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Shaping institutional change in skill formation: the role of background ideas in growth strategies

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ABSTRACT

States are taking on an increasingly prominent role in shaping policy across advanced capitalist democracies. This paper conducts a comparative study of state intervention in skill formation between 2014 and 2022 and explores why state intervention was deployed for opposite goals: it increased deregulation, underlining skill formation's subordinate role in the French educational system while it strengthened collective governance and the social inclusion potential of the German system. Using a mixed-methods approach that combines process tracing and discourse network analysis of public media debates, this study argues that the non-functionalist background ideas of the actors employing skill formation in growth strategies inform this process. In Germany, beliefs about the complementarity between skill formation and economic growth tie coalitions of state actors and employers that promote institutional reproduction of skill formation even by unusual means, such as state intervention. In contrast, in France, where the skill formation system is perceived as a social policy tool, a coalition of business and state actors aims at increasing the economic potential of the system and reforming its governance according to market principles. This paper calls for more attention to the role of the ideas in influencing trajectories of institutional change.

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KEYWORDS State; Vocational education and training; Ideas; Political economy; Liberalization; Growth strategy

'If we want everything to remain as it is, everything must change.'

Giuseppe Tomasi di Lampedusa, 'Il Gattopardo' (1958)

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Introduction

In recent decades, advanced capitalist democracies have adapted their skill formation systems to keep pace with rapidly evolving skill demands. As part of broader growth strategies, defined as ‘(relatively coherent) series of decisions and reforms to boost growth and stimulate job creation’ (Hassel & Palier, 2021, p. 13), the governance of skill formation has undergone institutional change. This paper defines the governance of skill formation or Vocational Education and Training (VET), used interchangeably, as the regulation of firm-based training within certified educational curricula, equivalent to the provision of apprenticeships (Busemeyer & Trampusch, 2012). However, the direction of institutional change in skill formation governance remains contested. Some scholars have noted a widespread shift towards the liberalization of skill formation governance, driven primarily by employers, marked by the politically legitimated removal of market constraints and an emphasis on greater flexibility (Armingeon & Weisstanner, 2023; Thelen, 2014). However, recent contributions highlight an increased state intervention in skill formation aimed at shoring up coordination between employers, countering liberalization (Busemeyer et al., 2022; Carstensen et al., 2022; Durazzi & Geyer, 2020; Ibsen & Thelen, 2024; Martin & Thelen, 2007).

This article investigates institutional change in skill formation governance and tracks developments in two important continental political economies: France and Germany.¹ A shared institutional trajectory characterizes both countries’ skill formation systems until the 2010s, namely a state-enabled dualization of skill formation, maintaining employer cooperation in the provision of training for an industrial core, on the backdrop of a secondary labor market less reliant on certified skills (Palier & Thelen, 2010; Thelen & Busemeyer, 2012). In Germany, core firms competed for top apprentices and provided firm-specific training thanks to pressure from work councils to retain apprentices after training, while smaller firms exited the system, limiting opportunities for lower-qualified apprentices (Thelen & Busemeyer, 2012). In France, large firms leveraged strong tertiary VET to meet their skill needs and smaller firms struggled to offer appealing upper-secondary VET, which remained low in prestige and reinforced social inequalities (Chevalier, 2021). However, the ‘age of dualization’ (Emmenegger et al., 2012) seems to have come to an end. In Germany, the state has started enshrining the commitment of employers of all sizes to VET through public and inclusive ‘orchestration’ of training provision, increasing training spots (Busemeyer et al., 2022). In contrast, in France, the state has been deregulating training and enabling firms to provide company-specific skills, reducing the coverage of training arrangements and fostering flexibility (Bagorski, 2019; Levy, 2023). This paper, therefore, asks: Why does state intervention in skill formation shore up coordination in Germany but leads to deregulation in France?

I rely on ‘parallel demonstrations of theory,’ juxtaposing two different historical cases to show the validity of my argument across them (Skocpol & Somers, 1980). I argue that different background ideas sustain growth strategies and, therefore, influence trajectories of institutional change. Background ideas, understood as taken-for-granted assumptions, are ‘almost depoliticized’ and gain the authority to ‘structur[e] thought at the expense of other ideas’ (Carstensen & Schmidt, 2016, p. 329). Background ideas influence how actors articulate their interests by constraining ‘the range of programs that decision-making elites are likely to perceive as acceptable and legitimate both to their constituents and themselves’ (Campbell, 2004, p. 96; Martin, 2023). Therefore, background ideas provide internal ‘consistency and coherence’ to growth strategies (Hassel & Palier, 2021, p. 23) and shape trajectories of institutional change.

In the case of skill formation, ideas about the role of skill formation in achieving economic efficiency sustain growth strategies. When actors’ background ideas connect skill formation to economic growth, growth strategies focus on maintaining skill formation governance unchanged, even through unconventional means. Conversely, when skill formation is seen as a social policy, growth strategies focus on institutional change insofar as it aims to realign skill formation with economic objectives. Significantly, these background ideas stem from non-functionalist tropes about skill formation. In fact, while Germany’s skill formation system has always had the reputation of functioning better than France’s (Estevez-Abe et al., 2001; Maurice et al., 1986), recent studies show that education-employment linkages in France have been equally strong in the two countries, particularly in manufacturing industries (DiPrete et al., 2017).

I conduct a comparative case study of institutional change in the French and German skill formation systems from 2014 to 2020. I employ process tracing on primary and secondary sources and discourse network analysis of actors’ public statements about skill formation. I analyze the clustering of discourses and study the political coalitions driving the state interventions. I find that state-employer coalitions drive institutional change in the two countries. However, the coalitions share different background ideas about the complementarity between skill formation and economic growth. In Germany, deep historical roots and a strong tradition of employer, labor union, and state support for skill formation sustain the desire to maintain the system even through exceptional federal government intervention. In France, skepticism about the skill formation system’s contribution to economic growth stemming from its subordination to academic education and the complementarities between the economy and higher education results in the promotion of market-oriented reforms.

The paper is structured as follows: Section 1 reviews the literature on the state’s role in skill formation. Section 2 outlines the theoretical argument

about the role of background ideas and the mechanism through which they influence institutional change. Section 3 details the methodology, and Section 4 showcases the analysis, including the coalitions advocating for institutional change in skill formation and their background ideas. Section 5 addresses and refutes several established counterarguments, among which the role of functionalism. Finally, the conclusion summarizes the findings, discusses limitations, and suggests avenues for future research.

The state as an agent of coordination or liberalization

This section reviews the literature on institutional change in skill formation with special attention to the state's role. Among the most prominent scholars in this debate is Kathleen Thelen, who famously argued that the term liberalization 'may be too encompassing to be useful' (2014, p.11) and provided a seminal categorization of two orthogonal sides of institutional change within liberalization. On the one hand, liberalization may manifest through undermined coordination between employers. On the other hand, liberalization may involve a decreased encompassingness of institutional arrangements (see Figure 1). In skill formation, institutional change may manifest as, first, changes in who controls access to high-quality training between the state and the private sector, challenging employer coordination (Thelen, 2014). Decreased employer coordination usually involves a retreat of the state from direct sponsorship of training – *deregulatory liberalization* (Thelen, 2014), as was the case for the Swedish and US states which endorsed privatization of education and skill formation (Busemeyer & Thelen, 2020; Thelen, 2014). Changes in the availability of quality training for young

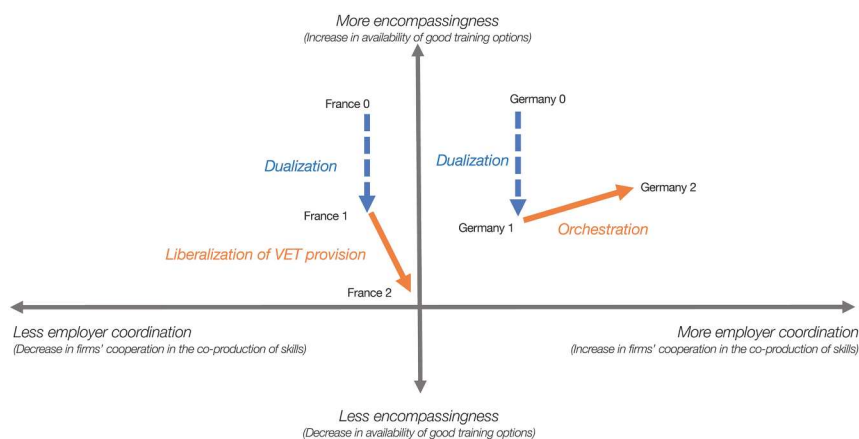


Figure 1. Trajectories of change in French and German VET.

Note: The dotted lines are trajectories of institutional change until 2014, and the orange lines are the trajectories since 2014. The framework dimensions are adapted from Thelen (2014).

people may challenge the encompassingness of skill formation (Thelen, 2014). Decreasing encompassingness involves state accommodation to employers, who maintain coordination in an industrial core at the expense of social inclusion – a trajectory known as *dualization* (Emmenegger et al., 2012). For instance, the French and German states supported a divide where only large firms continued offering training to fewer individuals. In contrast, smaller firms faced challenges attracting trainees and eventually withdrew from the system. This change made the most attractive training opportunities increasingly inaccessible to youth from low socio-economic backgrounds (Chevalier, 2021; Thelen, 2014).

Recent contributions highlight increased state-sponsored institutional change that counters liberalization (Busemeyer et al., 2022; Ibsen & Thelen, 2024). When the state has a strong independent capacity to provide training, it may create a publicly funded training system alongside traditional skill formation, preserving the system's inclusiveness (Ibsen & Thelen, 2024). However, this approach risks weakening collective employer commitment to training provision (Bonoli & Emmenegger, 2021). Even if the state has a lower capacity to train, it may still intervene to facilitate cooperation (cf. Eckelt, 2023). Busemeyer et al. (2022) show that the German state exemplifies this case. Since 2014, the state has intervened in skill formation to preserve employer coordination and increase encompassingness. It established the *Alliance for Initial and Further Education* (Allianz, 2014) and 'orchestrated' the public commitment of stakeholders to delivering an adequate offer of training places, increasing the degree of employer coordination of the system. This strategy, called 'orchestration,' involves deploying ideational and institutional resources through soft law interventions and results in increased employer coordination and encompassingness, as illustrated in Figure 1 (Busemeyer et al., 2022).

However, skill formation scholarship tends to overlook that the state needs not to be either a bulwark against liberalization or its 'passive underwriter' (Busemeyer et al., 2022, p. 235) because, as argued by Howell (2019), 'neoliberalism is not about limiting state intervention, but rather about using state power in new ways to institutionalize a market order' (p.468). Since markets always require political construction (Vogel, 2007), in the neoliberal era, states have access to unique capacities of institution building linked to 'legitimation and generalizing and embedding of institutions' that are not available to private actors, who are often 'timid, concerned with short-term interests and reluctant to abandon existing institutions' (Howell, 2019, p. 467). Arguing for the inexorability of neoliberalism, Howell (2019) sees dualization as only an intermediary step within a broader liberalization process.

The state can also actively dismantle employer cooperation and reduce the encompassingness of skill formation (Howell, 2019; Levy, 2006). For example, state intervention in the French skill formation system follows this

trajectory of change (see [Figure 1](#)). The French state has been intervening to deregulate skill formation with a series of reforms culminating in the 2018 *Loi Avenir Professionnel* (French Ministry of Labour, 2018). On the face of it, this law aims to centralize VET financing and regulation through the newly-established state agency *France Competences*, which counters a long-standing decentralization trend in skill formation since the 1980s (Cole & Pasquier, 2020). However, centralization becomes a tool to liberalize skill formation because it involves reducing the role of the regional actors overseeing VET financing. With the reform, firms offering training can request state financing (channeled via the apprenticeship tax) without any regional oversight and open apprenticeship centers to train for their specific skill needs without any need to cooperate (Duberland, 2020). Although *France Competences* contains social partner representation, firms are unconstrained in privileging the training of company-specific skills, which damages employer coordination (Ruello, 2018b). The state has also offered subsidies to training firms through the One Youth One Solution program (French Ministry of Labour, 2021), which further incentivizes the provision of firm-specific skills and decreases encompassingness. Firms may access state financing to train for their specific skill needs, and to do so quickly, they have started recruiting higher education students, excluding the unskilled youth who should have benefitted most from the programs (French Court of Auditors, 2022). As such, the intervention of the French state reduces any opportunity for employer coordination and reduces the social inclusivity of the system.

In sum, state intervention in skill formation may pursue opposite goals, either shoring up collective governance and increasing training encompassingness in Germany or empowering firms to train for their specific needs, reducing the encompassingness of training arrangements, as in France. Therefore, I ask the following research question: Why does state intervention in skill formation shore up coordination in Germany but lead to deregulation in France?

Background ideas shape actors' interest construction within growth strategies

I propose a novel non-functionalist explanation for why state intervention pursues distinct goals across countries, emphasizing the role of background ideas in shaping actors' interest construction by framing the possible alternatives within institutional change.

Coalitions of producer interests and state actors develop growth strategies that balance economic accumulation and social policy provision in the pursuit of growth (Martin, 2021, p. 230). Skill formation, unlike other policy areas (e.g., financial rules, monetary policy), remains under national jurisdiction, making it a policy that is central to growth strategies (Chevalier, 2021;

Hassel & Palier, 2021). In general, changes in skill formation may involve one (or both) of its functions, either as an economic lever to supply skills to domestic firms (Durazzi, 2023) or as a social policy to enhance labor market integration and social mobility (Carstensen & Emmenegger, 2023). Therefore, there is considerable variation in the governance of skill formation and its contribution to economic efficiency or to the integration of youth in labor markets.

Ideas sustain growth strategies (Hall, 2021), providing coherence and consistency, especially by framing diagnoses of economic challenges and proposed solutions (Hassel & Palier, 2021, p. 23). While ideas can be of different kinds, among the most powerful (in the sense of *power in ideas*, see Carstensen & Schmidt, 2016) are background ideas (Campbell, 2004), which are ‘almost depoliticized’ and enjoy ‘the authority [to] structur[e] thought at the expense of other ideas’ (Carstensen & Schmidt, 2016, p. 329; see the account of cognitive lock in Blyth, 2001). Taken-for-granted ideas solidify group identities (Berman, 1998) and reinforce institutional settings, acting like ‘a subterranean river that underlies the political struggles and institutional impacts that shape specific policy outcomes’ (Martin, 2023, p. 222).

A key mechanism through which background ideas solidify growth strategies is constraining the options that decision-making elites perceive as viable and legitimate, shaping the construction of actors’ interests (cf. *public sentiments*, Campbell, 2004, p. 96). As such, background ideas guide the construction of their interests, influencing actors’ perception of the possible range of institutional change. In skill formation, background ideas revolve around balancing economic efficiency and social inclusion. Societies hold deep and established beliefs about how skill formation should balance efficiency and inclusion (Martin, 2023). While economic efficiency and social inclusion can promote each other through skill formation (Carstensen & Ibsen, 2021), these goals are often portrayed as a tradeoff. I argue that if background ideas of skill formation revolve around the complementarity between skill formation and economic growth, the interests of the actors crafting a growth strategy promote the reproduction of the governance of skill formation at all costs. However, suppose skill formation’s complementarity with economic growth is problematic, and actors perceive skill formation to favor social inclusion *at the expense* of economic growth. In that case, the growth strategy incorporates institutional change in its reform plans and resorts to market principles to assert the dominance of economic growth over social inclusion.

Importantly, these background ideas need not be functionalist. Scholarship has shown that, particularly under conditions of uncertainty, ideas create ‘imaginaries’ and not rational expectations, nevertheless organizing action, and providing an ‘instruction sheet’ for institutions (Beckert & Bronk, 2018; Blyth, 2003). These ideas mediate how policymakers and social

groups express their preferences to realize functional goals but do not need to be functional themselves, as is the case for skill formation (see Section 4). This argument is complementary to institutional and interest-based explanations (Martin, 2023) because, on the one hand, institutions mediate the framing of growth strategies since ‘the specific national growth and welfare regimes [*that*] structure the decisions taken and the strategies adopted in a specific country’ (Hassel & Palier, 2021, p. 23) and, on the other hand, material power influences the coalition-building behind growth strategies by affecting actors’ presence in a coalition.

Method: process tracing and discourse network analysis

I conduct process tracing to investigate the causal process through which ideas influence policy (Bennett & Checkel, 2015). I rely on evidence collected through a mixed-methods empirical strategy that combines qualitative document analysis with discourse network analysis.

I study political actors’ views on skill formation through, first, deductive yet flexible content analysis (Schreier, 2012) of data collected from newspaper articles² (see below), primary documents such as legislative texts or speeches, and secondary documents such as policy briefs and academic literature. Second, I build on an original dataset of public discourse data and filter the articles about skill formation between 2014, when reforms started, and 2022, the most recent year at the time of data collection. Out of the articles searched through keywords at the intersection of labor markets and education (see Appendix), I retain the articles focused on skill formation and its main stakeholders, namely business actors, unions, and state actors.

The public debate is here understood as an arena used by elite actors to increase a topic’s likelihood of being discussed in legislative institutions, engender policy learning, and influence public opinion (Schaub, 2021), effectively playing a leading role in agenda-setting (Thesen et al., 2024). While not all discussions of skill formation occur in the public debate (Schmidt, 2008), the media may still report on the political struggles happening behind the scenes. To ensure that the content is not biased, I select two ‘quality press’ general-interest newspapers known for their political moderation per country – one leaning more to the center-left and one more to the center-right, more details in Appendix (Barranco & Wisler, 1999) and exclude editorial articles and opinion pieces from the sample. I focus on national newspapers, which offer regular publications, providing a dependable source for systematic, comparative analysis over time (Koopmans & Statham, 1999).

The units of analysis are claims – instances when an actor presents a single argument (Koopmans & Statham, 1999). With a coder team, we manually annotate claims through the Discourse Network Analyzer software. The analysis proceeds as follows. The data is exported from the DNA Software and

normalized to account for the fact that certain actors are likely to appear more central in discourse just because they are officially in charge of dealing with the problem (standardization for average activity, see Leifeld, 2013). I then derive one-mode networks, where nodes represent organizational actors, namely aggregations of individuals representing the same organization, and edges represent relationships of agreement on the same concept between nodes. I combine the connections accumulated over the timeframe using the ‘subtraction’ aggregation method, where disagreement is subtracted from agreement. The resulting networks are, therefore, artificial representations of interactions that have developed over time. Finally, I apply an optimization algorithm to the networks to uncover coalitional alignments (Leifeld, 2013; Muller, 2015). I choose the Louvain clustering algorithm, which reveals actor clusters by optimizing the modularity of the debate (Blondel et al., 2008). The modularity of a network measures the strength of the division of the network into clusters (or communities) that have fewer connections between nodes in different clusters and more within nodes of the same cluster. Therefore, by integrating the insights of the cluster analysis with the qualitative analysis of the positions of the actors’ organizations, I uncover the ideas motivating coalitions pursuing reforms.

Analysis

This section presents the analysis of the institutional change trajectories in France and Germany, showing the role of background ideas about skill formation in driving them.

Skill formation as social policy: the case of French VET

In France, background ideas about skill formation consider it as a social policy rather than a tool to achieve economic growth. Apprenticeships were formally established in 1919 as part of a state-led growth strategy to provide large firms with skilled workers during the post-war expansion. However, over time, skill formation has become fundamentally split because the French education system cultivates an elite while simultaneously sorting students into different professional trajectories, and VET serves as a path for those with lower academic aptitude (Buechtemann & Verdier, 1998; Crouch et al., 1999; d’Iribarne & Jolivet, 2016; Verdier, 2001). In higher education, apprenticeships are seen as a mode of learning rather than an education track in its own right. They are used to upskill school-based education with work-based components (Troger, 2019). At the lower end of the skill distribution, apprenticeships are used to boost employment (Chevalier, 2021). For example, in light of rising youth unemployment, mainly since the Global Financial Crisis, many reform efforts, such as the *Plan 500.000*

Formations Supplémentaires (2016) and the *Emplois d'Avenir* (2012), have aimed to expand apprenticeship opportunities (Bonoli et al., 2025; Jagannathan, 2021; OECD, 2017), linking VET to social inclusion. However, these apprenticeships have been evaluated as ineffective social policies because, ultimately, they have increased atypical employment (Chevalier, 2021).

In contrast, economic efficiency has traditionally been coupled with reforms in higher education aimed at aligning curricula with the needs of large firms, not least by incorporating vocational elements. Since the 1980s, the state has reorganized labor relations systems and reshaped training programs to reflect the demands of large firms (Hancké, 2002, p. 66). Through state-financed social plans, higher education has increasingly been 'professionalized' to better match industry and large corporations' skills requirements (Hancké, 2002; Verdier, 2006). Short vocationally-oriented programs in higher education have been incentivized at polytechnics (*Instituts Universitaires de Technologie*), which are affiliated with universities but operate with greater autonomy, and at the Higher Education Sections (*Sections de Techniciens Supérieur*), which are specialized college departments introduced in high schools (Crouch et al., 1999; Verdier, 2006). These programs may include some apprenticeship components to increase the practical relevance of the skills learned but remain academically oriented. As a result of these reforms, by the early 1990s, the old industrial workforce had been almost entirely replaced by workers with 'much higher education credentials' (Hancké, 2002, p. 67), including higher technical diplomas as well as general education credentials (p.169).

Despite many reforms aimed at increasing the economic efficiency of skill formation, the latter struggles to complement economic goals (Troger, 2019). The regionalization of training has been chief among the policies aimed at integrating VET and firms' skill needs. Regionalization started in the 1980s and has involved assigning regions the responsibility of managing apprenticeships in the hope that training provision would be more attuned to the local firms' needs (Brennetot, 2018). Regional councils became 'market regulators' of apprenticeship centers, distributing funds collected through the apprenticeship tax trying to reduce inequalities between economic sectors (Déjeans, n.d.; Ruello, 2018a). While some regions succeeded in facilitating information exchange among firms and fostering collective problem-solving (Culpepper, 2003), the regional skill formation governance ultimately never satisfied firms' needs. The businesses paying the apprenticeship tax have consistently sought greater control over apprenticeship funds, advocating for apprenticeship centers to operate according to a profit-driven logic rather than the political considerations they attribute to regions. Therefore, businesses kept being dissatisfied with the governance and offering few apprenticeships (Troger, 2019).

The limited complementarity between skill formation and economic growth configures skill formation as an (ineffective) social policy. This view informs the coalition that pushed for skill formation reform in 2014-2022.

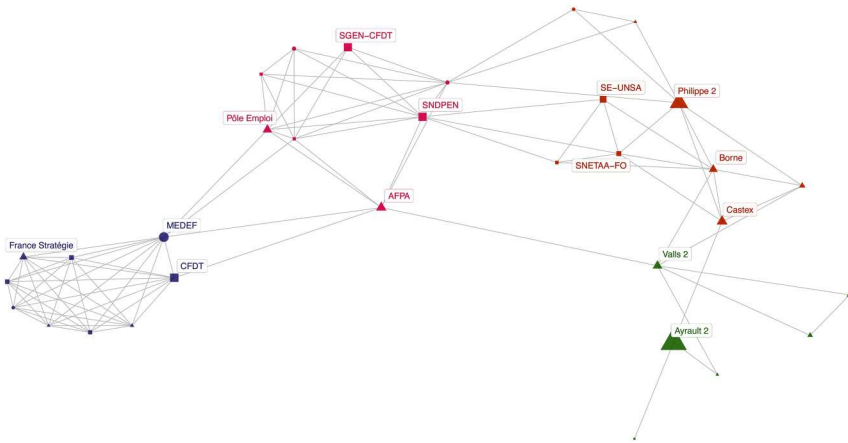


Figure 2. French debate on VET. Clustered with the Louvain algorithm. Node type: ○ Business Association, △ State, ■ Union.

Note: Threshold weights >0.5 and degree centrality >5 . Node size is proportional to frequency. Colors indicate different clusters. Acronyms: AFPA, National Agency for Adult Vocational Training; CFDT, French Democratic Confederation of Labour; MEDEF, Movement of the Enterprises of France; SE-UNSA, Teachers' Union; SNDPEN, National Syndicate of Managerial Staff of National Education; SNETAA-FO, National Syndicate of Technical Teaching Autonomous Action. Colors indicate different clusters.

Shaped by persistent challenges in aligning VET with labor market needs, a coalition of employers and state actors sought to address these structural inefficiencies within a growth strategy. As shown in Figure 2, the central business organization, Movement of the Enterprises of France (MEDEF), formed a coalition with *France Stratégie* (community 3), a key strategic government agency in skill formation. MEDEF has historically supported reforms that grant firms greater autonomy in training provision, especially over regions. MEDEF President Pierre Gattaz underscored the importance of reform, calling for the courage to conduct an in-depth reform of the system and arguing that 'we [employers] want to have complete control over apprenticeship schemes and training centers [calling for] funding to no longer go through the regions' (Mazuir & de Comarmond, 2017).

The stance of their coalition partner, *France Stratégie* (community 3), shared the preferences of French employers. As a government policy analysis body, *France Stratégie* advocated for transforming skill formation governance ahead of the 2017 presidential election, calling for a 'stronger and more active involvement of companies within the education system' (France Stratégie, 2017). At the time, it outlined two pathways to align skill formation with firms' skill needs. The first option sought to align the French system more closely to the German model, integrating firms more directly into the national education system and in the definition of training content (a pathway that had already been tried, see Hancké, 2002). The second option resembled the

British approach, emphasizing general education while leaving the responsibility for job-specific training to firms. While Germany is, by many accounts, a model of apprenticeship governance due to its strong employer engagement and low youth unemployment, the UK's quasi-market VET is widely seen as ineffective in employer engagement and economic productivity (Benassi et al., 2022).

The coalition managed to agree on a way forward and integrated skill formation into its growth strategy when Minister of Labor Muriel Pénicaud advanced an economic reform of skill formation, emphasizing the importance of easy access to economically relevant qualifications in a knowledge economy (Pénicaud, 2018). The government echoed employers' calls for apprenticeship reform, framing apprenticeships as a pathway to employment [3410, 3433] and a solution to firms' skill shortages [3456]. Although located in a different coalition from *France Stratégie* (community 2), the government espoused these views, proposing a law guaranteeing universal access to labor-market-relevant skills. It framed the reform as a 'Copernican revolution' for apprenticeships, arguing that the system would now revolve around the needs of young people rather than forcing them to navigate it [3393]. Central to this vision was 'the liberalization of the training offer,' presented as a prerequisite for reform, citing Germany as an example (Pénicaud, 2018). In reality, the reform diverged significantly from Germany's collective governance because it granted firms complete control over the opening of training centers and distributed apprenticeship funding directly through a new central agency, *France Compétences*, that bypassed regional authorities. This choice made negotiating difficult with regions, but the state ultimately silenced opposition (Ruello, 2018b). This shift introduced a market logic in which apprenticeship centers received state funding based on apprentice recruitment. The same approach persisted with the *One Youth, One Solution* program after the COVID-19 pandemic, where the government subsidized employers to increase apprenticeship opportunities and facilitate youth labor market participation (Levy, 2023). While these reforms reduced opportunities for employer cooperation, they also limited the system's coverage (French Court of Auditors, 2022).

In sum, ideas about skill formation's role as a social policy and its limited alignment with economic objectives inform the French trajectory of institutional change. The growth strategy developed by state and business actors aimed to reform skill formation to align VET provision with the skill needs of firms. This framing led to a market-oriented approach, which was not (or could not be) opposed and resulted in the state-led liberalization of apprenticeship provision.

Skill formation as economic policy: the case of Germany

Background ideas about skill formation link it to economic growth in Germany. Skill formation is deeply historically embedded in German society

and its economic model. Apprenticeships emerged at the end of the 1800s after an independent artisanal sector was formally and legally endowed with the rights to regulate training and certify skills (Thelen, 2004). The state supported delegating para-public authorities to the organized handicraft sector (*Handwerk*) to counterweight a strong and radical labor movement (ibid). The machine industry, which also desired to organize its training and certify the skills it desperately needed in the early industrial period, could not escape the logic of the pre-existing training and created a system for industrial training parallel to the handicraft one (ibid). VET originated from within the German manufacturing sector and has, ever since, been seen as complementary to it.

The complementarity between VET and the German economic model is well-documented. Streeck (1991) highlighted that the model of German production rested on ‘a training regime creating an oversupply of more broadly trained workers – redundancy of capacities at industrial levels, a quasi-reserve army of workers’ (p.54). The objective of the German VET system is to deliver a set of specific skills for the needs of the industry and, therefore, to sustain the ‘high-skill equilibrium’ based on employer coordination (Estevez-Abe et al., 2001; Finegold, 1999). German VET provides employers with well-trained mid-skilled workers to produce diversified quality products and is widely regarded as an example of efficiency (Powell & Solga, 2011; Streeck, 1997). Recent scholarship on growth regimes (Chevalier, 2021) also underscores the complementarity between the German export-led growth strategy that relies on the manufacturing sector and the VET system that supplies employers with the necessary skills.

The ‘symbiotic’ relationship between VET and the German industry (Durazzi, 2023) has contributed to the continued popularity of VET, particularly in its dual form. As enrolment numbers show, dual VET has remained popular since the 1970s (Emmenegger et al., 2023), while school-based VET has become less favored. In contrast, although higher education has remained somewhat underdeveloped (Ansell, 2008), enrolment increases in higher education have challenged the capacity of the VET system to deliver economically (Emmenegger et al., 2023) and led to hybridization of VET with higher education to align skill provision with the needs of the advanced manufacturing sector (Durazzi, 2023). Nevertheless, the stability of the economic function of VET is enshrined in its consensual and hard-to-reform governance, which has largely remained unchanged (Graf, 2018). The only detectable change is *layering*, which involves adding some elements to an unchanged core, such as upgraded training that mixes VET elements with aspects from higher education (Graf, 2018, p. 186) or exported training pathways abroad (Ivardi & Wanklin, 2025).

Notably, VET’s economic role does not exclude a social policy function. VET has played a crucial social policy role, keeping youth unemployment

relatively low and wage equality high (Chevalier, 2021; Emmenegger & Haslberger, 2025). The union camp has nevertheless criticized the inclusivity of German VET, particularly concerning salaries and work conditions (DGB, 2019). However, it is mainly the complementarity between the apprenticeship system and economic needs that serves as the background for the coalition that pushed for apprenticeship reform in 2014–2022. Shaped by the desire to maintain VET aligned with labor market needs, a coalition of employers and state actors sought to capture these complementarities within a growth strategy.

As shown in Figure 3, a coalition of state actors and employers grouped around ideas about the governance of skill formation. Employers represented by chambers of commerce expressed the main concern of skills shortages. For instance, the German Association of Chambers of Commerce and Industry (DIHK) raised the alarm about the shortage of skilled workers [499]. At the same time, the Association of Craft Guilds (*Kreishandwerkerschaft*) highlighted the shortages of trainees and applicants for mid-skilled trades, i.e., carpenters [855]. The German Confederation of Skilled Crafts (ZDH) pointed to the lack of entrepreneurial spirit among the few skilled workers and expressed concern about future skill shortages [967]. Despite this, the Chamber of Commerce and Industry (IHK) emphasized maintaining the skill formation system by ensuring enough apprenticeships for young people, even during challenging times like the COVID-19 pandemic [1901, 1923]. Notably, the IHK advocated incentivizing small firms to (re-)enter the VET system and cooperate in training provision. Representing small and medium-sized enterprises, the IHK pushes to restore employer coordination across the economy. This proposal was framed as a key solution to the skills shortage and linked governance stability to VET's economic function [59, 1865].

Decision-makers within the federal government picked up the preference of German business associations for maintaining the collective governance of VET (Merkel 4 in community 2). Initially reluctant to intervene in a domain traditionally governed by business (Martin & Thelen, 2007), the state slowly began to play a more active role in ensuring that apprenticeships were favorable to companies. One of its key initiatives was the establishment of the Alliance for Initial and Further Education in 2014. Initially intended as a temporary institution, the Alliance gradually became a permanent stakeholder discussion forum. It built upon a series of training pacts signed between 2004 and 2007 by employers' representatives and the federal government, though notably not by trade unions. These pacts included soft commitments to create additional training places and implement new measures to ease the transition from school to dual training (Busemeyer et al., 2022). While the reform increased opportunities for employer cooperation by increasing apprenticeship spots, it also increased the system's coverage (ibid).

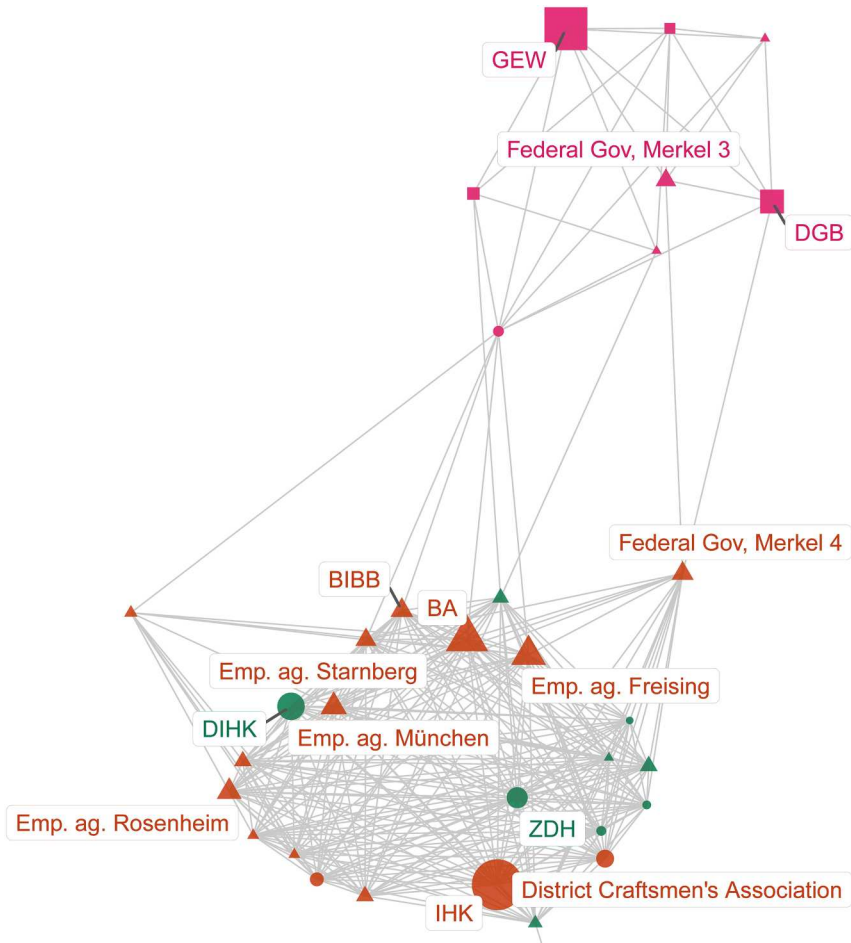


Figure 3. German debate on VET. Clustered with the Louvain algorithm. Node type: ○ Business Association, △ State, ■ Union.

Note: Threshold weights >0.5 and degree centrality >5 . Node size is proportional to frequency. Colors indicate different clusters. Acronyms: BA, Federal Employment Agency; BIBB, Federal Institute for Vocational Education and Training; DGB, German Trade Union Confederation; DIHK, German Association of Chambers of Commerce and Industry; Emp. Ag., Employment Agency; GEW, Trade Union of Education and Science; IAB, Institute for Employment Research; IHK, Chamber of Commerce and Industry; Kreishandwerkerschaft, Association of Craft Guilds; VLB, Association of Teachers at Vocational Schools in Bavaria; ZDH, German Confederation of Skilled Crafts.

Neither the pacts nor the Alliance changed the traditional corporatist decision-making structure of the German training system. Instead, they reflected a shared commitment to improving efficiency through unconventional means, specifically state intervention. Scholars have thus evaluated the establishment of the Alliance as ‘orchestration,’ a governance strategy distinct from dualization because it is more inclusive and consists of state

active involvement of various stakeholders to balance power asymmetries and provide economically relevant skills (Busemeyer et al., 2022).

In sum, ideas about skill formation's complementarity with the economy inform the German debate. These have shaped a growth strategy developed by state and business actors, aiming to maintain skill formation governance to provide skills to firms. This led to a reform aimed at preserving governance even through the unusual means of state intervention, which resulted in a counter-liberalizing trajectory of intuitional change.

Alternative explanations

This section deals with five prominent alternative explanations to the argument about the role of background ideas in influencing the interests of the coalitions devising growth strategies.

Functionalism

A first alternative explanation would be that the German skill formation 'works better' than the French one and that political actors who know this, act rationally to preserve a system that works. Functionalist arguments derive from the view that French institutions have a suboptimal performance because they do not conform to one of the two ideal-typical models of capitalism (Hall & Soskice, 2001), contrary to Germany, which is as close as possible to the model of a Coordinated Market Economy (Hall & Gingerich, 2009; Hancké et al., 2007). The argument goes that efficient skill formation systems ensure smooth transitions from school to work, as seen in Germany, because employers are deeply involved in providing industry-specific skills, which aligns well with the needs of the advanced industry (Culpepper & Finegold, 2001; Finegold & Soskice, 1988). In contrast, in France, skill formation lacks direct ties to employment, school-to-work transitions take longer, and workers' credentials send unclear signals (Culpepper, 2001; Estevez-Abe et al., 2001). These arguments build upon Maurice et al. (1986)'s seminal work, which distinguished *organizational spaces*, where workers are hired based on their level of general education, i.e., France, and *qualificational spaces*, where jobs are closely matched to qualifications, i.e., Germany.

However, recent studies, particularly by DiPrete et al. (2017), have questioned this established view. DiPrete et al. (2017) criticize Maurice et al. (1986) because they conflate two dimensions of variation in skill formation systems: the distribution of students across different tracks and the association between school titles and work. In addition, DiPrete et al. (2017) argue that vocational and general education programs can only be

distinguished through information on the skills taught in each program, that functionalist arguments do not empirically measure the success of education programs, and that often, these studies sample only parts of the workforce, e.g., male workers in metal and petrochemical manufacturing firms in Maurice et al. (1986). DiPrete et al. (2017) offer an improved methodology to examine the link between education programs and specific occupations (see also Bol et al., 2019; Elbers et al., 2020). With this methodology, DiPrete et al. (2017) find that the differences in the link between skill formation and occupational placement between the French and German systems are pretty slight (p. 1907). Although, on average, nowadays Germany has a stronger education-occupation linkage than France, this distinction has not always existed, and ‘in 1970 [around the time when functionalist scholars collected data, see Maurice et al., 1986; Hall and Sockice 2001], the French educational system was [more] successful than the German system in providing a close link toward the labor market – it just did so for a smaller share of the labor force’ (Elbers et al., 2020, p. 1132). Additionally, in crucial fields for the ‘German skills machine’ (Culpepper and Finegold, 2001), such as manufacturing and engineering, the linkage between education and work was equally strong in France and Germany. France’s linkage was even more substantial in other fields, such as transportation and personal services (DiPrete et al., 2017, p. 1900). Therefore, background ideas about functionalism have not emerged due to objective differences between the two systems.

State capacity

Second, the different capacities of the two states to form coalitions with employers may explain different outcomes of state intervention. According to Martin and Thelens established theory (2007), if Germany had a higher state capacity than France, this could explain why it was able to maintain cooperation in governance, forging coalitions with employers and trade unions. In contrast, if France had a lower state capacity than Germany, conflicts between employers’ organizations would hinder the creation of coalitions to sustain coordination (ibid). The indicators for state capacity employed by Martin and Thelen (2007) are related to bureaucratic capacity and, therefore, are public spending and public employment. Applying the same indicators to France and Germany shows that the bureaucratic capacity of the French state is higher, as public spending is higher – it has exceeded 50% of GDP every year since 1989 (Levy, 2023, p. 8) and French public employment has been around 20% of total employment since the 2000s, while it has been just above 10% in Germany (Eurostat, 2020). Therefore, based on this theory, the French state would have a higher capacity to cajole private interests in a coalition to support

coordination, particularly small/medium-sized employers who would see an advantage in shoring up coordination (Culpepper, 2003). This is against my empirical evidence, which finds that the state builds a coalition supporting coordination in the country with the lowest bureaucratic state capacity. This suggests that in the case under consideration, another type of state capacity matters more than bureaucratic state capacity, namely 'strategic state capacity,' defined as the 'ability of the state to mobilize or demobilize interest groups in the pursuit of official policy goals' (Meckling & Nahm, 2022, p. 495)

Party politics

Third, differences in party politics may explain different orientations of the states. In particular, liberal agendas fuel liberalization, and conservative programs should resist change – however, the developments under consideration span partisan politics. While Macron's liberal agenda (Lichfield, 2019) aligned with the eventual reforms, it was Hollande's socialist government that laid their foundations. A tough policy of control of local public finances under Hollande functioned as the basis for the reform of skill formation (Cole & Pasquier, 2020). Moreover, in Germany, the developments leading to the Alliance unfolded over a decade and through multiple coalition agreements, making it difficult to attribute the changes solely to the influence of Merkel's Conservative Party. While partisan politics fed into these developments, the trajectories of institutional change transcend short-term party politics.

Business power

Fourth, accounts of business power would ascribe trajectories of institutional change to divisions among employers – particularly between large and smaller firms. While large employers favor general, transferable skills that provide workforce flexibility, medium and small firms resist these changes, preferring specific skills that enhance worker retention (Culpepper, 2007; Thelen & Busemeyer, 2012). However, in France and Germany, large firms dominated over smaller ones due to the common dualization trajectory (Palier & Thelen, 2010). Research has shown that the growing dominance of large employers in Germany, coupled with weakening union influence, led to the end of monolithic skill profiles and a rise in shorter (two-year) apprenticeships (Thelen & Busemeyer, 2012; Trampusch, 2010). Similarly, large firms in France have been dominating the training market since the 1980s, managing, in some cases, to change training curricula in their favor (Hancké, 2002). Therefore, business power cannot explain the differing trajectories of change under consideration.

Role of unions

Finally, recent arguments trace state intervention's outcomes to unions' different capacities to engage with employers (Carstensen et al., 2022; Durazzi & Geyer, 2020). In the cases under consideration, unions are involved to different extents in reforms. In France, unions are often radical and internally divided, and they do not frequently participate in reform due to the political tradition known as 'skinny politics,' indicating that they are not routinely involved in government initiatives (Hancké, 2002; Levy, 2023). In contrast, German unions remain embedded in the corporatist tradition despite declining membership. However, the unions' voices were not decisive in both reforms. In France, unions either underwrote the new growth strategy or were marginal in its negotiation. The French Democratic Confederation of Labour (CFDT) aligned with MEDEF (community 3), showing a willingness to consider the economic constraints under which French companies were operating and making concessions (Centre Inffo, 2018; Levy, 2023, p. 149). Other unions focused on different aspects of the package deal including skill formation reform, such as the reform of collective bargaining (France24, 2017), or raised issues unrelated to governance, in the case of teacher unions [3929]. In Germany, upon encouragement from the social democratic party, unions joined the Alliance as signatories. Still, they always focused more on working conditions for apprentices rather than on the governance structure itself. Unions like the German Trade Union Confederation (DGB) raised concerns about poor working conditions that deterred young people from pursuing apprenticeships. For instance, in 2018, the DGB highlighted, 'Almost 60 percent of trainees come to work sick, a third regularly work overtime, and employers build up pressure. Support from training staff is not always guaranteed [...] one in ten trainees frequently had to carry out tasks unrelated to their training' [824]. Similarly, the German Education Union (GEW) and the Association of Teachers at Vocational Schools in Bavaria (VLB) advocated for making the teaching profession more attractive to students enrolling in VET to counter the increasing number of teacher retirements [63][67]. Therefore, unions seem not to have had a decisive influence on either of the trajectories of change, although, admittedly, having the potential to have a different impact on skill formation governance.

Conclusion

This study explores the ideational factors driving the pursuit of liberalization or the shoring up of cooperation through state intervention in skill formation. Through process tracing of the institutional change trajectories in France and Germany, I show that state and employer coalitions devising growth strategies departed from a common trajectory of dualization. This is because

non-functional background ideas about the complementarity between skill formation and economic growth constrain the alternatives that actors perceive as possible and influence institutional change. In Germany, the coalition perceives skill formation as a tool to achieve economic growth, while in France, skill formation is perceived as a social policy at the expense of growth. This is due to the historical embeddedness of VET within the German export-oriented economy and, within the French system, to the heavy tradition of state intervention and the low prestige of VET. Therefore, in Germany, the coalition devising the growth strategy is constrained by the desire to uphold the efficient complementarity at all costs, even if this requires a policy as unusual as state intervention in the German skill formation system. In contrast, in France, the coalition shaping the growth strategy pursues market-oriented change with the hope of asserting the economic function of skill formation. Several counterarguments are weighted and refuted, starting with functionalist considerations, as recent evidence highlights that the school-to-work linkage of the German and French skill formation systems are more similar than commonly thought by VofC. Explanations connected to the roles of party politics, state capacity, unions, and business power also do not fully account for the outcomes of interest.

Substantively, this paper presents a novel argument about dualization (Emmenegger et al., 2012; Palier & Thelen, 2010; Marx & Starke, 2017). Political economy scholarship on liberalization has viewed dualization as a means to maintain coordination, although for a diminishing group of firms (Thelen, 2014; Thelen & Busemeyer, 2012). However, scholarship on industrial relations has been more skeptical, arguing that dualization is merely an intermediate step in a broader movement toward liberalization (Howell, 2019). In this paper, I argue that both perspectives can be correct and that the state is fundamental in producing one outcome or the other: the state may advocate for the reinforcement of coordination, but also be the carrier of neoliberalism.

Theoretically, this paper seeks to contribute to debates about how ideas matter in politics. A large body of scholarship has demonstrated that ideas are significant, particularly in times of crisis, when actors have greater freedom to utilize ideas creatively (Emmenegger, 2021; e.g., Blyth, 2001, Hall, 1989, Hay, 2001). In contrast, this paper contributes to the body of literature regarding the stabilizing role of ideas, even in the face of institutional change (Béland, 2009; Martin, 2023), and integrates this argument within the broader political-economic framework of growth regimes (Hassel & Palier, 2021). I have clarified one mechanism by which background ideas (those implicit, taken-for-granted assumptions that underlie policy debates) constrain the range of programs that decision-makers consider legitimate (Campbell, 2004). As such, background ideas play a role in how political actors construct their interests (cf. Martin, 2023), contributing to the perpetuation of institutional logics and thereby providing coherence and consistency that

stabilize growth strategies. This mechanism complements discussions on the power of ideas (Carstensen & Schmidt, 2016) by providing a concrete example of power *in* ideas, defined as the background ideational processes through which certain ideas gain authority at the expense of others. It is notable that I find the power of ideas is not dependent on their objective accuracy. In societies pressured to grow economically, the role of actors' beliefs about institutions' contributions to achieving economic growth is often not grounded in rational expectations, which are hard to formulate due to the uncertainty surrounding current socio-structural changes (cf. Martin, 2023; Beckert, 2013). Further research should examine how deeply held beliefs about an institution's economic function influence growth strategies in other collectively governed areas, such as wage bargaining and corporate governance.

Notes

1. It must be noted that skill formation has different connotations in France and Germany. In Germany, skill formation discussions primarily refer to initial vocational education and training (IVET) for youth, because continuing VET (CVET) for adults remains relatively underdeveloped (Thelen, 2014). In contrast, the French term *formation professionnelle*, which most readily translates as VET, usually refers to adult training, as IVET is part of the state education system (Crouch et al., 1999). However, French employers participate in both IVET and CVET through *alternance*, a work-based training model involving apprenticeships (service-public.fr, 2025). Therefore, this paper focuses on the role of employers in the provision of VET across both IVET and CVET.
2. ID numbers of the statements are indicated in square brackets.

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Data statement availability

The data supporting this study's findings is available upon reasonable request, but restrictions apply to the availability of these data, which were used under licence for the current study and so are not publicly available.

Notes on contributor

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