechanics—dealt with this challenge. We find that notwithstanding their scarce resources, they were able to shape the decentralised governance and foster collective training for small occupational groups.

Introduction

Occupations constitute a key area in which governance plays out. In collective skill formation systems, occupational profiles are defined at the national level, intermediary associations decide on training content, and schools and firms provide vocational education and training (VET). VET stakeholders are under pressure to adapt these systems to changing labour market requirements (Culpepper & Thelen, 2008). However, the governance of collective skill formation is seen as particularly fragile because it relies on firms' willingness to participate in training, which is typically fostered by capable employer associations (Culpepper, 2003).

[26] This is the accepted version of the following book chapter: Strebel, A., Baumeler, C., and Engelage, S. (2021) *Governing Occupations: How Small Occupations Dealt with the Swiss VET Reform*. In Regula Bürgi and Philipp Gonon (Eds.). *Governance Revisited. Challenges and Opportunities for VET*. Bern: Peter Lang. Series: Studies in Vocational and Continuing Education.

Such intermediary associations are key meso-level governance actors. Bridging the national and firm levels, they aim to ensure that apprenticeship training fits skill requirements and firms continue offering apprenticeships in specific occupations. Hence, implementing reforms in specific occupations constitutes a central governance process in which new policies either become effective or fail to do so. To understand reforms in collective skill formation systems, it is essential to understand governance as a broad process that unfolds on multiple levels and includes various public and private actors, in particular, intermediary associations.

We understand governance as a "process whereby elements in society wield power and authority, influencing and enacting policies and decisions that affect public life" (ETF, 2013, p. 2). Our analytical approach builds on institutional theories that provide concepts for understanding how regulative systems, norms, and cultural traditions influence actors and how, in turn, actors work to shape these dimensions of institutions through institutional work—purposive action to create, maintain, or disrupt an institution (Lawrence & Suddaby, 2006, p. 215). We distinguish such institutional work along the three dimensions of institutions: rules and regulations, norms, and cultural-cognitive elements (Scott, 2014). For example, the institutional arrangements of collective skill formation distribute roles and tasks among stakeholders at the national and occupational levels. They attribute a specific value to apprenticeships and provide widespread models of how to organise apprenticeships (Nicklich & Fortwengel, 2017).

Policy reforms constitute key moments for governance: They can be understood as deliberate attempts to provoke institutional change as they alter existing actor constellations, tasks, and practices (Cloutier et al., 2016). Recently, historical institutionalist research greatly advanced our understanding of governance processes in collective skill formation systems, the actors who are involved, and the resulting forms of institutional change (Busemeyer & Trampusch, 2012). So far, this literature mainly focuses on political processes. It has mostly neglected decentralised processes of policy implementation, as well as cultural-cognitive and normative elements of institutions. In contrast, from a sociological institutionalist point of view, understanding governance implies including normative and cultural-cognitive elements in the analysis of institutions. This literature highlights the importance of decentralised processes in policy reforms (Cloutier et al., 2016). Moreover, recent developments in sociological institutionalism focus on the practical work of a multitude of actors involved in institutional change processes (Lawrence & Suddaby, 2006). In this view, governance

is a process that involves the constant work of multiple actors aimed at fostering, circumventing, or inhibiting institutional change, or in other words, governance is institutional work (Houben, 2019, p. 165).

Our contribution focuses on new approaches to governing training occupations at the upper-secondary level introduced with the last reform of the Swiss VET system in 2002. Specifically, we address a gap in the literature on how less resourceful associations—rather than central and powerful organisations—dealt with the changes in governance. The reform aimed to reduce the number of small occupations to avoid overly narrow occupational profiles and to increase skilled workers' labour market mobility and adaptability to technological change (Maurer & Pieneck, 2013). It also introduced further measures to improve training quality and cost efficiency. As a key governance instrument that implements these measures, authorities developed a standardised process of defining occupational profiles that all occupations had to follow (BBT, 2005b).

We show that although the VET reform threatened the existence of small occupations, many small occupations survived, and new ones were created. Today, small occupations still constitute more than half of the approximatively 240 currently existing initial VET occupations in Switzerland (BFS, 2018). Thus, we ask which institutional work small occupational associations developed to deal with the Swiss VET reform and how the diverse outcomes can be interpreted. To answer these questions, we conducted a qualitative comparative case study of three small occupations' reform processes. We selected small occupations that were disrupted, maintained, or newly created: piano makers, weavers, and cable car mechanics. We found the occupational associations engaged in substantial efforts and institutional work to (re)-institutionalise their occupations. The collective type of governance that unfolded in the occupation-level processes allowed substantial leeway for small occupations to develop individual solutions.

In the first section, we discuss governance in collective training systems from an institutionalist point of view. We introduce the notion of institutional work as an approach to analysing governance processes in specific occupations. Then, we review the existing institutionalist literature on reforms and institutional change in collective skill formation systems and detail the key elements of the Swiss VET reform that concern individual training occupations. The third section discusses our case selection

of the three small occupations and the methods we used. Fourth, we present the findings from the case studies, and finally, we offer a summary and conclusion.

The Governance of Collective Skill Formation

Governance is an important topic in educational sciences, political science, and sociology. For example, the recent literature on educational governance (e.g., Langer & Brüsemeister, 2019) provides an important platform for interdisciplinary work on governance in education. This approach highlights the multiple administrative levels and stakeholders that coordinate their actions in governance processes. An important strand of literature in this research context builds on institutionalist theories (Houben, 2019). Roughly speaking, in institutionalist theories, the individual and collective actors involved in governance are understood as embedded in an institutional context. Institutions influence their actions and help to resolve collective action problems. However, different institutionalist traditions highlight different aspects of institutions. For example, historical institutionalists focus on institutions as regulative systems, whereas the key areas of interest for sociological institutionalists are cultural traditions and cognitive elements (Hall & Taylor, 1996; Scott, 2014).

The governance of VET is a complex process because VET should smooth the transition of youth from education into the labour market, and thus, it involves educational and labour market stakeholders. This is particularly pronounced in collective skill formation systems. In contrast to state, market, or employer-dominated VET systems, the collective ones are based on the systematic cooperation of state (including schools) and labour market (including employers and employees) stakeholders. Collective skill formation systems provide training through dual apprenticeships that take place in firms and at vocational schools. The training conveys transferable occupational skills, and the state and intermediary associations of business and labour are highly involved in the governance of these systems. Such systems have historically developed in Austria, Denmark, Germany, the Netherlands, and Switzerland (Busemeyer & Trampusch, 2012).

In this governance arrangement, intermediary associations are key actors (Culpepper, 2003; Wettstein et al., 2014). The state delegates the important task of defining occupational profiles to associations based on the widely held assumption that associations know employers' needs and will ensure that the VET is adapted to them. Through this cooperation, the associations share the state's formal authority and gain access to resources (Schmitter & Streeck, 1999). In exchange, these intermediary

associations need to ensure that enough firms offer apprenticeship positions because, while workplace-based training is a key element of the system, it relies on firms' voluntary participation. This complex constellation makes reforming a collective VET system particularly challenging. Importantly, how policies are implemented on the ground in individual occupations is decisive for the type of institutional change after a policy reform (Streeck & Thelen, 2005).

To understand the decentralised governance processes in the Swiss VET system, we will discuss the concept of institutional work in more detail. Then we situate the Swiss VET reform within existing historical institutionalist literature and highlight specific reform elements that affected decentralised governance processes.

Institutional Work

Sociological institutionalist approaches highlight that institutions enable and constrain social action through coercive, normative, and cultural-cognitive elements (DiMaggio & Powell, 1983; Scott, 2014). In Scott's (2014, p. 71) words, "Institutions comprise regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life". This implies that institutions distribute authority and resources and provide shared understandings and belief systems that influence what is perceived as appropriate and legitimate. This conceptualisation of institutions comprising three dimensions can, for example, be applied to collective skill formation: VET regulations distribute tasks and responsibilities among the involved stakeholders (regulative), firms' participation in education is seen as appropriate and valorised (normative), and dual apprenticeship is a taken-for-granted widespread form of upper secondary education for a broad share of youth (cultural-cognitive) (Nicklich & Fortwengel, 2017).

Institutions are seen as contributing to stability and have often been understood as self-reproducing (e.g. Jepperson, 1991). In contrast, approaches that are more recent argue individuals and organisations aim to purposively create, maintain, or disrupt institutions (Lawrence & Suddaby, 2006). This type of action is defined as institutional work. From this perspective, actors are culturally competent and skilfully address their institutional environment to pursue their aims.

Such institutional work becomes visible in a variety of practices and strategies. We distinguish institutional work along the institutional dimension it addresses and provide some examples. First, institutional work aiming to influence regulative institutions consists of activities such as creating rules and regulations and ensuring the adherence

to these rules, which may involve advocacy and the monitoring of activities (Lawrence & Suddaby, 2006, pp. 221–238).

Second, regarding normative elements of institutions, institutional work includes attempts to modify values and norms that support an institution by, for example, depicting certain rules and practices as appropriate and others as inappropriate. To do this, actors may mobilise positive and negative examples. This type of institutional work is called valorising and demonizing (Lawrence & Suddaby, 2006, pp. 232–233).

Finally, cognitive institutional work aims to alter meaning systems with regard to their underlying explanations of how the world works. This type of work, for example, involves elaborating categories and chains of cause and effect (theorising) and easing the adoption of new practices through educational activities (educating) (Lawrence & Suddaby, 2006, pp. 226–228).

From this broad conceptualisation of institutional work follows an ability to attempt shaping institutions that is not limited to powerful groups but is widespread and thus includes institutional work that is "nearly invisible and often mundane, as in the day-to-day adjustments, adaptations and compromises of actors" (Lawrence et al., 2009, p. 1). Hence, institutional work is ubiquitous. Nevertheless, institutions remain powerful, structuring elements of the social and political world because institutional work may fail, have unintended consequences, and require mobilising a wide range of heterogeneous actors along with material or discursive resources (Battilana et al., 2009; Fligstein, 2001; Hampel et al., 2017).

Social position, social skills, and available resources such as formal authority, finances, or informal networks affect a stakeholder's ability to influence institutions (Battilana et al., 2009; Fligstein, 2001). This means that powerful, incumbent stakeholders may resist change as guardians of institutionalised practices but they may also adapt institutions to their changing needs and, thus, act as change agents (Micelotta & Washington, 2013). In contrast, peripheral actors may be more apt to develop innovation and promote divergent change but they may need to mobilise substantial resources and various stakeholder groups' support to implement and diffuse change (Battilana et al., 2009; Tracey et al., 2011).

In the context of policy reforms, actors' ability to engage in institutional work may result in partial implementation and unintended consequences. The state is a particularly powerful institutional actor because it disposes of the formal authority to create and

change coercive rules. Policy reforms affect multiple stakeholders involved in governance at various levels because they alter the distribution of tasks and resources and may call the legitimacy of traditional practices into question. This could lead to empowering new stakeholders or marginalising incumbents and the need to legitimate traditional practices.

Consequently, organisations often do not faithfully comply with new policies, but their responses diverge. For example, affected organisations may resist institutional change or attempt to use new policies in a way that allows them to maintain their position (Currie et al., 2012; Micelotta & Washington, 2013). Importantly, the intermediary actors situated at the meso-level between policymakers and the organisations that are meant to change practices on the ground, were identified as key to the success or failure of a policy implementation (Cloutier et al., 2016).

From this literature, it follows that studying the governance of VET and VET reforms implies analysing the institutional work of the affected organisations. In particular, an analysis of intermediary associations' institutional work during policy implementation promises to deepen our understanding of governance and institutional change in these systems.

Reforming Collective Skill Formation

Reforming collective skill formation is challenging due to the complex cooperation between stakeholders with sometimes diverging interests. Employers aim to cover their skill needs, the state is interested in the smooth transitions of youth into the labour market, and individuals want to gain relevant skills. Yet, given the changing skill needs of the economy, VET systems need to be adapted (Culpepper & Thelen, 2008).

Historical institutionalist literature highlights that, in the adaptation processes, established compromises and the balance between different actor groups in a collective skill formation system can be destabilised and this can gradually transform the systems (Emmenegger & Seitzl, 2019; Thelen & Busemeyer, 2008; Trampusch, 2010a). However, the recent Swiss VET reform provides a case of self-preserving institutional change. A coalition of the state and the small firms' umbrella association preserved the essential dimensions of VET: the alternation of training at the workplace and in schools, the provision of transferable occupational skills, and the involvement of associations in VET governance (Trampusch, 2010a). Moreover, in the years following the policy reform, small firms continued to largely participate in the system and the share of school leavers entering dual VET remained at around 60% (Müller & Schweri, 2012; OECD,

2017a). This makes Switzerland a crucial case for studying how institutions of collective skill formation can be stabilised in a changing environment. The existing literature mainly gave insights into the process of policy-making that led to the self-preserving reform at the national level. Yet, so far, little is known about the reform implementation at the decentralised level in individual occupations and the role of intermediary associations in these processes. Understanding these dynamics is important as scholars highlight that maintaining the formal rules is not sufficient for stabilising the institutions that may erode due to inconsistent policy implementation (Streeck & Thelen, 2005). Hence, although the VET reform aimed to preserve the dual system, it may have led to changes at the levels of occupations and their associations.

Several aspects of the policy reform particularly affected small occupations and their responsible intermediary associations. Amongst others, the 2002 VET reform addressed the need to adapt occupations to rapid technological change and higher qualification requirements (BBT, 2005b; Gonon, 2016). Therefore, Swiss authorities aimed to broaden the occupational profiles from the initial VET to increase labour market mobility and facilitate access to continuing education (Maurer & Pieneck, 2013). From this followed the idea to merge similar training occupations into occupational fields. This should also make training more cost efficient for VET schools because of larger groups of apprentices (Maurer & Pieneck, 2013). Hence, public authorities asked small occupational associations to merge with similar occupations (BBT, 2005b, p. 14).

To provide associations with additional financial resources and allow them to use coercive measures towards firms, the reform introduced the possibility of declaring sectoral VET funds as generally binding (Trampusch, 2010a). In this case, all companies that employ diploma holders of a certain occupation are obliged to contribute to the funds.

For implementing the reform, each occupation was revised in a standardised process that included occupational associations, the federal state agency, and the cantonal VET offices. Federal authorities published a guideline document, *Handbuch Verordnungen* [*The Handbook on Ordinances*] that spelled out criteria for the occupational revisions and the necessary administrative steps. The guidelines highlighted the necessity to clarify "fundamental questions" (BBT, 2005b, p. 8), which included analysing the labour market relevance of occupations, cost benefit relationships of training, and the further education prospects of diploma holders. This resonates with the central criteria that also serve public authorities and political stakeholders in valorising and legitimising

dual apprenticeships (e.g. permeability to tertiary-level education, low youth unemployment rates, and economic success; Gonon, 2016).

Against this backdrop, small occupational associations appear as marginal actors, which are particularly vulnerable to the increasing administrative and quality requirements established in the guidelines. Given the small number of apprentices and host firms, the associations of small occupational groups generally only command few resources. Moreover, because occupational profiles should be broadened, the reform questioned the legitimacy of offering training in small occupations.

Finally, the VET reform resulted in a decline in the number of occupations from around 300 to 240. However, surprisingly, many small occupations were maintained and new ones created. Overall, most (56%) of the approximately 240 federally recognised initial VET occupations offered less than 100 apprenticeship positions annually, 18 occupations (7%) offered more than 1000, and the remaining ones offered between 100 and 1000 (BFS, 2018, own calculation). The small occupations with less than 100 apprentices provided roughly 3600 (5%) of 76,000 apprenticeship positions per year. Among these, we selected three occupations for case studies.

Methods and Data

We explored how the adaptation of the Swiss VET system affected small occupations, based on a qualitative comparative case study (Palmberger & Gingrich, 2014; Patton, 2015). Concerning case selection, the smallest occupations constitute extreme cases that promise to reveal how the new policies affected the most marginal players in the system. If the actors' ability to influence institutional outcomes depends on their resource endowment, the institutional work is the least likely to be successful. Yet, in the case of the smallest occupations, reforms also resulted in different outcomes: small occupations were disrupted, maintained, or created. This raises the question of how associations achieved these outcomes despite their scarce resources and marginal status.

To capture differences and commonalities between occupations, we purposefully selected three information-rich cases of small occupational reforms in a maximum variation sampling (Patton, 2015). The selection criteria were the small numbers of apprentices per year at the time of the reform (around 10 apprentices) and the heterogeneity of reform outcomes. The cases selected were the associations responsible for the occupations of piano maker, artisanal weaver, and cable car mechanic.

Before the reform, piano makers and weavers offered dual apprenticeships independently in their long-standing occupations (Baumeler et al., in press; Strebel et al., 2019). Cable car firms recruited diploma holders from other occupations, such as mechanics or electricians. The piano makers represent a case of disruption because they merged with wind instrument makers and organ builders into the musical instrument maker apprenticeship. This means they train basic competencies together in a common training centre. The weavers maintained their occupation against all odds, while the cable car mechanics represent a newly created small occupation (Strebel, 2020).

We conducted 12 theory-generating, semi-structured expert interviews with key representatives involved in the broader reform process and representatives of the occupational associations (Bogner et al., 2009). To complement and contextualise the expert interviews, we analysed annual reports, minutes, and official communications such as the magazines of occupational associations, websites, surveys, newspaper articles, and government documents, as well as statistical information on each occupation's development.

First, based on interviews and documents, we developed rich case descriptions. These descriptive narratives about the unfolding of the reforms over time (Langley, 1999) reconstructed the processes from the occupational associations' perspectives (Harrison et al., 2017). The literature on institutional work provided sensitising concepts (Kelle & Kluge, 2010) that directed the attention to theoretically relevant aspects but also allowed for inductive data-driven reasoning. These narratives distinguished regulative, normative, and cultural-cognitive institutional work. Second, we identified commonalities and differences between the three cases. The next section presents findings for two aspects of the reform process: gaining the approval to offer dual apprenticeships and implementing training.

Small Occupations' Institutional Work

The VET reform provoked specific challenges for small occupations. We present our findings in two sections. The first shows how associations of small occupations gained the approval to offer their apprenticeships in the VET reform context, which questioned the appropriateness of offering apprenticeships in small occupations. The second documents the associations' efforts to implement revised training regulations. Each section discusses, in turn, the institutional work of piano makers, weavers, and cable car mechanics.

Offering Dual Apprenticeships

The reform questioned the appropriateness of offering apprenticeships in small occupations. Thus, all associations considered alternatives, such as relying on further education. Yet, finally, the occupational associations engaged in legitimising their apprenticeships to gain public authorities' approval to continue or start offering dual apprenticeships.

Confronted with the VET reform's demand to merge with other small occupations, piano makers considered stopping apprenticeship in Switzerland and sending apprentices to a well-known German school. Yet, this would exclude French-speaking Swiss apprentices, and the piano makers devalorised the training offered at the German school.

> The distances here are short, and it is tailored to Swiss needs, and we have a higher level of education. We have the four-year training; we can go even deeper. We have much more days of intercompany courses, so our people are much better educated in the end than those from Germany. (Association board member)

Consequently, the piano makers wished to maintain an apprenticeship in Switzerland and did not consider further alternative training options. Public authorities had imagined merging them with other traditional handicraft occupations with the sole similarity of using wood. Piano makers convinced public authorities to merge only with wind instrument makers and organ builders, which are also instrument makers. This solution seemed better than stopping apprenticeship or sending apprentices to Germany. Thus, they became pioneers for creating a new merged small occupation.

As pioneers, the piano makers had to address many open questions, which led to an increased need to negotiate solutions with the responsible state agency. To gain more influence, they chose a member of parliament as president of their intermediary association. This person facilitated negotiations with the state agency.

> If we would have come bottom-up: Mrs [a state agency representative], considering the situation, we have a problem, etc., there would have come a disreputable letter and the matter would be off the table. But when it came from above, from the National Council, suddenly, the music played. (Association board member).

Still, they could not convince the state agency to keep their occupational title "piano makers and tuners", and the agency imposed a common name for the merged occupations, which was accepted only reluctantly.

> We are piano makers! We are not musical instrument makers! We didn't feel at home there, and we had to swallow this toad. [. . .] But then we suddenly had to stand there and present it to our people as if we were deeply convinced in our souls of the whole story. (Association board member)

Although the association's board did not like the new title, in their intermediary function, they had to convince their members to agree with the compromise they had found with the state agency. Their institutional work in this phase thus included valorising their apprenticeship and theorising its value as well as networking with politicians as a form of advocacy. The form of training per se and the need to train were never questioned in this case.

In contrast, the weaver association managed to maintain their specific apprenticeship although they were subject to similar pressures as the piano makers (Strebel et al., 2019). The first factor that allowed this maintenance was that the weavers had anticipated the reform and updated their training regulations in the 1990s. Thus, their training regulations were not outdated, which made the renewed adaptation less urgent from public authorities' standpoint. However, weavers also evaluated merging with similar occupations, for example, textile designers or basket makers. However, there was no merger because they did not agree about if and when to start with the reform. Instead, they considered replacing apprenticeship with further education courses. Yet, later, they abandoned this idea as they realised setting up such courses demanded equal effort and would not offer the same wage levels as a VET diploma. While the piano makers pioneered a merger, the weavers took their time to decide, entered the reform process at a later stage, and thus avoided merging. Yet, they also needed to justify their apprenticeship.

The weavers conducted an inquiry among diploma holders that showed they were successfully integrated into the labour market—a crucial criterion for public authorities to recognise an occupation. Moreover, the weavers' association valorised their apprenticeship, arguing that employers valued weavers' practical skills.

> If you only have training at the higher education level, the distance to practical work is extremely large. That was also confirmed in talks with managers of workshops, in design workshops in industry. (Association leader)

A further strategy was accusing the social institutions that employ weavers to work with disabled people of being freeriders and trying to recruit them as new host companies.

These efforts of the weavers to valorise and theorise the labour market relevance of their occupation point to the key role of this criterion for gaining the state agency's approval to continue their apprenticeship. Moreover, dual apprenticeships are an attractive training option because VET diplomas are associated with a certain wage level, which contrasts with less recognised further education.

Surprisingly, public authorities authorised the creation of a new, rather small occupation shortly after the VET reform: cable car mechanics. This new occupation provides more industry-specific skills, which seems inconsistent with the VET reform's aim to broaden occupational profiles. The cable car association argued that diploma holders from other occupations were no longer suited to deal with the increasingly complex cable car technology and security requirements. Moreover, the existing continuing education option was costly for companies and employees. Like piano makers and weavers, the cable car association first considered various alternative solutions, for example, expanding continuing education or adding cable-car-specific training to an existing apprenticeship.

After exchanging ideas with other occupational associations, the cable car association concluded that developing an independent dual apprenticeship was the best solution for covering their skill needs because the initial VET was still missing from their training activities so that offering it appeared to solve their qualification and recruitment problems.

> I find it important that we made the step now and started to offer the basic level and to do something from the ground up because it is easier than if you always tinker at the higher level [. . .] as if you put apples on trees instead of letting the tree grow first so that it carries fruit afterwards. (Training commission representative)

Importantly, the cable car association convinced public authorities that no other occupation met their skill requirements and that there were sufficient cable car companies to offer apprenticeship positions and a labour market for future cable car mechanics. Additionally, the cantons supported the project because they hoped this new occupation would offer apprenticeship positions for youth in mountain regions. Again, theorising labour market relevance and, in particular, offering new apprenticeship positions for youth constituted the key rationale for the new apprenticeship's approval.

Organising Training

Due to the small number of apprentices, small occupations often reverted to training models that allowed them to bring in apprentices from all over Switzerland to form classes of reasonable sizes. The three associations' institutional work differed and variously focused on mobilising financial support or voluntary work from members, fostering firms' training participation, and mobilising financial support from public authorities and private donors.

To take over VET governance tasks for the new musical instrument maker apprenticeship, the piano makers and other musical instrument makers founded an umbrella organisation that employs a part-time staff. This solution implies turning away from the purely voluntary work of association members to a more professional approach that causes additional expenditures. Moreover, the musical instrument makers decided to offer VET school and intercompany courses for all Swiss apprentices in a new training centre.

These innovations implied higher costs for training. Thus, to generate more income, they returned to regulative institutional work and introduced a new, generally binding VET fund to which all firms employing musical instrument makers have to contribute. The new levy encountered resistance, and the association got involved in a lawsuit with a professional who refused to pay. The court decided in favour of the association, which was an important step in stabilising the new financing model.

> He went to court and then came the moment of truth. Does the system withstand, does it really work? We were anxious about this moment because we thought that if the court said no, then the whole thing would collapse like a house of cards. But the court said that's right what you did and it's very clear he has to pay. (Association board member)

Cantons are responsible for organising and financing vocational schools. The musical instrument makers had to find a canton that was willing to host their new training centre. This was a difficult endeavour because cantons were not eager to support schools for small occupations. Finally, they found a canton that was interested in filling the void left by a VET school for agriculture that lacked apprentices.

However, the musical instrument makers still lacked resources. To acquire the necessary machines and materials for the new training location, they found a private sponsorship of 250,000 Swiss francs thanks to their social network. Additionally, the associational

leaders approached companies that import musical instruments. They argued that instrument manufacturers profit from well-trained professionals who can maintain and repair their instruments.

> And then we created the factory fee. Then again, it was my job to go and negotiate with every manufacturer. [. . .] We grabbed the biggest one and, at some point, he said yes. And with the others, you have to act as if everyone had said yes, even if it's only the second or the third. (Association board member)

This case shows that merging and modernising occupations can drive training costs up. Because the occupational association and its member firms have limited resources, in addition to the generally binding VET fund, they used their network and social skills to finance the new training infrastructure.

For the weavers, the new training ordinance updated the content of training but, otherwise, they maintained the existing form of training. Namely, the school-based part of training would continue to take place in a small vocational school. Thus, the weaver association only needed limited additional resources. Public authorities provided some financial support for all occupational reforms, and this support mainly served to finance educational advisors for creating the weavers' new training regulations. Yet, then unexpectedly, the cantonal VET offices decided the weavers needed to integrate the only French-speaking apprentice into the courses taking place in the German-speaking part of Switzerland. The weavers did not manage to counteract this decision and negotiate a different solution with the cantons. This failure to develop successful advocacy meant the weavers needed to organise bilingual courses quickly, and the public authorities rejected contributing to the additional costs of translating teaching materials.

For the weavers' association, the most important way to mobilise resources was thus to recruit the further voluntary support of members, and they appointed members to develop the new teaching materials. The association organised social events and face-to-face meetings, which were what they perceived to be the best paths to persuading and motivating members.

> But we realised that this is really needed, that all people concerned with VET come together and that we can discuss things at the same table. [. . .] So much more is possible if you meet people face-to-face [. . .] It is a big effort [. . .] But it is worthwhile; it is really irreplaceable. (Association leader)

The association also used normative strategies such as valorising and demonising. In its publications, the association regularly thanked its members and praised their efforts towards the reform project. And on the contrary, they negatively mentioned organisations that did not join events or contribute to the collective efforts.

In contrast to the piano makers, the weavers refrained from using coercive strategies. For example, they sometimes struggled to convince host companies to enact new regulations and contribute to the association's efforts. Although the association knows that according to legal rules, host companies not complying with training requirements can be sanctioned and lose the permission to train, this sanctioning mechanism comes at the high price of losing one of the few host companies.

> This is a big balancing act that, yes, one can tell them do it or you lose the permission to train, but these are also difficult decisions. So there, I'd rather try to work with the motivation of the workplace trainers so that they bring in the novelties. (Association leader)

Association leaders are well aware of this limitation of coercive strategies and, thus, prefer using normative strategies, such as enlisting personal contacts to motivate firms. For example, a special working group was set up to motivate social institutions to start offering apprenticeship positions. Hence, this case shows that a small association with a limited political network and very few firms has hardly other means than cognitive and normative strategies to mobilise the support of members and public authorities.

Last, to implement their apprenticeship, the cable car association wanted to create their own training centre where all apprentices would be schooled together. The cable car association imitated a training model from the construction industry that they perceived as successful. This model implied taking over full responsibility for VET school courses from the cantons and carrying the associated financial risks. Like the musical instrument makers, the cable car association introduced a new VET fund to cover part of the training costs. Yet, it was unnecessary to declare the fund as generally binding for non-member companies because over 70% of all concerned companies were members. Additionally, the association applied for public funds for developing mountain regions and requested cable car manufacturers to donate equipment for the training centre.

Nevertheless, financing the centre became a challenge for the association. The reform had introduced a new mode of financing, foreseeing that cantons pay lump sums per

apprentice instead of a given part of the fixed costs. When only 12 apprentices started training rather than the planned-for 20, this resulted in a deficit.

Facing the financial deficit, the association needed to take further measures for their project to survive. A local politician supported the association in negotiations for an increased cantonal contribution for the initial years.

> [A cantonal level politician] now, he is a member of the governing council before he was the mayor of [location], and he really helped us [. . .] We went to the canton, and he came with us, and then they found the solution that they would finance a double contribution per apprentice for the initial three years. (Training centre representative)

The cable car association also developed institutional work to gain more host companies. They monitored firms' training participation closely and used normative strategies to win additional host companies. For example, the association published the names of new firms that intended to offer apprenticeship positions in their newsletters and increased normative pressure on members: "Offering this new training is a chance. We ask all members to seize this chance . . . to offer one or more apprenticeship positions" (SBS, 2007, pp. 4–5). Additionally, they distributed tutorials to instruct firms and workplace trainers, which corresponds to "educating", meaning cognitive institutional work aimed at diffusing knowledge that facilitates the implementation of new practices (Lawrence & Suddaby, 2006).

Importantly, the cable car association not only had to convince firms to offer apprenticeship positions but also attract school leavers to the new, unknown occupation. Therefore, the association approached career counsellors, schools, and parents and produced promotional material to attract youth with the message "You work where others spend their holidays. You go up in the morning and go 'wow' when you leave the cable car and look at the white, beautiful mountains" (training centre representative). This case documents the role of existing models of apprenticeships that can be imitated (this type of institutional work is called mimicry; Lawrence & Suddaby, 2006). Moreover, it illustrates that a highly organised economic sector could raise substantial resources for training without relying on coercive strategies. Using their well-developed political network and developing normative and cognitive institutional work towards member firms as well as potential apprentices allowed them to implement their project for a new apprenticeship.

Discussion and Conclusion

Our comparative case study focused on small associations' institutional work to deal with the Swiss VET reform. Adopting the institutional work perspective allowed us to reveal how much effort intermediary associations need to mobilise to create, maintain, or adapt occupations, although the Swiss VET reform qualifies as a self-preserving form of institutional change. Indeed, the reform's requirements, such as revising training regulations and broadening occupational profiles, translated into more administrative work for intermediary associations and increased training costs. Moreover, the call for broader profiles delegitimised small occupations.

Occupational associations of small occupations developed institutional work to remain in or gain access to the VET system and to offer initial VET apprenticeships despite the existence of training alternatives. Their reasons included wage levels associated with the VET diploma, control over the provided skills, and the conviction of the high value of their apprenticeships. They justified their apprenticeships by referring to the skill needs of employers and labour market integration. In the case of merging into a new apprenticeship, less justification was needed because the association followed the state agency's demand for broadening the occupational profile. Situating this institutional work in the Swiss context, in the regulative dimension, VET law distributes roles and tasks for governing apprenticeships and, besides sharing the formal authority of the state, associations also receive financial support for fulfilling governance tasks. Further, some sectoral employment regulations associate a VET diploma with certain wage levels. Therefore, gaining access to the VET system allows associations to control training content, receive resources, and secure diploma holders' wage levels. Moreover, in the normative dimension, the associations' conviction of the high value of apprenticeships resonates with the largely shared view of Swiss educational and labour market stakeholders that apprenticeships constitute valuable educational pathways. Concerning the cultural-cognitive dimension, the institutional work to justify apprenticeships mirrors the stance that the labour market orientation is a key rationale underpinning the legitimacy of the Swiss VET system.

In these three cases of small occupations, apprentices from all over Switzerland attend the school-based part of their training together in one location rather than in their cantons of origin. Establishing these centralised forms of training and its infrastructure required associations to mobilise additional resources from members and external sources. To do so, only the piano makers used the national regulative framework to introduce coercive

measures aimed at firms by establishing a generally binding VET fund. The other associations relied on the association's internal regulations, voluntary contributions or voluntary work of members, and the raising of additional funds from public authorities, private donors, and related firms. Consequently, they mainly used normative and cognitive institutional work. The normative work highlights the value and appropriateness of firms and association members contributing to the collective effort to offer apprenticeships. Cognitive institutional work such as educating key persons was especially relevant for creating a new apprenticeship. Widely available knowledge on apprenticeships and training models facilitated the cable car associations' institutional work. This highlights that apprenticeships are still the most prominent and taken-for-granted form of upper secondary education in Switzerland.

Finally, networking with politicians facilitated these small occupations' institutional work in various situations, especially when it came to negotiating with the state agency or cantonal VET offices. The weavers seem to have lacked such a network and consequently failed to negotiate solutions with authorities that would have been more favourable for them.

By focusing on the processes of governing occupations and the institutional work of the intermediary associations of small occupations, we addressed a gap in the literature on collective skill formation systems and their reforms. Dual VET is based on multilevel governance that involves federal and regional authorities as well as private actors—the intermediary associations of occupations and firms. While regulations distribute the tasks and resources, the deeply anchored cultural tradition and positive image of firms that offer apprenticeships appear as key factors that support the institutional work of intermediary associations during reform implementation in their occupations. Far from being passive recipients of the policy reform, these marginal actors were able to shape the outcome of the occupational reform processes, at least to a certain extent. Specifically, collective governance provided opportunities for institutional work because it unfolds through a process of cooperation and negotiation between public authorities and intermediary associations.

We found that reform implementation often hinged on individual association representatives' capacity to mobilise various forms of support—financial, political or voluntary work—mainly through normative and cognitive institutional work. Hence, the institutionalisation of individual occupations is tightly linked to the capacity and skills of their association leaders. More generally, if capable leaders of intermediary

associations provide resources for collective forms of training, it also allows small firms with limited resources to offer apprenticeships. However, this success criterion also means that it is not always labour market demand that drives the maintenance or creation of an occupation but rather the skilful institutional work of associations.

Our contribution highlights the processual character of governance. Showing the everyday work of intermediary associations that underpins collective skill formation highlights how careful governance reforms in this system need to be. In this setting, it seems that coercion is not a good option because it may undermine an association's motivation to contribute to the VET system as well as firms' willingness to train. This is a key challenge for policymakers aiming to update apprenticeships and increase quality. In the governance process, public authorities and intermediary associations found which policy measures were realisable and to what extent. Unsurprisingly, the VET reform did thus not provoke abrupt institutional change or the dismantling of small occupations but, rather, led to a variety of negotiated solutions at the occupational level. This may support self-preserving institutional change but could also result in an inability to implement far-reaching reforms.

8. Conclusion: Maintaining Collective Skill Formation

This dissertation set out to explore how intermediary associations contribute to stabilising collective skill formation in a challenging environment marked by changing skill requirements and liberalisation pressures on neo-corporatist institutions and associations. It focused on two elements: the structural characteristics of the associational system that underpins neo-corporatist policymaking and implementation in collective skill formation and the purposive action of intermediary associations to promote or resist changes in the aftermath of a major VET policy reform.

Currently, VET that involves employers, amongst others as providers of apprenticeship positions, is seen as a particularly promising approach to develop skills and avoid youth unemployment (e.g. EU, 2020). While many countries lack institutional arrangements that support employers' involvement in training, collective skill formation systems are supported by such institutional arrangements and have traditionally fulfilled the double role of fostering both economic efficiency and social inclusion. Yet, these systems are challenged by digitalisation, deindustrialisation and liberalisation. To adapt to the current political-economic context, collective skill formation systems need to maintain high employer involvement, for example, by increasing training in the growing service sector of the economy (Culpepper & Thelen, 2008) or shoring up the organisational capacity of employer associations. However, attempts to do so may gradually drive the system towards more segmentalist or statist approaches to skill formation (Seitzl & Emmenegger, 2020; Seitzl & Unterweger, in press).

Switzerland is in many ways a prototypical example of collective skill formation and currently stands out as the country with the highest share of workplace- and school-based upper-secondary-level VET in the OECD (OECD, 2017a). Hence, the Swiss case can provide insights into strategies that support the adaptation of collective skill formation to the service economy. Previous research has found both transformative and self-preserving forms of institutional change in national and sectoral reforms and attributes a key role to large firms as promoters of transformative change. Yet, rather than on firms and their representatives in the political arena, this dissertation follows the neo-corporatist research tradition and focuses on intermediary associations, namely, in their second role as implementors of reforms and administrators of training that fulfil public tasks. The time frame of this dissertation mainly covers the last two decades in which the 2002 VET reform, characterised as a self-preserving form of institutional

change (Trampusch, 2010b), was implemented. Arguably, the reform contributed to stabilising the system but also provoked change amongst the intermediary associations involved in VET governance, the OdA, especially by extending the VET system to new sectors and reducing the number of occupations.

This dissertation presents seven chapters concerning important aspects of the Swiss collective skill formation system and its adaptation to the service economy. First, the Swiss and German collective skill formation systems are compared to provide more detailed insights into a basic difference between the two similar cases, namely the weaker union representation in the Swiss system (Chapter 2). Based on the data collection on Swiss OdA, the limited extent to which employee associations participate in content definition is documented, as the OdA are clearly employer-dominated. In contrast to the German case, therefore, the Swiss system represents a more liberal type of collective skill formation. This is due to the early developments in both countries. In Switzerland, cantonal authorities devised the first VET laws and occupied key functions in the governance of VET, most importantly the monitoring of training firms and, thereby, pre-empted unions of their chance to take over this task once a federal VET law was established in 1930. In Germany, unions had a stronger mobilisation capacity and secured more far-reaching competencies at the beginning of the century and in the 1960s when they sided with the social democratic government. Today, these different paths are still reflected in differences in the functions of employee representatives in the two VET systems and in a more employer-friendly Swiss system, which displays lower training costs for firms on average.

The third chapter more broadly addresses the voluntarist approach of Swiss public authorities to cooperation with labour market stakeholders. Swiss public authorities allow labour market stakeholders substantial leeway to create various forms of intermediary associations that represent them in VET, and membership in these organisations is voluntary for firms (Höpflinger, 1984). Especially with the 2002 VET reform, a new umbrella term was introduced – the *Organisations of the World of Work* – intended to designate all intermediary associations that are active in the collective governance of VET. This development led to a more fragmented and less neo-corporatist associational landscape as it enabled the emergence and spread of a new organisation type. These *VET organisations* have brought together different stakeholders for the sole purpose of fulfilling the public tasks associated with VET; they are less integrated in

traditionally powerful peak-level associations and use other channels to represent their members' interests vis-à-vis public authorities.

The fourth chapter tackles the expansion of the Swiss system to include additional sectors of the economy, which has helped to offset the shrinking apprenticeship market in the craft and industrial sectors. The latter are the traditional strongholds of the associational logic that is associated with collective governance in VET and other collectively governed policy areas. In the newly integrated sectors, a more state-oriented, school-based institutional logic characterises the pre-reform training. Thus, to institutionalise apprenticeships in these sectors, intermediary associations needed to be created to take over the public tasks typically delegated to neo-corporatist associations. Through *bricolage,* the state agency responsible for VET helped combine the two existing institutional logics by supporting new types of intermediary associations in the newly integrated sectors.

Changing perspectives, chapters 5 to 8 explore the world of the OdA as institutional actors. In the context of the reform and its requirements, specifically the aim to merge small occupations into broader occupational fields, OdA defended, adapted and created occupations. The fifth chapter analyses the case of the artisanal weavers that managed to defend their occupation by anticipating the reform and delaying a decision concerning potential mergers with other occupations. Supported by cantonal stakeholders, this small occupation was then updated but preserved an autonomous apprenticeship. This example shows that even OdA with scant resources can resist pressures to merge and defend their occupations if associational leaders manage to mobilise voluntary work from members to fulfil governance tasks.

The sixth chapter, in contrast, illustrates the opportunities and caveats of such an occupational merger for another small occupation, the piano makers. While synergies in the provision of training of various apprenticeships around building and repairing musical instruments were identified, merging these apprenticeships led to the creation of a new umbrella association and to professionalisation of associational work as paid staff were hired. Increasing costs were covered by installing a compulsory VET fund and raising additional funds amongst private donors and firms. Although the piano makers' associational leaders saw opportunities in this development, they were dissatisfied with the loss of their occupational title through the merger. Thus, when the

opportunity presented itself, they seized it and reintroduced their former title to defend their occupational identity.

Chapter 7 shows that an existing business association could create a new small occupation, even in a context in which public authorities have aimed to reduce the number of occupations. The case of the cableway mechanics illustrates how existing institutions facilitated the introduction of new apprenticeships for the Cableways Switzerland employer association. Nevertheless, employers needed to deploy various strategies, such as normative pressure on firms, diffusing information, educating on-the-job trainers, raising funds and promoting a positive image of the new apprenticeship amongst potential apprentices, to attract enough apprentices. This creation was successful due to the commitment of associational leaders who would not abandon their project but mobilised substantial efforts to make the new occupation 'stick'.

Finally, chapter 8 compares the three cases of maintenance, disruption and creation of small occupations. The VET reform had challenged these occupations due to the administrative workload it implied and the delegitimisation of small occupations. Yet, although associational leaders evaluated alternative forms of training, the benefits from remaining within or accessing the VET system were judged as being of higher value. Associations in the VET system have gained public support and control the content of training; they are also convinced of the high value of apprenticeships and profit from the legitimacy employers enjoy in the Swiss VET system with its focus on the labour market relevance of training. The positive image of firms and widespread knowledge about apprenticeships have facilitated the institutional work of the intermediary associations. Although these associations can be considered marginal actors in the VET system, they are able to shape the outcome of their occupational reform process to a certain extent through negotiation with public authorities, the mobilisation of internal support and raising additional funds from various sources. Consequently, skilful institutional work of associational leaders has been essential for the survival and creation of occupations so that even apprenticeships in traditional handicraft occupations with limited labour market relevance can continue to survive. Thus, the VET reform did not result in abrupt institutional change, i.e. the merger or abolishment of all small occupations, but instead led to a variety of negotiated, individual solutions.

8.1 Contributions

The chapters of this dissertation address five research puzzles and offer the following contributions.

The data collection and systematic analysis of the OdA governing initial VET addressed an important empirical gap in Swiss VET research and served as a basis for the first part of the dissertation. Through the analysis of data on OdA in initial VET, new and more detailed insights into employees' (limited) role in Swiss VET could be gained. Together with the historical analysis of the role of unions in Switzerland and Germany, this contributed to the conceptualisation of the Swiss collective skill formation as a more liberal variant than the German system because Swiss intermediary associations are employer-dominated, unions are not involved in the monitoring of training firms and the system follows occupational rather than sectoral lines. Contrasting these similar cases of collective skill formation gave insights into necessary or sufficient elements for the governance of such a system. For example, the comparison of unions' roles shows that the distribution of tasks amongst the stakeholders can vary substantially. Moreover, although the chapter does not propose a causal analysis, the two types of collective skill formation produce different outcomes related to the part of productive tasks assigned to apprentices, time at school and costs of training. Consequently, liberalisation and the deregulation of labour markets can also lead to liberalisation *within* a collective skill formation system and not only to a move towards a more statist or segmentalist skill formation system. Trends in this direction are discussed by economic scholars such as Jansen and colleagues (2015) for the German case.

A second contribution based on the data collection on Swiss OdA is that the VET reform of 2002, while maintaining formal dimensions of collective skill formation, led to transformative change in the neo-corporatist associational system. This shift is documented in chapter 3. The findings show the temporal association of the spread of a new type of intermediary organisation with the VET reform. It conceptualises the new organisation type, the *VET organisation*, by distinguishing two dimensions: policy field and membership composition (Behrens & Helfen, 2009; Traxler, 1993). While typical neo-corporatist forms of intermediary associations unite similar stakeholders to represent them in various policy domains, the VET organisations have a broad domain of membership but lower levels of generalisability regarding their domain of interest representation. Therefore, I propose that intermediary associations might face a trade-

off between these two dimensions. In addition, comparing VET organisations with traditional organisation types in two dimensions of governability, i.e. associational activities and integration into the associational system (Traxler, 1993), reveals that the new type has lower levels of governability. Thus, the transformation of the associational landscape can be understood as a movement from a neo-corporatist towards a more pluralist system of interest representation, which is more fragmented. Nevertheless, the VET organisations have developed activities to foster employer cooperation and represent their interests vis-à-vis public authorities. Thereby, they fulfil their public policy tasks in the field of VET governance and contribute to the provision of collective goods, which contrasts with typical pluralist interest associations. This chapter documents a subnational transformation that does not undermine but support macro-level institutional outcomes of the VET system, most importantly the provision of many apprenticeship positions. Regarding extant neo-corporatist literature, these results appear in line with research that claims that a culture of consensus in which intermediary associations are systematically included into policymaking is the decisive element in current neo-corporatist interest intermediation (e.g. Baccaro, 2014) rather than a certain type of associational structures as claimed by earlier works (e.g. Schmitter & Streeck, 1999). However, if associational landscapes are fragmented and representation is not coordinated, the question arises who prevails in negotiations with public authorities.

Third, this dissertation adds to research on extending apprenticeships to new sectors of the economy (Culpepper, 2003; Fortwengel et al., 2019; Nicklich & Fortwengel, 2017). It addresses two dynamics: the state-led extension of apprenticeship to new sectors (Chapter 4) and the bottom-up creation of new apprenticeships (Chapter 7). Chapter 4 suggests the state took over a leading role as bricoleur (Campell, 2004; Carstensen, 2017) to establish collective governance in sectors newly included under the VET Act. In this transfer process, the associational institutional logic that characterises collectively governed VET was blended with the pre-reform state-oriented and school-based logic of training in the newly integrated sectors. To enable this transition, the state agency responsible for VET acted as a bricoleur that helped to combine these different institutional logics by creating a new type of intermediary associations. These organisations developed characteristics that allow to bring together heterogeneous stakeholders. Moreover, the new intermediaries fulfilled the public tasks typically delegated to neo-corporatist associations and thus helped to establish collective governance in new sectors of the economy. Therefore, to build up an apprenticeship in

a new sector, including the relevant stakeholders seems more important than sticking to traditional organisation types. Additionally, building on organisational institutionalist research on hybrid organisations, the chapter offers a novel conceptualisation and operationalisation for measuring hybridity at the organisational level. Applied to the data on Swiss OdA, the cross-sectional comparison of OdA in newly integrated sectors with OdA in traditional sectors shows that the former display higher levels of hybrid organisational characteristics than the latter. Previous literature on the integration of all non-academic vocational training under the 2002 VET Act argued that the parliament and the state agency sticked to the blueprint of training in the craft and industrial sectors (Esposito et al., 2019; Kiener, 2004). This chapter adds to this that the state agency left the previously involved stakeholders some leeway to remain active in VET governance through their involvement in the new intermediary associations. Overall, this process resulted in a reduction of institutional variety at the system level at the expense of hybridity and fragmentation at the level of the intermediary associations.

In contrast to this top-down dynamic, a bottom-up dynamic can also lead to the extension of apprenticeship to new sectors when employers develop the initiative to create a new occupation. The need to overcome the cooperation dilemma for the provision of the collective good of transferable occupational skills is a significant challenge in the process of creating new apprenticeships. Extant research often identifies successful initiatives merely at the regional level (Culpepper, 2003; Fortwengel et al. 2019; Jackson & Fortwengel, 2016). Even in established collective skill formation systems, the endeavour of creating apprenticeships may fail (Nicklich & Fortwengel, 2017). However, VET also appears as an area that may help to shore up employer associations in a changing environment (Brandl & Lehr, 2019). I applied the institutional work perspective to the first of eleven cases of creating a new apprenticeship from the bottom up from 2006 to 2016: the cableway mechanic apprenticeship. The case study revealed that institutional work is embedded in the national context, and within the strongly institutionalised Swiss VET system, the Cableways Switzerland employer association profited from the good reputation of apprenticeships, available templates for organising it, its well-developed internal network among firms and its resources. Nevertheless, long-lasting efforts were needed to institutionalise the new apprenticeship amongst firms in the cableway sector. These efforts relied on cognitive and normative institutional work vis-à-vis member firms, rather than coercive strategies. Normative work also aimed at convincing potential apprentices. In contrast to Nicklich and

Fortwengel's (2017) findings, the regulative foundations of the new apprenticeship enabled future diploma holders to access branch-specific career paths that could lead to higher wages and thus managed to attract apprentices. In this case, the state agency's role remained limited, and new financial regulations of the VET Act even put obstacles in the associations' way. Thus, the Swiss VET system still attracts 'new entrants' – business associations that had thus far not offered apprenticeships – and these new entrants help shoring up collective skill formation while simultaneously adding to their organisational development.

Fourth, the VET reform attempted upgrading and modernising small occupations by merging them into occupational fields that should provide broader skill sets and improve diploma holders' labour market mobility. Given this delegitimisation of small occupations, their marginal role in the overall system and the low number of concerned firms, the survival of small, traditional handicraft occupations was a surprising outcome. However, the institutional work approach claims that marginal actors also engage in institutional work. Two cases of small, traditional occupations' reform processes (chapters 5 and 6) contribute to this literature. Yet, the two cases have different outcomes: artisanal weavers maintained their apprenticeship and piano makers merged. In both cases, the reform triggered reflexive awareness that was used to evaluate the apprenticeships and seek alternatives. Yet, the institutional characteristics of Swiss VET make apprenticeships an attractive training option for traditional handicraft occupations. Their access to political networks did not influence the decision to merge or not; conversely, the network of the artisanal weavers appeared weaker, and piano makers strategically mobilised a political network to have better access to authorities, although they acquiesced to merge. Crucially, both occupations were required to mobilise substantial additional resources to implement the reform: for example, the voluntary work of highly committed association members or financial resources. The additional costs were even higher in the case of merging, as this involved developing innovative solutions and setting up a new training infrastructure. Moreover, a new umbrella association was put in charge of the merged apprenticeship programme. Firms are only indirectly members in this organisation through their membership in the piano maker association. The new umbrella association used the possibility, which was introduced with the 2002 VET reform, to declare a sectoral VET fund as generally binding.
Overall, the survival of traditional occupations seems to depend on their associational leaders' skill (Fligstein, 2001) to mobilise resources and support. Complying rather than

resisting the request to merge triggered professionalisation and the use of coercive measures – which is a transformative element in the context of Swiss VET that often relies on occupational associations' voluntary work. However, in the context of high legitimacy of employer-side intermediary associations, the VET reform did not provoke abrupt institutional change or the dismantling of small occupations. Yet, against conventional wisdom, these processes of institutional reproduction and piecemeal adaptation relied on a high capacity of intermediary associations to mobilise the collective action of their members and external political and financial support. As a result, institutional reproduction was not automatic without using collective mobilisation, as suggested by Jepperson (1991), but relied on effort and partial resistance to the demands of public authorities.

Last, Thelen and colleagues (Mahoney & Thelen, 2010; Streeck & Thelen, 2005) have highlighted the important role of the enactment of policies at the decentralised level in processes of institutional change. Mahoney and Thelen (2010) noted that formal rules are always ambiguous and shared understandings underpin their implementation. This dissertation contributes to research on gradual institutional change by focusing on the phase of policy implementation. In policy implementation, meso-level actors that bridge between affected stakeholders and public authorities have an impact on reform implementation on the ground, which, in turn, affects the effectiveness of the policy (Cloutier et al., 2016). Applying the institutional work perspective to three cases of small occupations' reform processes with varying outcomes enabled me to document the complexity of subnational processes of institutional change and maintenance and to produce detailed descriptions of the OdA's roles and strategies in these processes.

Far from being passive recipients of the policy reform, these OdA were able to shape the outcome of the occupational reform. I suggest that the type of process that structures policy enactment in the Swiss collective skill formation system is key to explain this outcome. The legal rules that delegated the definition of training content to employers allowed various types of OdA to claim skill needs and defend their occupations. Public authorities depend on the cooperation of employer associations and their member firms for the provision of apprenticeship positions and therefore needed to take these actors' interests into account. Thus, collective governance provided opportunities for institutional work because it functions through a process of cooperation and negotiation between public authorities and intermediary associations. This process also allowed to

establish shared understandings and contributed to constantly adjust policy measures to keep private actors on board. In turn, besides defining training regulations, the OdA interacted with their members on a regular basis. They built on the positive reputation of apprenticeship, and they pressured firms to train for the benefits of the whole sector through normative institutional work. In the context of the reform and creating a new occupation, OdA developed cultural-cognitive institutional work to embed novelties into routines, e.g. through educating responsible in-firm trainers. In the OdA's institutional work the occupational identity also played a key role – especially in securing the commitment of association members who contributed to associational work on a voluntary basis.

Based on these insights from three cases, I have illustrated that through the multitude of decentral policy enactment processes at the occupational level, in which public servants and associational leaders were involved, various institutional solutions for organising apprenticeships were established within the same national legal framework. This variety and individualisation reflect the strongly consensus-oriented practices of consultation and negotiation in policy implementation in Swiss VET. Through these processes, employer-side intermediary associations remain strongly involved and committed to apprenticeships so that they can foster decentralised employer cooperation. However, this commitment comes at the cost of a limited ability of the state to reach certain policy aims, such as reducing the number of occupations.

8.2 Limitations and Avenues for Further Research

This dissertation focused on the Swiss collective skill formation system. Although it built on insights from comparative research on collective skill formation, one limitation is the focus on a single country. Especially, the employer-side intermediary associations enjoy a particularly strong role in the governance of Swiss VET, for example concerning the definition of training content (see section 1.4.). Therefore, assessing change in these intermediary associations is certainly important for observing institutional adaptations in the Swiss VET system. However, employer associations in other dual apprenticeship systems may not enjoy the same privileges as the Swiss OdA. Therefore, further research in other collective skill formation systems is needed to carefully assess how far the propositions developed in this dissertation travel. Nevertheless, previous research on employer associations' adaptation to changing circumstances hints towards the importance of exploring the structures and activities of intermediaries, especially

employer-side associations, to gain insights into subnational processes of institutional change. My work shows that this is not only a relevant approach in the more often studied area of collective wage bargaining (e.g. Behrens, 2011) but also in the VET policy area.

The study's time frame regarding the evolution of the new organisation type is still relatively short. At the time of the data collection, some new organisations were still being founded. Extant research on organisational forms and hybridisation has conceptualised hybrid organisations as suffering from internal tensions associated with handling different institutional logics (Battilana & Dorado, 2010). Moreover, a new organisation type may be confronted with external competition of traditional association types, which are incumbents and still the most legitimate actor types in the governance of collective VET. It remains to be seen if the new organisation type diffuses further and becomes more important given its prevalence in numerically important apprenticeships, or if hybrid organisations collapse or struggle to uphold employer cooperation, for example, because training firms are indirect members in these hybrid organisations. Moreover, the data collection for this study was based on written sources that reflect formal structures. Therefore, further research using other methodologies, such as organisational ethnography or surveys, could provide relevant insights into how the various organisation types handle tensions internally and shed light on potential differences between formal structures and actual activities.

Furthermore, although some data on training firms was integrated into the OdA database, due to limitations of data availability, it was not possible to assess these organisations' associability, that is, the degree to which an association manages to organise firms in its sector (Brandl & Lehr, 2019; Traxler, 1993). Further research could thus collect data on association membership and training behaviour. Moreover, the database offers the potential to connect the characteristics of the associations to quantitative work on occupations, such as cost-benefit studies (Dionisius et al., 2008; Gehret, Aepli, Kuhn, & Schweri, 2019) and research on the occupational characteristics, their labour market outcomes or access to tertiary-level education (Grønning et al., 2019; Sander & Kriesi, in press).

The concept of institutional work includes a broad array of purposive actions that affect institutions. Its use thus far has a mainly descriptive value that allows documenting

actors' work to maintain, create or disrupt institutions. Hence, the literature has claimed that cases in the same organisational field should be compared (Nicklich & Fortwengel, 2017) and that national-level institutional characteristics and the distribution of power and resources should be included in the analysis of institutional work (Hotho & Sakha-Helmhout, 2016; Hwang & Colyvas, 2011). This dissertation aims to address these research desiderata by proposing a comparative case study within a field and by focusing on actors that have access to relatively scarce resources. Moreover, it includes the institutional characteristics of the Swiss VET context by building on insights from the comparative literature on collective skill formation. However, at the time of the case selection, systematic data on Swiss OdA's characteristics was still lacking, and the case studies relied on a small number of cases; thus, they can only give a limited insight into potential variation of institutional work and conditions under which different types of work may succeed or fail. The in-depth case studies on the processes of policy enactment at the decentralised level illustrated that regulative, cultural-cognitive and normative institutional work played major roles in all cases. Yet, the design of the comparative case study is apt to reconstruct processes but not to assess if any of the three institutional pillars (Scott, 2014) or economic self-interests prevail for fostering employer cooperation. Rather, in the context in which the institution in question enjoys broad support, institutional work at the occupational level could build on all these pillars.

Nevertheless, several propositions can be derived from the case studies. These propositions could be tested through further case studies or large-N analysis, especially as the new database on Swiss OdA now offers the possibility to select cases based on OdA's organisational characteristics. For example, further research could explore the proposition that less effort is needed for the institutional reproduction of middle-sized occupational groups, as their legitimacy was not questioned by the reform. In addition, they better fit the system of cantonal VET schooling, so that fewer additional resources should be needed for financing training infrastructures. Moreover, these middle-sized occupations and their associations still build on relatively small networks amongst firms, which facilitates the diffusion of training practices and normative institutional work to encourage firms' training contributions. In contrast, larger occupational fields should supply substantial resources for the associations, which may make voluntary work of members less necessary and allow the use of paid staff for VET governance tasks. However, in these fields, binding firms may be more difficult so that these associations may also be inclined to use coercive strategies, such as generally binding VET funds.

A further proposition is that the use of coercive strategies, such as the introduction of a compulsory VET fund, is associated with the new type of intermediary associations with more distance from firms and a need to finance professionalisation. As honorary work based on the identification of individuals with their occupation and their commitment to the associations has been shown to be an important driver for associational institutional work, the dynamics of professionalisation may have repercussions on the system by crowding out voluntary work. This potentially also weakens the links between training firms and associations, which could hamper normative associational work. The case studies also pointed towards the potential relevance of access to political networks, which could be tested in future research, for example, using network analysis. The establishment of internal and external networks may also be necessary for fostering employer cooperation in newly emerging sectors and network analysis could contribute to assess the establishment of apprenticeships in such contexts.

Finally, notwithstanding the favourable conditions for employers in the Swiss VET system, only a small number of apprenticeships were created from the bottom up by employers in the last decade (SERI, 2016), which has limited the potential of this mechanism for extending the VET system to new sectors. In contrast, for the creation of large, new occupational groups (e.g. those in healthcare), the state took over an important and active role for a successful extension.

8.3 Final Remarks and Outlook

Institutional change and adaptation are complex processes. Assessing the state of the institutions of collective skill formation is challenging; an analysis of institutional change or maintenance needs to define a time frame and the relevant institutional dimensions (Campbell, 2004). The time frame selected in this dissertation covers roughly the last two decades, which followed a crisis of the system in the 1990s and its last reform (except for Chapter 2). Regarding the institutional dimensions, my work aimed to make visible normative and cultural-cognitive underpinnings of Swiss VET, rather than focusing on the regulative or economic aspects alone.

Undoubtedly, the institutions of collective skill formation consist of a complex bundle of policies. The 2002 VET reform constitutes one element amongst others in a larger process of adapting the education system to a changing socio-economic context.

Although my work does not cover this broader process (e.g. Maurer & Gonon, 2012), I want to stress that access for apprentices to higher education is today taken for granted and this appears as an important element for encouraging young people to opt for an apprenticeship pathway in my case studies. A further interesting aspect, which I could not address in-depth is that the state agency responsible for VET engages in normative institutional work to valorise the apprenticeship pathway through large-scale public campaigns (e.g. Gonon, 2016).

This dissertation, however, documented the characteristics and activities of Swiss OdA in the collective skill formation system in processes of institutional change and maintenance beyond their political role. On the one hand, the Swiss systems' flexibility and the state agency's bricolage regarding intermediary associations' forms helped to extend the system to new sectors by bringing together various stakeholder groups for fulfilling governance tasks. Importantly, in this case of expanding apprenticeship to new sectors and in the case of creating an apprenticeship from the bottom-up, the new occupations appear to belong to occupations that cannot be easily automated because they perform mainly non-routine manual or interactive tasks. On the other hand, although the state agency's role in occupational revision processes was undeniably strengthened, even small OdA have still managed to negotiate solutions adapted to their needs to a certain extent. The institutional work of these small OdA to foster employer cooperation builds on all institutional pillars.

Illustrating the importance of building intermediaries in new sectors as well as normative and cultural-cognitive underpinnings of a well-established collective skill formation system, may provide valuable insights for policymakers aiming to foster apprenticeships in the EU and elsewhere. Besides collective skill formation, my approach to focus on subnational developments and core intermediaries of employers may be useful for analysing other collectively governed policy areas in coordinated market economies. It might also be applicable to other areas in which public tasks are delegated to private actors, which is a broader phenomenon for example in education where private actors have gained more power through such institutional arrangements (Busemeyer & Thelen, 2020).

The preceding chapters documented the spread of a new form of intermediary association, occupational mergers and professionalisation. These developments show

increasing fragmentation within the associational landscape and the hybridisation of institutional logics at the organisational level, which may have the potential to transform the Swiss VET system in the long run. However, to date, these subnational shifts appear to have contributed to the stabilisation of key observable outcomes of the institutional arrangement, such as the share of youth in apprenticeship training. This contrasts with other modes of gradual institutional change that affect macro-level institutional outcomes negatively (Behrens, 2011; Thelen, 2014). Therefore, I follow Fortwengel and colleagues (2019, p. 18) who suggest that processes of 'institutional renewal' be added to the inventory of concepts describing varieties of institutional change. In the case of Swiss VET, I refer to the concept of *institutional maintenance*. In contrast to terms such as institutional reproduction or self-preserving institutional change, which connote self-sustaining mechanisms, the concept of institutional maintenance can be used to refer to situations in which institutions need to be actively sustained and require collective mobilisation while their core dimensions and outcomes persist.

Challenges due to liberalisation, technological change and deindustrialisation remain relevant for collective skill formation and coordinated capitalism more broadly. Currently, the threat of an economic downturn due to the COVID-19 pandemic should also alert policymakers responsible for dual VET. To prevent institutional exhaustion of collective skill formation, once again, they face the challenge of finding smart policy measures to shore up the apprenticeship market without crowding out employers' provision of the collective good of transferable skills.

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