

Toward a modular understanding of school-to-work transitions: Comparing Italy and Austria

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journals.sagepub.com/home/cos**Ruggero Cefalo** 

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Abstract

Comparative analyses investigating school-to-work transitions (SWT) aim to explain how institutional characteristics shape national differences in the transition from education to employment. Researchers often rely on typologies and classifications to simplify the complex processes involved. While typologies serve as useful heuristic tools, they can also lead to oversimplification and neglect of the multilevel governance structures and territorial disparities. Our modular approach integrates various research strands to enhance understanding of the relational and spatial dynamic underlying the transition from education to the labor market. We use analytical dimensions from previous studies to structure a small-N comparison, accounting for a higher degree of complexity. Empirically, we explore the theoretical argument through the in-depth comparison of SWT systems in two diverse cases with contrasting outcomes: Italy and Austria. The analysis reveals significant hybrid traits in both countries that are often overlooked by SWT typologies. In addition, we gain insights into how multilevel institutional configurations interact with the socio-economic context contributing to diverging SWT outcomes.

Keywords

Multilevel governance, political economy, school-to-work transitions, skill formation, vocational education and training

Introduction

Since its comparative turn, the analysis of school-to-work transitions (SWT) seeks to explain how institutional characteristics shape national differences in the transition from education to employment in Europe (Raffe, 2014). Researchers compare countries along specific analytical dimensions and thereby identify systems of regimes with common institutional traits (Pastore, 2015; Raffe, 2008; Walther, 2017). Such typologies and classifications represent useful heuristic instruments to

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reduce complexity but can also lead to oversimplification. Case in point, life course and transition regimes focus on young people in transitions and on the characteristics of welfare and education systems, but they tend to overlook the structure of the demand of work and the skill content of jobs (Saar and Räs, 2017). Studies on vocational education and training (VET) and skill formation prioritize vocational tracks and their linkages with the labor market but produce limited understanding of other education and social policy provisions that contribute to structure SWT (Frommberger and Porcher, 2023; Lassnigg, 2020). Large comparisons based on structural similarities often overlook that national systems are unique configurations with multiple relational dynamics among internal sub-systems (Bosch, 2017). Therefore, they tend to underestimate the complexity of hybrid and mixed cases, as well as the subnational variation underlying multilevel governance settings (Scandurra et al., 2021).

Our contribution suggests that these critiques could be overcome by a relational and spatial approach to the study of SWT that fosters the dialogue among analytical perspectives. We argue that typologies should be considered as complementary modules (Scharpf, 1997) to structure small-N comparisons of national case studies characterized by complex multilevel settings. While extant research tends to rely on a parsimonious number of dimensions in order to propose classifications that can be applied to several cases; in this article, we consider several analytical dimensions from previous analyses to build a framework that accounts for a higher degree of within-case complexity. This endeavor goes beyond the mere juxtaposition of indicators, as its main value added lies in the relationship among dimensions that provide a more nuanced and spatially sensitive understanding of social phenomena.

Our theoretical argument is explored through an in-depth comparison of SWT systems in two diverse cases: Italy and Austria. They present marked contrasts in SWT outcomes that are usually interpreted as performances of different transition or skill formation regimes (Hadjivassiliou et al., 2018; Walther, 2017). The empirical analysis addresses the following questions: To what extent do SWT outcomes differ between and within Italy and Austria? What are the main country-specific combinations of factors that contribute to shape these differences? What role does the territorial dimension play in shaping SWT outcomes?

In order to answer these research questions, we integrate various complementary research strands to build our analytical framework and structure the within-case analysis and cross-case comparison. We discuss our findings in light of the expected classifications of Italy and Austria in SWT and skill formation comparisons, finding confirmation that large international comparisons overlook similarities between, as well as variation within the cases, that have a significant impact on SWT. At a closer look, the education systems of both Italy and Austria present multi-track VET systems with school-based training and apprenticeships that make their inclusion within regime classifications ambiguous. The relative weight of the elements considered, as well as the involvement of supporting institutions, private firms, and social partners denote stronger linkages with the labor market in Austria than in Italy. Furthermore, the coordinating role of the state plays out differently within the multilevel setting and in interaction with existing territorial disparities. In Italy, weak central coordination and institutional fragmentation exacerbate spatial disparities, while in Austria, the public actor plays a compensatory role of mismatches in a competitive system with low coordination among education subsectors.

Our contribution to the literature is manifold. From a theoretical standpoint, we highlight the relevance of relationality and spatiality for the understanding of social processes within complex multilevel settings. In this sense, a modular approach can take advantage of multiple sources of knowledge to account for case-specific mechanisms. From an empirical standpoint, we provide multi-method evidence that describes Italy and Austria as hybrid cases with a mix of similarities and differences that have significant consequences for SWT but have been largely overlooked by the comparative debate.

In the “Integrating typologies and beyond: toward a modular approach” section, we illustrate key analytical dimensions used in comparative SWT research, highlighting the limitations of the main approaches and especially the lack of attention devoted to the territorial dimension. In the “Methods and data” section, we describe our modular approach, justify the case selection, and present the data used for the comparison. In the “Regimes and outcomes of SWTs in Italy and Austria” section, we contrast a range of empirical indicators of educational and labor market outcomes for youth in Italy and Austria. In the “Institutions and transitions in Italy and Austria” section, we describe and compare the institutional characteristics of the two SWT systems, according to the analytical dimensions discussed in the “Integrating typologies and beyond: toward a modular approach” section. Section “Outlook: implications for youth opportunities and territorial disparities” concludes by reflecting on theoretical and policy implications.

Integrating typologies and beyond: toward a modular approach

Education, labor market, and SWT regimes

A range of dimensions regarding education and training systems and their linkages with the labor market have been used to investigate effects on inequalities (see Gross and Hadjar, 2024; Gross et al., 2022) and to characterize transition regimes (Raffe, 2008). Moving from the seminal work of Allmendinger (1989), sociologists compared education systems across two main analytical dimensions: (a) the stratification of educational opportunities and (b) the standardization of educational provision. (a) The *stratification of educational opportunities* “is the proportion of a cohort that attains the maximum number of school years provided by the education system, coupled with the degree of differentiation within given educational levels (tracking)” (Allmendinger, 1989, 233). Stratified systems are often characterized by *early tracking* practices (Schindler et al., 2023; Shavit and Müller, 1998), that is, sorting pupils into differentiated pathways for further education. In early tracking systems, like, for instance, in Germany or Austria, the first choice must be made right after the primary cycle and is strongly influenced by the family background. The (b) *standardization of educational provision* “is the degree to which the quality of education meets the same standards worldwide” (Schindler et al., 2023; Shavit and Müller, 1998), referring, for instance, to curricula and qualifications. A high level of standardization allows employers to rely on information given by educational and professional certificates. When a high level of standardization and stratification go together with differentiated occupational structures, a good match between educational qualifications and labor demand is to be expected, while a higher amount of mismatching is to be expected in unstandardized and un-stratified systems.

Scholars complemented these dimensions by looking at the structure of labor markets and at the strategies adopted by employers for filling occupational vacancies (Shavit and Müller, 1998). Drawing on theories on labor market segmentation (Marsden, 1999), they distinguished between: (a) *occupational labor markets*, where the access to jobs is highly regulated and where formal certificates and standardized qualification profiles play a major role and (b) *internal labor markets*, where access to jobs is strongly segmented according to companies’ strategies, that rely less on formal qualifications and more on in-house recruitment, professional experience of applicants and informal training. Other authors looked more closely at the institutional linkages between education and labor market (Müller, 2005), arguing that the relationship between educational paths and labor market traits can follow a dual logic, for example, Germany or Austria, so that education and work-related skills develop together, or a sequential logic, where education comes before work-related skills, for example, United Kingdom (Pastore et al., 2021). This leads to a strong research interest toward the vocational orientation of education systems, which depends on the characteristics of the vocational pathways as well as the extent to which specific occupational skills are

provided (Blommaert et al., 2020; Bol and Van de Werfhorst, 2016). Along this line, vocational training and apprenticeship are considered crucial policy tools, allowing researchers to zoom in on mechanisms (Ryan, 2001) and modes of intervention. Eichhorst et al. (2015) propose a useful typology to differentiate VET provision, built on two dimensions. The first dimension refers to the relative importance of institutional learning and workplace training, going from situations where VET is provided entirely by vocational schools to older union-dominated apprenticeship without formal and school-based learning. The second dimension distinguishes whether formal learning is provided in vocational schools (part of the education system) or in training centers (which often have close ties to industry). Combining these dimensions, they distinguish between (a) *school-based vocational training* and education (prevailing in Southern Europe); (b) *formal apprenticeship* schemes (prevailing, for instance, in countries like the United States and Australia); and (c) *dual vocational training* that combines class and work-based learning (prevailing in countries like Germany, Austria, and Switzerland). VET provision also influences labor market outcomes, as dual VET systems seem to facilitate timely entry into more stable and better-paid jobs (Busemeyer and Trampusch, 2012).

These perspectives share a focus on policy domains such as education, labor market, and vocational training, but they say less about the interaction among policies within wider institutional configurations. In the attempt to systematize similarities in national configurations of institutions shaping transitions, much comparative literature broadened their approach to identify SWT regimes where institutional traits are explicitly connected to patterns of transitions. An SWT regime denotes the set of institutions and rules that govern and supervise the passage from school to employment (Pastore et al., 2021; Smyth et al., 2001). This research strand emphasizes the complementary role of education, employment, and active labor market policies (ALMPs), as well as public employment services (PES) (Pastore, 2015; Walther, 2017), tracing connections with SWT outcomes (Hadjivassilou et al., 2018). In addition, scholars assume a certain coherence between transition regimes and principles behind wider welfare state regimes (Esping-Andersen, 1990). (a) Scandinavian countries with a *universalistic regime* guarantee protection, inclusive services, and education, including high investments in ALMPs and training directed at unemployed or youth with scarce working experiences. (b) In continental countries with an *employment-centered regime* the State actively supports vocational training and skills matching, in collaboration with private actors and social partners, through a capillary network of ALMPs and PES. (c) In Anglo-Saxon countries with a *liberal regime*, the labor market is fluid and flexible, with high opportunity of access but also risks of precarization, fragmentation, and privatization of relevant shares of ALMPs and PES. (d) In South-European countries with a *sub-protective regime* social protection is often underdeveloped and segmented. Public provision of ALMPs and PES is ineffective and scarcely funded, so youth depend extensively on family networks. Finally, (e) post-socialist countries display *mixed regimes*, owing to the hybrid combinations of trajectories in the transition to a market economy (see Buttler et al., 2023). This wide group includes significant internal differentiations; for instance, some Eastern countries place a high emphasis on training and extensive participation in education (e.g., Slovenia), while others show deep deficits in service provision and a strong dependency on family relations (e.g., Bulgaria).

The political economy of skill formation

Comparative research on SWT regimes adopts a wide perspective covering education systems, labor market regulations, and welfare regulations. However, due to the focus on young people in transition from education to work, these analyses often convey a supply-side view of the labor market which underplays the role of the demand of work and structure of the productive systems

(Saar and Rääs, 2017). From this point of view, a political economy perspective is useful to factor in the central role of firms, employers, and social partners, investigating how the interaction between labor demand and supply shapes the development of skills and the transitions from education to work. On the negative side, this research strand tends to overlook the complexity of educational systems and welfare policy provision, often limiting their explanations to the VET sector and to the rational decision-making of companies (Frommberger and Porcher, 2023). Within a political economy approach, Busemeyer and Trampusch (2012) developed an influential typology of *skills formation regimes*, drawing on Greinert's (2004) concept of learning cultures and on the varieties of capitalism approach (Hall and Soskice, 2001). Skill formation regimes result from the interplay between the degree of firm involvement and public commitment to the skills system (especially to vocational education at the upper secondary level). Skill systems may differ concerning specific activities, like VET provision, funding, and control, and regarding specific actors' roles like the state or social partners. Regimes also vary due to the relationship between VET and the general education system. Accordingly, the authors distinguish between four types of skill formation regimes in post-industrial countries. (a) *Collective regimes* (e.g., Austria, Germany, and Switzerland) in which the collaboration between firms, associations, and the state in providing and financing vocational skills has a long tradition. (b) *Liberal regimes* (e.g., the United States) in which vocational skills are mainly provided through on-the-job training. In these countries, public funding for VET is comparatively low to medium, and, generally, the level of public commitment is low. (c) *Statist regimes* (e.g., France and Sweden) in which the state is the provider of vocational skills education and training. These countries show high rates of VET participation as it is integrated into general schooling, which raises its social value. (d) *Segmentalist regimes* (e.g., Japan) in which large and competitive firms are deeply involved in the training of their employees, while the public commitment to VET is low.

The critical debate and the role of space

The classifications we discussed so far tend to share two assumptions: First, that institutions relate to one another according to various degrees of complementarity and producing specific socio-economic outcomes (Hall and Soskice, 2001); second, the need to reduce complexity by emphasizing common characteristics of groups of cases. Beyond the limitations of specific classifications, the scholarly debate also highlighted some shortcomings that are inherent to the use of typologies in comparative analysis on SWT.

According to Walther (2017) and Lassnigg (2020), typologies may overlook change and emphasize the internal coherence of types and features. Change over time is emphasized by Hadjivassiliou et al. (2018), who maintain that institutional configurations are in a state of flux, blurring the internal coherence of transition regimes, although path-dependency limits the scope of change (Bosch, 2017). Other authors state that the focus on limited structural features overlooks the complexity of SWT as an object of research that involves several sub-systems, actors, and institutions (Roberts, 2018). The coexistence and competition of sub-systems that can be referred to as different types is therefore paramount to grasping the complexity of existing cases as unique national configurations (Frommberger and Porcher, 2023). Along this line, both variable-oriented and case-based research singled out hybrid cases or outliers that are difficult to classify according to most used typologies (Lassnigg, 2020; Raffe, 2014). As a result, scholars have been calling for case studies of transition regimes in specific national (or local) contexts to enrich the debate.

A main point that speaks to the complexity of national cases is the territorial articulation of social policies and SWT. Analysis on SWTs and skill formation mainly engages with country comparison (Raffe, 2014), overlooking significant territorial heterogeneity below the country level.

Regional and local contexts can affect SWT by enabling (or hindering) specific opportunities for young people, due to the interactions between: (a) multilevel governance arrangements and service provision (Kazepov, 2010) and (b) persisting spatial disparities in a variety of domains, from employment to economic development, demographic and education-related conditions (Rodríguez-Pose, 2018; Scandurra et al., 2021). Point (a) refers to the transformative processes that impacted mature welfare states countries from the 1970s and ushered in the rescaling of policy responsibilities to jurisdictions above and below the national state (Kazepov, 2010). Within multilevel governance structures, paths of devolution and stricter coordination coexist in complex scenarios: As policies move through this multi-layered process, significant intra-country variation is produced in policy outputs and outcomes (Ciccia and Javornik, 2019), in both federal and unitary states (Bacher et al., 2017). The rescaling of policy responsibilities toward subnational scales of governance strongly affects service provision, such as training and ALMPs (Cefalo and Scandurra, 2023), because it is highly dependent on implementation procedures and contextual differentiation (Kazepov and Ranci, 2017). According to Kazepov (2010), multilevel governance structures of policy provision deal differently with territorial aspects affecting population needs. Point (b) maintains that the context within which policies are implemented contributes to structure opportunities, distribution of outcomes, and inequalities. Territorial disparities refer to the configuration of needs and (territorial) specificities with which regulatory jurisdictions and implementation processes must cope (Kazepov et al., 2022). In Europe, dynamics of agglomeration, skill-based technological change, and new patterns of migration and trade prompted a geography of jobs with pronounced inter-regional inequalities (Rodríguez-Pose et al., 2023). Regional contexts appear, to an extent, separate from the overall national performance, as elements of endogenous development, and can mediate the impact of policies (Cefalo and Scandurra, 2023; Keating, 2021). It is important to note that heterogeneity can be high also in the presence of national responsibilities in the governance of, for instance, training, as the enactment of skills agendas takes place within local socio-economic contexts. Crucially, this research emphasizes the interaction between policy provision and contextual socio-economic characteristics, as key to understanding within-country differentiation in policy outputs and outcomes. National welfare systems can be marked by the prominence of *active subsidiarity*—in the presence of significant autonomy of subnational jurisdictions (regions, cities, and so on) together with relevant (also financial) support and coordination from the central state—or *passive subsidiarity*—when the devolution of competences unfolds without central resources and coordination. We find this subsidiarity frame particularly fitting for our research, given the fact that national SWT systems often defer competences to subnational jurisdictions (e.g., VET and ALMPs) and that the crucial linkage between education and labor market is necessarily affected by local production systems (Garrizmann et al., 2021; Kazepov and Cefalo, 2022).

Taking stock of the debate reviewed so far, we argue that the combination of typological contributions from different research strands can be helpful in reducing oversimplification by orienting in-depth case studies. This relational and spatial perspective allows us to consider how institutions shaping SWT are organized through complex multilevel settings and contribute to heterogeneous outcomes between but also within countries. An encompassing visualization of our orienting analytical frame is presented in Figure 1 and Table 1¹.

Methods and data

In order to structure and enrich the comparison, our research is guided by a modular approach to its analytical framework that: (a) combines several analytical dimensions from the literature on SWTs and skill formation (see Table 1) and (b) adopts a spatial and context-sensitive perspective to account for critics on the limits of such classifications. The modular approach to policy research

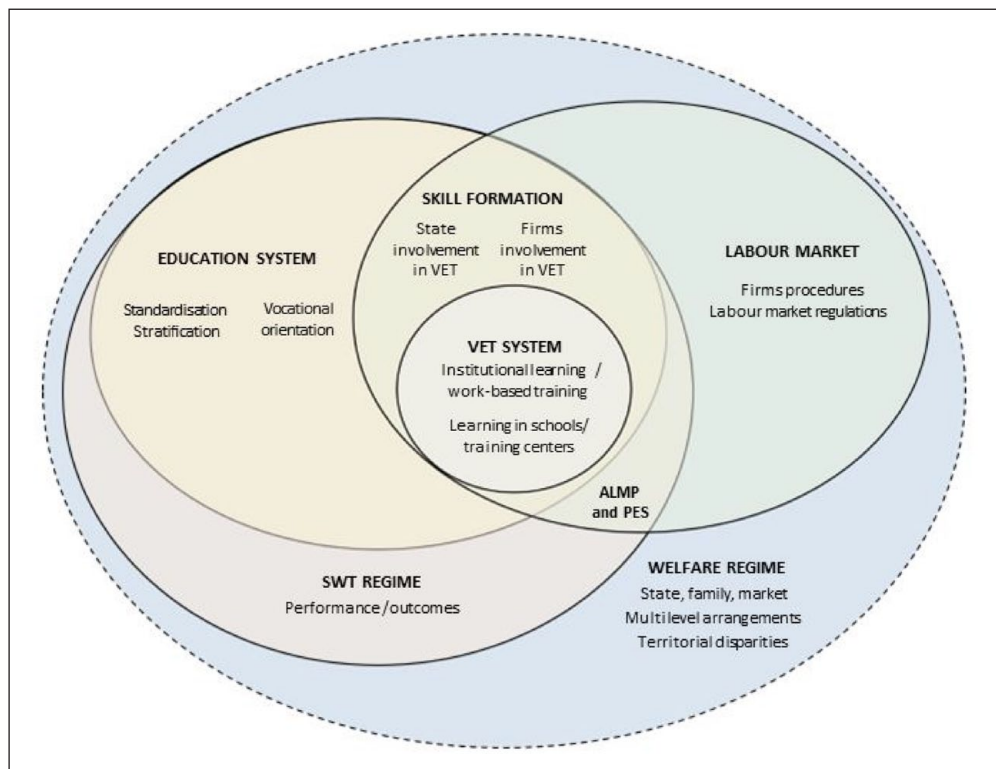


Figure 1. Typologies and main dimensions of school-to-work transitions.

Source: Our elaboration.

was developed by Scharpf (1997) to address complex research objects typically related to the study of policy provision within macro-social units, such as countries and SWT systems. According to the author, complex constellations of situational and institutional factors are better grasped by a multidimensional property space coming from a framework that combines multiple perspectives (modules). Explanations of outcomes, in this view, do not just add indicators but rather need to combine the specification of the institutional settings, of the actors' constellation, and of their mode of interaction. This approach is coherent with the aims of our case-based investigation, that is, accounting for complex relationality and spatial differentiation to allow for a more nuanced analysis of the combination of factors affecting SWT outcomes in Italy and Austria.

Driven by the logic of comparison, this article focuses on a small-N, case-oriented comparison (Mahoney, 2008). Case studies and small-N comparisons are useful for both theory-building and theory-testing, as they explore the impact of many relevant factors (Della Porta and Keating, 2008). The selection of Austria and Italy responds to a *diverse cases* design apt to explore the range of variation of conditions and outcomes (Seawright and Gerring, 2008): The two countries present strongly contrasting SWT patterns (see Table 2 and section "Regimes and outcomes of SWTs in Italy and Austria") that in the literature are linked to different regimes of SWT and skill formation. However, our approach brings in both relationality and spatiality in the case studies analysis, unveiling a more complex combination of factors at work that contribute to explaining the contrasting SWT outcomes.

Table 1. Typologies and main dimensions of school-to-work transitions.

Classification	Dimensions	Types, when indicated	Main references
SWT regimes	<ul style="list-style-type: none"> • SWT outcomes • Standardization of education • Stratification (tracking) of education • Linkages with labor market • Labor market regulations • Enterprises procedures • Welfare arrangements between state, family, market • ALMPs and employment services 	<ul style="list-style-type: none"> • High to low youth integration • High to low standardization • Comprehensive, selective • Tight coupling, loose coupling, intermediate • Sequential model, dual model • Occupational, internal labor markets • Scandinavian—universalistic, continental—employment centered, Anglo-Saxon—liberal, South European—sub-protective, Former socialist 	<p>Müller and Gangl, 2003; Wolbers, 2007</p> <p>Allmendinger, 1989</p> <p>Allmendinger, 1989; Pastore et al., 2021</p> <p>Marsden, 1999; Shavit and Müller, 1998</p> <p>Pastore, 2015; Raffe, 2008; Vogel, 2002; Walther, 2017</p>
VET and skill formation	<ul style="list-style-type: none"> • Vocational orientation • VET organization: institutional learning and workplace • VET organization: Institutional learning in secondary schools or training centers • Degree of firm involvement in VET • Public commitment to VET 	<ul style="list-style-type: none"> • High to low vocational orientation • Vocational and technical secondary schools, formal apprenticeship, dual system 	<p>Bol and Van de Werfhorst, 2016</p> <p>Eichhorst et al., 2015</p>
Spatial variation	<ul style="list-style-type: none"> • Multilevel governance • Spatial disparities 	<ul style="list-style-type: none"> • Collective regime, liberal regime, segmentalist regime, statist regime • Active subsidiarity, passive subsidiarity • Territorial divides 	<p>Busemeyer and Trampusch, 2012</p> <p>Kazepov, 2010</p> <p>Iammarino et al., 2019</p>

Source: Our elaboration.

Table 2. School-to-work transition regimes in Europe: indicators of SWT outcomes (employment, education, territorial variation) for selected countries 2008–2019 (or closest year available).

SWT and welfare regimes over time	Liberal		Universalistic		Employment-centered		Sub-protective		Post-socialist			
	United Kingdom		Denmark		Austria		Italy		Poland			
	2008	2019	2008	2019	2008	2019	2008	2019	2008	2019		
Employment outcomes												
1) Employment rate (15–64)	71.5	75.2	76.3	75.0	70.8	73.6	58.6	59.0	59.2	68.2	65.7	69.3
2) Youth employment rate (15–24)	52.0	50.3	62.5	55.0	54.4	51.6	24.2	18.5	27.3	31.7	37.2	35.8
3) Employment 20–34 ISCED 0–2	60.4	65.6	72.9	57.7	62.2	58.4	61.8	49.8	53.5	51.6	63.8	56.7
4) Employment 20–34 ISCED 3–4	80.3	82.6	90.2	83.6	87.8	88.1	76.0	65.4	75.3	78.9	80.2	79.0
5) Employment 20–34 ISCED 5–8	89.1	88.8	92.0	87.7	91.4	90.2	77.9	73.3	87.0	89.2	87.8	86.2
6) Unemployment rate (15–64)	5.7	3.8	3.7	5.1	4.2	4.6	6.8	10.2	7.2	3.3	7.1	6.4
7) Youth unemployment rate (15–24)	15.0	11.2	9.5	10.1	8.5	8.5	21.2	29.2	17.3	9.9	15.8	14.4
8) Long-term unemployment (15–29)	1.9	1.2	0.3	0.7	1.0	1.1	6.2	10.9	3.0	1.1	3.1	3.0
Educational outcomes												
9) NEETs (15–24)	12.1	10.5	4.3	7.7	7.4	7.1	16.6	18.1	9.0	8.1	10.9	10.1
10) Early school leavers (18–24)	16.9	10.9	12.8	9.9	10.2	7.8	19.6	13.5	5.0	5.2	14.7	10.3
11) Low-qualified ISCED 0–2 (25–34)	18.3	13.9	21.2	18.0	12.5	10.6	31.0	23.8	7.2	6.0	20.1	15.3
12) Upper secondary education ISCED 3–4 (25–34)	43.1	36.7	42.6	36.1	68.3	47.8	49.1	48.4	60.7	50.6	49.0	43.9
Territorial outcomes												
13) Dispersion of 1) by NUTS 2 regions	5.3	3.6	1.5	1.7	4.2	4.9	15.9	18.2	4.4	5.2	9.9	11.7
14) Dispersion of 6) by NUTS 2 regions	29.6	24.1	6.1	5.6	39.3	55.6	55.4	52.3	17.4	35.2	46.4	76.8
15) Dispersion of 9) by NUTS 2 regions	21.0	23.3	9.6	10.3	18.7	22.8	36.7	38.1	15.5	29.3	44.8	53.2
16) Dispersion of 10) by NUTS 2 regions	21.3	27.9	18.7	9.5	21.1	35.4	25.2	31.8	30.1	42.0	58.3	48.3

Source: Eurostat online database: <https://ec.europa.eu/eurostat/data/database>.

In identifying the mechanisms underlying complex social realities, such as SWT, we link various partial theories in a modular construct (Héretier, 2008; Scharpf, 1997) to orient the analysis and produce a composite explanation of our outcomes of interest. Accordingly, the case studies describe the multilevel settings of the welfare state, education system, and labor market, complemented by a political economy perspective that looks at the productive system and the coordination among public, private actors, and social partners. The main SWT policies considered are VET provision, apprenticeship, ALMPs, and PES, implemented in different subnational contexts. Finally, a time-sensitive lens emphasizes the main developments in the last two decades. Our goal is not to identify experimental or statistical causation but rather to unveil mechanisms and multiple relationships affecting the outcome of interest within the scope of comparative policy analysis (Mahoney, 2008; Peters, 2022). This implies revealing differences and similarities in the observed conditions and outcomes, as well as “relating relations” (Walther, 2022) to elicit insights related to the impact of structural and institutional features (Desjardins and Ioannidou, 2020).

In the next sections, we juxtapose the two cases by means of descriptive analysis of secondary data on educational, labor market, and territorial outcomes of SWT. Furthermore, we carry out a case-based institutional analysis to identify relations between SWT outcomes, meaningful institutional traits, actors, and their interaction (Raffe, 2008; Walther, 2022). Then, we deploy logical and structural forms of comparison based on the analytical framework in Figure 1 and Table 1 (Ragin, 2014) and discuss our results in light of the expected classifications of Italy and Austria in SWT and skill formation comparisons. The institutional analysis is based on previous scientific literature, gray literature, and official documents retrieved from national sources (such as ministries and research institutes) and complemented by 24 experts and stakeholders’ interviews at the national and subnational level (including PES, training providers, social partners, national and regional public officers; see the list in the Appendix)². It should be noted that the main purpose of our analysis is to illustrate empirically the frame developed in the previous sections; therefore, we do not specifically cover the impact of COVID-19 and report secondary data only until 2019 (Table 2), as this would go beyond the scope of the article.

Regimes and outcomes of SWTs in Italy and Austria

Referring to the transition and skill formation regimes presented in the “Integrating typologies and beyond: toward a modular approach” section, we can describe Austria as a corporatist welfare state characterized by an employment-centered and collective skill formation regime. As main traits of countries from these regimes, we expect selective and standardized education systems, a prominence of dual VET (apprenticeship), and high levels of employers’ involvement in the provision of training (Busemeyer and Trampusch, 2012; Hadjivassilou et al., 2018), associated with fast and stable transitions to employment for youth. Italy is a Mediterranean welfare state characterized by a sub-protective and statist regime (Benassi et al., 2022; Pastore, 2015). From the literature, we would therefore expect the Italian case to display comprehensive education systems, low relevance and take-up of publicly funded VET (school-based), weak linkages between the education system and the labor market, and publicly funded VET provision, associated with difficult and lengthy transitions.

Aggregated indicators of SWT in terms of (un)employment outcomes for youth tend to provide a picture that is coherent with SWT regimes’ classifications. Table 2 compares cross-sectional indicators on SWT outcomes to juxtapose Italy and Austria and situate them in the European landscape, using the EU average and selected countries from other welfare regimes as additional comparative references for the exercise. The Italian labor market offers few opportunities to young people, who tend to finish their studies and search for a job only afterward navigating through long

and difficult transitions from education to work (Sergi et al., 2018). This is confirmed by high NEET and unemployment rates. By contrast, in Austria, youth employment rates are above the EU average, and unemployment and NEET (Not in Employment, Education or Training) rates are comparatively low, although observers note a rise in the number of youth unemployed after 2011. If we include a larger set of indicators, including educational and territorial outcomes, the picture gets more complex. Both countries show a marked increase in enrolment and participation in education in the last decade, with a consequent decrease in dropouts. In both cases, half of the population 25–34 has upper secondary education as higher attainment, but in Austria, the upper secondary sector showed marked signs of contraction vis-à-vis higher education after 2008. Italy presents steep dispersion in employment and unemployment rates, as a sign of multiple territorial differentiations, first between the North and the South of the country. To put it clearly, Northern regions usually show values that come close to EU averages, while Southern regions rank among the worst across all European regions (Scandurra et al., 2021). Also in Austria, however, we can notice significant dispersion in unemployment regional rates. Interestingly, Vienna has the highest youth unemployment and NEET rates among Austrian regions. The case studies presented in the next section delve deeper into the SWT systems underlying these patterns and unveil nuanced configurations that reflect only partially the classification of Italy and Austria into regime types.

Institutions and transitions in Italy and Austria

The institutional configuration of SWT in Austria

The Austrian welfare state is characterized by an encompassing social insurance system and social partners play a strong role in the administration of important branches of social protection (Österle and Heitzmann, 2019). In terms of multilevel governance, the intervention of the Austrian state is organized through its “weak” federalist structure (Erk, 2004). The federal government has the legislative and administrative responsibility for education and training. A similar federal division of responsibilities is observed for the provision of active policies, that are defined and implemented mostly at the central level and through the national network of PES. The nine federal provinces (*Länder*) oversee organizing the delivery of many social policies, but they highly depend on financial means granted by the central state, which operates through financial compensation (*Finanzausgleich*) to limit differences in service provision. Within this welfare architecture, Austria displays above-average values (Table A1) in expenditure in education and ALMPs, especially on training measures.

The Austrian education system is stratified and standardized: at the age of 10 years, pupils are sorted in parallel channels (*early tracking*) that set toward a vocational or pre-academic trajectory. Recent de-tracking reforms aimed at increasing the inclusiveness of the system at early ages, but the results have been mixed (Flecker et al., 2020). Regulations, examinations, and procedures are uniform, and the qualifications attained are recognized throughout the country. Austria presents a tight coupling between educational qualifications and employment outcomes. The education system, and especially vocational training tracks, produces qualifications as signals on sector specialization and individual skills and firms tend to rely on such signals for their hiring procedures. The Austrian labor market shows comparatively high levels of employment, partially due to the persisting weight of the industrial sector, and moderate productivity in comparative terms. At the same time, signs of an ongoing transition toward more skill-intensive sectors pose significant challenges for people with low formal qualifications a situation worsened by the in-flows of foreign workers and of refugees after 2015 (Flecker et al., 2020). Notwithstanding the comparatively high opportunities for youth to enter the core sectors of the labor market, segmentation is in fact growing, as can

be gauged by the increasing number of non-standard jobs in marginal sectors, especially in small and traditional firms that still play a significant role in the Austrian economy (Bliem et al., 2016; Culpepper, 2007).

A core element of the Austrian SWT system is the strong vocational orientation, where a strong dual apprenticeship system as the main core of the VET system is usually associated with fast and stable SWT (Hadjivassilou et al., 2018). Due to the high commitment of the state in the provision of VET, as well as to the direct involvement of private firms and social partners and private firms in dual vocational training (apprenticeship), Austria is classified as a collective skill system (Busemeyer and Trampusch, 2012). However, when looking at the different policy instruments, Austria is better described as a hybrid case (Lassnigg, 2011). The VET system is constituted by work-based (dual apprenticeship) and school-based tracks (vocational and technical schools—*Berufsbildende Mittlere Schule* (BMS) and *Berufsbildende Höhere Schule* (BHS)). Dual vocational training accommodates a relevant share of all secondary school graduates, combining part-time vocational schooling and structured learning on the job. Students who pass the final examination obtain formal qualifications and a recognized professional certificate. Dual apprenticeships seem to facilitate timely entry into the labor market: Typically, around 35–40 percent of each cohort enters the labor market through an apprenticeship, and unemployment rates of graduated apprentices are much lower than those of low-qualified (Bliem et al., 2016). However, the dual system has been recently declining in Austria, owing to the trend toward increased participation in school-based and higher education and to the shrinking number of firms offering training.

Dual apprenticeship and full-time schooling developed both independently and in competition, with a progressive deterioration of quality and quantity of apprenticeship over time, establishing functional links with different sectors of the Austrian economy and labor market (Lassnigg, 2011). The Austrian dual system displays a high degree of formalization (training regulations and requirements for firms) and involvement of social partners (via the Chamber of Labor and the Economic Chamber) in developing the regulations and monitoring the training, but not in political decision-making (Emmenegger and Seitzl, 2020). Apprenticeship is also characterized by a dominant core of individual and tacit learning, with very traditional practices of training and little supervision. In school-based tracks, social partners have reduced formal competences, although they tend to collaborate fostering the links between VET schools and firms. The expansion of BHS, also providing short-cycle tertiary qualifications (ISCED 5), in the last decades is one of the factors behind the steep increase of tertiary educated displayed in Table 2. While the dual system is more connected with small and medium firms in traditional sectors of the Austrian economy (Culpepper, 2007), big firms and innovative sectors tend to turn to BHS or applied science universities as a primary source of skilled workers. Accordingly, the involvement of firms in dual training declines with the increase in the number of employees (Bliem et al., 2016).

In response to the decline of apprenticeship, the Austrian government supports small and medium enterprises by offering training through several subsidies. Moreover, bridges between dual training and higher education have been introduced to increase the attractiveness of apprenticeship contracts: Apprentices can obtain qualifications to access vocational branches of tertiary education through flexible preparatory courses and exams. Most youth-oriented ALMPs (as the Austrian Youth Guarantee) aim at supporting young people below 18 years who are not able to find an apprenticeship. In 2008, the Austrian Vocational Training Act gave young people the opportunity to obtain vocational qualifications in supra-company apprenticeships financed by the PES (Schlögl et al., 2020).

As we saw, the provision of VET is centralized, although the federal states participate in financing training and have the opportunity to pursue some specific educational and ALMP objectives that are reflected, for instance, in the varying importance of the different school tracks (Bacher

et al., 2017). This moderate institutional space for subnational variation interacts with the local characteristics of the economy. Accordingly, the share of pupils in dual apprenticeship is significantly higher where industrial employment is higher, peaking in Upper Austria (ibw—Institut für Bildungsforschung der Wirtschaft, 2019). General schools and school-based VET are more popular in the Eastern part of the country and especially in an international service hub like Vienna. The capital is the main outlier with respect to national averages, due to the unique status of the capital city and *Land* at the same time. The skill formation profile of the city mainly turns to high-tech and advanced services in the tertiary sector of the economy, with a strong demand for highly qualified workers. Hence, the dual system is weaker—Vienna hosts 21 percent of the Austrian population and workers, but only 15 percent of the apprentices³ (ibw, 2019; Oberwimmer et al., 2019)—and employment opportunities for low-skilled, often with migration background, are shrinking. This mismatch results in high rates of youth unemployment and NEETs compared with the other *Länder*. As federal state governments can add layers of localized measures to national provision, Vienna presents a unique institutional configuration of ALMP provision: the Vienna Employment Promotion Fund (WAFF) engages primarily in the provision of lifelong learning (Ahn and Kazepov, 2022) and complements the local section of PES. Given the challenges, the main focus of local ALMPs provision shifted to the integration of immigrants and refugees, especially after 2015, and to the public provision of supra-company apprenticeship (5300 positions in Vienna on a total of 12,000 in the whole country in 2018; see: ibw, 2019).

The institutional configuration of SWTs in Italy

In the Italian welfare state, underdeveloped service provision goes together with a passive subsidiarity configuration (Kazepov, 2010) that endows the family with primary responsibilities. ALMPs and PES are underfinanced and scarcely effective in supporting youth in the transition to the labor market, so young people need to rely intensively on family networks for job search and material support (Ascoli and Pavolini, 2015). The multilevel governance structure displays strong regional autonomies, where subnational jurisdictions have significant regulatory, funding, and managing functions in the presence of a weak national coordination (Kazepov and Cefalo, 2022). This often brings about volatile funding and unequal implementation across territories. Deep territorial disparities are amplified by institutional fragmentation (Ascoli and Pavolini, 2015), with a scattered division of responsibilities between the central state and the regions in the field of regional VET, apprenticeship, and ALMPs.

School is comprehensive, with the first separation in tracks taking place at the beginning of upper secondary education (at age 14), when pupils can opt between generalist pre-academic education, 5 years of technical and vocational schools, and 3 years of vocational courses organized by the regions. Notwithstanding the relatively late age of tracking, mechanisms of differentiation in later stages of education significantly affect social reproduction (Schindler et al., 2023). The central state is mostly responsible for the provision of education (Ballarino, 2015), with the notable exception of regional vocational training. On the supply side, the separation between education and work is a defining trait of the Italian education system and has historical and cultural roots reflected in the marked sequentiality of the institutional setting, which creates few contacts with the labor market and postpones the development of work-related skills after the conclusion of the educational career (Pastore, 2019). On the demand side, this separation is reinforced by the peculiarity of the productive setup. The Italian economy is dominated by small firms, usually scarcely inclined to innovation and investment in training, that do not value educational qualifications and certifications. Beyond these general traits, the Italian economy is marked by sharp territorial differences, a regionalized capitalism based on local networks (Trigilia and Burrioni, 2009) that displays deep

divides in the productive structure and socio-economic conditions, especially between the better-off Northern and the strongly lagging Southern regions.

The Italian education system provides a differentiated set of pathways for youth. Upper secondary education is characterized by a dualism between the generalist and academic-oriented track (*Licei*) mainly preparing pupils for tertiary education and three VET tracks managed at the national (*Istituti Tecnici, Professionali*) and regional levels (*Istruzione e Formazione Professionale*). A three-sided apprenticeship system comes beside the prevailing school-based vocational training. Dual apprenticeship contracts allow one to gain an upper secondary or tertiary qualification (types I and III), combining part-time vocational schooling and learning on the job, similar to the dual system in Austria. Formal apprenticeship (type II) leads to a professional qualification defined by collective agreements. Formal apprenticeship combines institutional training provided by the regions with workplace training, without close links to the formal education system. The national VET tracks aim at providing youth with both general and practice-oriented knowledge to prepare them for particular occupations but tend to replicate contents and teaching modes of generalist education, with a residual role of laboratories or work-based training (Ballarino, 2015). Tertiary education is scarcely differentiated; the university plays the main role, while vocational institutions are almost absent.

A central feature is the reduced vocational orientation of the transition system, characterized by the separation between education and the labor market, school and firms, training, and working moments (Kazepov and Ranci, 2017; Sergi et al., 2018). In Italian skill formation, the provision of training is mostly school-based and sequential, since it separates education and work and thereby delays the acquisition of work-related experience (Pastore et al., 2021). Weak institutional linkages are not able to structure effectively the transitions to employment, thus contributing to a steep mismatch between the qualifications attained by young people and employers' requests. Below-average public investments in training and the scarce involvement of firms and social partners are further traits making the Italian skill formation system rather a hybrid with features from the statist and the liberal regime. At the local level, several instances of stable cooperation among schools and companies, and in some cases the social partners, can be documented. These voluntaristic bottom-up networks often use available policy tools such as internships and dual or formal apprenticeships; they constitute good practices with low systemic diffusion, that from a territorial perspective even contribute to stronger fragmentation as they depend on the direct involvement of the demand side. However, the Italian labor market is mostly made of small companies with scarce innovative potential that create low employment opportunities and saw the disproportionate growth of a low-qualified work demand in the last decades, while high-qualified work demand is stagnating (Fellini, 2015). These traits are particularly pronounced in the less dynamic areas of the country and especially in the South, adding territorial divides that increase the disadvantage for youth in transition. Segmentation and mismatch for young people are not compensated by an effective provision of ALMPs. The governance of ALMPs is under the responsibility of the regions but what strikes most in international comparison is the poor funding of PES (Pastore, 2019). Moreover, the major share of ALMP expenditure is directed toward employment incentives⁴ (Sacchi and Vesan, 2015), with training being at less than 30 percent of the total.

Several recent reforms tackled the limited vocational orientation and the support SWT via activation policies for unemployed and inactive youth. Within the multi-track VET system, a long chain of interventions in the last two decades introduced compulsory work-based learning in upper secondary schools (*alternanza scuola-lavoro*) and tried to promote dual apprenticeships. The reforms aimed at establishing an "Italian way to the dual system" by promoting the acquisition of work experience during upper secondary education but encountered several obstacles in implementation. Work-based learning—further renamed *Percorsi per le Competenze Trasversali*

e per l'Orientamento—spread all over the country from 2015 on, but this went together with the reduction of hours and resources. Together with the persisting lack of formal regulations for training standards in firms, the sparse data available show a significant reduction in students, schools, and firms involved between 2015 and 2019 (National Council of Economy Labour (CNEL), 2019). Work-based learning was mostly realized through internships in small and micro firms, with the partial exception of regional VET, where around 3300 dual apprenticeship contracts were activated (INAPP, 2021). Nonetheless, dual apprenticeships remain highly marginal in the Italian skill formation system, covering around 5 percent of the total apprenticeship contracts. In contrast, formal apprenticeships cover by far the lion's share of apprenticeship contracts, highlighting serious weakness in the related provision of the training component (Kazepov and Ranci, 2017). Apprenticeships are often used as temporary employment at lower labor costs and are still depreciated from a cultural standpoint, as apprentices are perceived as low-skilled workers who learn the job by observing more experienced colleagues in their working activity (Cefalo and Kazepov, 2020).

As for ALMPs and PES, youth transitions have been directly targeted by the Youth Guarantee, co-funded by the European Union, and by the creation of a national agency for ALMPs (ANPAL-Agenzia Nazionale Politiche Attive del Lavoro), to enforce central coordination of the system. The results have been, at best, mixed, because the flux of resources and the implementation of the Guarantee were hampered by the fragmentation and lack of administrative capacity of the PES (Pastore, 2019). The evidence shows steep territorial divides as well as unequal opportunities to take on the benefits from recent reforms: regional VET and apprenticeships are mostly diffused in local areas in Northern regions that can count on established networks of collaboration between schools, firms, and, in some cases, social partners (DD'Agostino and Vaccaro, 2021). For instance, six regions in the Center-North of the country gather over 70 percent of all Italian apprentices. Furthermore, the Northern regions of Lombardia, Veneto, and Piemonte cover 94 percent of the dual apprenticeship contracts activated within regional VET courses (INAPP, 2021). Similarly, the regional competences in ALMPs translated into significant territorial differences in the implementation of the Youth Guarantee, not limited by the inconsistency of the national agency of coordination.

Mixed and multilevel configurations

The comparison between Italy and Austria is synthesized in Table 3, following the combination of dimensions described above. At first sight, differences in SWT outcomes follow what we might expect from international classifications. Austria shows comparatively positive SWT outcomes, although with emerging lines of segmentation and disadvantages for low-skilled and youth with migration background. In contrast, Italian youth are strongly disadvantaged on the labor market as they have to navigate through long transitions with high risks of unemployment or precarization. However, both countries display a high level of upper secondary attainment among youth, possibly pointing toward a significant role played by vocational training in both institutional settings. Furthermore, national averages of transition outcomes conceal degrees of internal differentiation. Territorial dispersion is very pronounced in Italy, especially between the more dynamic Northern areas and the South of the country. In the North, local networks involving schools, firms, and social partners are diffused; apprenticeship contracts and VET tracks providing intermediate technical skills are more frequent, and ALMP provision tends to be more effective. This relates to SWT outcomes that are closer to the EU averages, while in the South, companies are smaller and rarely involved in training, and job opportunities are limited and often within the shadow economy, bringing to extreme levels of youth disadvantage. Perhaps unexpectedly, territorial differences are

Table 3. Comparison between Italy and Austria according to typologies.

Classification	Dimensions	Types, when indicated	Austria	Italy
SWT regimes	<ul style="list-style-type: none"> • SWT outcomes • Standardization of education • Stratification (tracking) of education • Linkages with labor market • Labor market regulations • Enterprises procedures • Welfare arrangements between state, family, market • ALMPs and employment services 	<ul style="list-style-type: none"> • High to low youth integration • High to low standardization • Comprehensive, selective • Tight coupling, loose coupling, intermediate • Sequential model, dual model • Occupational labor markets, internal labor markets • Scandinavian—Universalistic, Continental—Employment centered, Anglo-Saxon—Liberal, South European—Sub-protective, Former socialist 	<p>High integration Standardized, Selective (early tracking)</p> <p>Tight coupling Dual model</p> <p>Occupational labor market with moderate flexibility</p> <p>Mixed—Continental— Employment centered with some traits of Scandinavian— Universalistic</p>	<p>Low integration Standardized, Comprehensive</p> <p>Loose coupling Sequential model</p> <p>Internal labor market, protected with increased flexibility for outsiders</p> <p>South European—Sub-protective</p>
VET and skill formation systems	<ul style="list-style-type: none"> • Vocational orientation • VET organization: institutional learning and workplace • VET organization: Institutional learning in secondary schools or training centers • Degree of firm involvement in VET • Public commitment to VET 	<ul style="list-style-type: none"> • High to low vocational orientation • Vocational and technical secondary schools, formal apprenticeship, dual system • Collective regime, Liberal regime, segmentalist regime, statist regime 	<p>High vocational orientation</p> <p>Mixed Vocational and technical secondary schools Dual system</p> <p>Mixed Collective and statist regime</p>	<p>Low vocational orientation</p> <p>Mixed Vocational and technical secondary schools Formal apprenticeship with marginal dual system</p> <p>Mixed Statist and liberal regime</p>
Spatial variation	<ul style="list-style-type: none"> • Multilevel governance • Spatial disparities 	<ul style="list-style-type: none"> • Active subsidiarity, passive subsidiarity • Territorial divides 	<p>Active subsidiarity (weak federalism strong central coordination)</p> <p>East–west differences, unique case of Vienna</p>	<p>Passive subsidiarity (institutional fragmentation and weak coordination)</p> <p>North–south divide</p>

Source: Our elaboration.

significant in Austria too—although to a lesser degree—among the more touristic Western regions, the industrial Eastern regions, and the case of Vienna. While a dynamic economy contributes to generally positive SWT outcomes, migration in-flows and growing segmentation affecting low educated youth conjure into higher unemployment rates in the capital. The dual system is mostly diffused in some industrial regions, associated with extremely low youth unemployment, but is comparatively weaker in Vienna.

As expected from the literature, both education systems are mostly standardized, but the Italian one is comprehensive and sequential; scarcely connected to the labor market where small and micro-companies do not attribute high values to educational qualifications and reluctantly participate in training provision. This marks a strong difference with Austria, where education builds several trajectories of potential integration for young people, in the context of a tight coupling between a stratifying education system with strong vocational orientations and an occupational labor market requesting vocational and educational qualifications. Nonetheless, early tracking still contributes to the segmentation of educational paths and labor market careers.

Interestingly, the institutional analysis highlighted some mixed traits that do not fit with the overall classification of Austria and Italy as, respectively, employment-centered and collective skill formation, and as sub-protective and statist skill formation. Both countries present a combination of established vocational schools and apprenticeship provisions that make their institutional setting more similar than expected. This common trait constitutes an important base for comparison showing that similarities in formal regulations can translate into contrasting levels of implementation and outputs: it is the relative weight of the elements considered, as well as the involvement of supporting institutions and social partners actors within the regulatory frame that denote a higher level of vocational orientation in Austria than in Italy. Furthermore, PES and ALMPs play a strong compensatory role of labor market mismatches in Austria, while PES and ALMPs provision is underfinanced and fragmented in Italy.

The Austrian case displays a dualistic structure marked by competition between VET schools and dual apprenticeships with functional connections to sectors of the economy. School-based VET tracks have higher prestige and links with the most innovative sectors of the economy (i.e., engineering and business), but a lower participation of the social partners. The dual system is less prestigious but sees a direct involvement of private companies providing training and of the social partners. Apprentices are mostly employed in small and traditional firms, but open positions are declining and difficult to access for certain subgroups of youth, that is, low-skilled often with migration background. Therefore, the impact of dual apprenticeships on the positive employment outcomes of Austrian youth should not be overestimated: These are rather the result of complementarities between a mixed VET configuration with functional links to the labor market and a robust youth safety net provided by ALMPs and PES, that compensate for the loss of quantity, quality, and reputation of the Austrian dual system. This mix of features gives a nuanced portrait of the Austrian case, in a sort of intermediate position between social-democratic countries and continental Germany (Lassnigg, 2020).

Also in Italy, the VET sector has an established multi-track structure and a diffusion that one would not expect in a sub-protective regime: a large statist vocational schooling component is the bulk of upper secondary education but the picture is completed by a complex mix of regional VET courses, dual and formal apprenticeship schemes. The relative weight of these components is unbalanced toward school-based VET tracks that show, however, signs of academization, confirming the cultural division between learning and working (Greinert, 2004) and contributing to the low vocational orientation of the Italian case. A further trait of VET in Italy is the marginality of vocational institutions in tertiary education, a stark contrast with the rise of work-based academic education in Austria (Graf, 2016). The analysis gives the picture of a composite VET system with

strong criticalities and comparatively low investments, a skill formation that mixes statist, liberal, and collective traits but struggles to facilitate timely transitions into the labor market.

The contrasting features in the coordination between firms, social partners, and the central state mark the two cases. The Italian system is sequential, as it implies a separation between education and employment, which delays the acquisition of work experience. In Austria employers, social partners and public actors coordinate to develop collectively industry-specific skills within the dual system, but this happens to a lesser extent for school-based VET, which presents instead less formalized ties with the economy. It is interesting to note how some Austrian observers (Lassnigg, 2020) downplay the role of coordination in the Austrian system: dual VET and school-based VET developed independently and in competition with diverse governance structures. This means that the range of institutionalized opportunities for young people emerged without an overall plan, except for the shared policy priority of promoting youth employment. This brings to the forefront the compensating and mediating role played by the public actor, through PES and ALMP provision: The period of observation identifies an overall stability with an increase of state intervention in subsidizing apprenticeship positions, in response to the long-term decline of the dual VET. However, ALMPs and VET provision in the case of Vienna are struggling to compensate for the accumulation of disadvantage for low-skilled youth, often with migration background, which might pose significant challenges to the Austrian SWT system in the near future.

In the Italian case, the coordination between state, school, social partners, and firms is not a stable systemic configuration. The last two decades saw several interventions to promote work-based learning and dual apprenticeships, in order to foster a higher involvement of firms in the provision of training. This happened within a multilevel setting characterized by weak central coordination and strong territorial disparities. In Italy, the institutional fragmentation feeds on, and is fueled by, steep territorial divides, rather than acting as a balancing force. The result is that new measures often result selectively effective, owing to pre-existing regional networks of collaboration in areas with more dynamic industries and local production systems. It is the case, for instance, of Northern regions with a more established provision of PES and networks of collaboration between schools and firms (D'Agostino and Vaccaro, 2021; Sergi et al., 2018). Youth opportunities are thus scattered along several lines of disadvantage that pertain to age, territorial differentiation, institutional fragmentation, inadequate service provision, and low-qualified work demand. While in Italy we can observe local good practices that struggle to become systemic in a resulting exacerbation of territorial divides, in Austria, the mix of centralized and localized provision of services seems better equipped to balance local differences. Apprenticeship is weaker in areas with lower industrial development, but the central provision of PES and ALMPs is complemented by local programs funded by federal states, providing some spaces for compensation. The case of Vienna stands out, as the city tailors service provision trying to respond to challenges of in-coming migration, lack of apprenticeship positions, and internationalization. Conversely, other parts of the country still rely mostly on vocational skills and a pervasive dual apprenticeship system.

Outlook: implications for youth opportunities and territorial disparities

In this article, we presented a comparison of the institutional configurations of SWT in Italy and Austria, structured by a modular frame (Scharpf, 1997) of analytical dimensions from comparative SWT and skill formation research. Our ambition was to show how small-N comparisons that emphasize relational and spatial interactions allow a more nuanced understanding of how SWTs unfold within complex multilevel settings. The two cases present entrenched traits of the respective

SWT and welfare models that are perpetuated across policy fields and administrative structures, as well as features that challenge some consolidated characteristics of the existing classifications. All in all, the case studies confirmed that large international comparisons overlook similarities between, as well as variations within the cases, that have a significant impact on SWT.

Both Italy and Austria present multi-track VET within their education systems, with school-based training and apprenticeships that make their skill formation regime classification ambiguous. However, the relative weight of these subsectors, as well as the interaction among supporting institutions, private firms, and social partners mark the difference between the two countries and contribute to the divide in SWT outcomes. The low diffusion of apprenticeship, as well as the limited involvement of private firms and social partners in training provision, denotes weaker linkages with the labor market in Italy. This contrast is increased by the fact that the Austrian labor market creates more employment opportunities for young people and attributes higher value to vocational qualifications.

Furthermore, a crucial difference relates to the role of the state in the multilevel governance of SWT. Policies shaping transitions are provided through jurisdictional levels—mostly national and regional—that interact with territorial contexts—such as the regional socio-economic system—producing significant within-country variations in SWT outcomes. Austria can be described as a case of *active subsidiarity* (Kazepov, 2010), where the central government delegates certain social functions to collectively organized interests and federal states. The active connotation refers to the fact that the state provides a coherent regulatory frame and intervenes through PES and ALMP provision to enhance youth integration. Notwithstanding the limited cooperation among education subsectors, the public actor is key in reaching a higher level of overall coordination than in Italy. So far, this setting has been comparatively effective in ensuring labor market participation in Austria, but the complex structure of sub-systems with different governance and limited cooperation creates a potentially unstable equilibrium that could be challenged by economic pressures and in-flows of migration.

In the case of Italy, welfare provision is marked by low financial supports and limited capacity of central coordination exhibited in fragmented regional VET, apprenticeships, PES, and ALMPs. This configuration resembles the principle of *passive subsidiarity* (Kazepov, 2010); the state delegates to family networks, market arrangements, and subnational units without appreciable coordination, and feeble standard setting or financial support. As a result, weak linkages between education, training, and firms in managing vocational paths continue to characterize youth transitions, notwithstanding recent reform efforts. Furthermore, institutional fragmentation exacerbates spatial disparities, because better-off regions can make the most of the limited opportunities offered by scattered VET and ALMP provision, in the absence of effective mechanisms of spatial redistribution.

We consider our results as complementary and not opposed to larger-scale comparisons, adding a much-needed nuance rather than negating the heuristic value of classificatory efforts. In our view, in-depth case studies embracing higher degrees of complexity should engage with cross-country comparisons in an active dialogue to improve their understanding. The use of common analytical dimensions and concepts can provide a stimulating ground for discussion, avoiding the development of isolated literature silos. This could be a step toward the extension of comparative SWT analysis to non-EU countries, by means of in-depth case studies that refer to (and also challenge) established analytical dimensions from the European comparative debate.

Despite our focus on case-specific explanations of SWT in two European countries, the approach we put forth allows some wider considerations that go beyond our specific cases and the European context. Our analysis warns that the underestimation of the relationality among multilevel settings

and subsectors underpinning SWT might lead to the promotion of ineffective one-size-fits-all policies. For instance, in Italy, the institutional fragmentation and the profound territorial disparities hampered the implementation of VET and apprenticeship reforms. In addition, one-size-fits-all policies could overlook relevant traits of successful cases. A good example here is how the focus on apprenticeship tends to overshadow the range of opportunities for youth integration that the mixed configuration of VET, ALMPs, and PES generates in Austria. However, policymakers should also consider that such a configuration did not result from a concerted and intentional reform effort, and therefore its replication in other contexts could be difficult.

Most importantly, our findings challenge the assumption of homogeneity within countries and demonstrate the relevance of spatially sensitive research and policymaking (Kazepov and Cefalo, 2022). The Italian case illustrates how institutional fragmentation and neglect of territorial differences in policy design (and implementation) can even increase inequalities. Policies that create opportunities in better-off regions can indeed yield marginal outputs in disadvantaged areas due to a lack of adequate labor demand, as well as insufficient mediating services and networks among local actors. In turn, we should consider that scarce opportunities and the feeling of being “left behind” in lagging territories can fuel exclusion and even political discontent. Overlooked territorial factors appear to play a role in the rise of populism both in Europe and the United States (Rodríguez-Pose et al., 2023). Territorial differences are tightly linked to global processes such as labor precarization and digitalization. These processes exert strong pressures for adaptation on labor markets and policy provision, ultimately affecting young people and their future careers. In our view, this motivates the need for further research comparing SWT regimes under different spatial configurations, expanding the range of comparison also beyond Europe.

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Notes

1. Our selection does not aim at providing the complete picture of typologies that have some connections with SWT. For instance, themes related to youth perceptions and citizenship fall out of the scope of this article.
2. Experts and stakeholder interviews, as well as documents, have been collected during the participation of the authors in European comparative projects on the topics of youth transitions, lifelong learning and learning outcomes, and territorial cohesion, during the period 2017–2024: YOUNG_ADULLLT, COHSMO, and CLEAR. The interviews that supported the case studies presented are listed in the Appendix.
3. The number of apprentices in the total youth population is at 32 percent in Vienna, well below the national average of 40 percent and the peaks of 50 percent in some Western provinces. Furthermore, the percentage of graduated apprentices not employed in the same sector after 2 years from graduation is down to 39–40 percent in the Western part, while it goes up to 46 percent in Vienna (ibw, 2019).
4. Furthermore, employment incentives to firms have been criticized for lack of standards and criteria ruling the access to funding (Sacchi and Vesan, 2015).

References

- Ahn B and Kazepov Y (2022) Between protection and activation: Shifting institutional arrangements and “ambivalent” labour market policies in Vienna. In: Kazepov Y and Verwiebe R (eds) *Vienna in Transition: Still a Just City?* London: Routledge, pp. 85–98.
- Allmendinger J (1989) Educational systems and labour market outcomes. *European Sociological Review* 5: 231–250.
- Ascoli U and Pavolini E (eds) (2015) *The Italian Welfare State in a European Perspective: A Comparative Analysis*. Bristol: Policy Press.
- Bacher J, Koblbauer C, Leitgöb H, et al. (2017) Small differences matter: How regional distinctions in educational and labour market policy account for heterogeneity in NEET rates. *Journal for Labour Market Research* 51: 4.
- Ballarino G (2015) School in contemporary Italy: Structural features and current policies. In: Ascoli U and Pavolini E (eds) *The Italian Welfare State in a European Perspective: A Comparative Analysis*. Bristol: Policy Press, pp. 181–190.
- Benassi C, Durazzi N and Fortwengel J (2022) Comparative institutional disadvantage: Small firms and vocational training in the British manufacturing sector in comparative perspective. *British Journal of Industrial Relations* 60(2): 371–390.
- Bliem W, Petanovitsch A and Schmid K (2016) *Dual Vocational Education and Training in Austria, Germany, Liechtenstein and Switzerland*. Wien: IBW.
- Blommaert L, Muja A, Gesthuizen M, et al. (2020) The vocational specificity of educational systems and youth labour market integration: A literature review and meta-analysis. *European Sociological Review* 36(5): 720–740.
- Bol T and Van de Werfhorst HG (2016) Measuring educational institutional diversity: Tracking, vocational orientation and standardisation. In: Hadjar A and Gross C (eds) *Education Systems and Inequalities: International Comparisons*. Bristol: Policy Press, pp. 73–94.
- Bosch G (2017) Different national skill systems. In: Chris W, Ken M, David F, et al. (eds) *The Oxford Handbook of Skills and Training*. Oxford: Oxford University Press, pp. 424–443.
- Busemeyer MR and Trampusch C (2012) The comparative political economy of collective skill formation. In: Busemeyer MR and Trampusch C (eds) *The Political Economy of Collective Skill Formation*. Oxford: Oxford University Press, pp. 3–38.
- Buttler D, Ławrynowicz M and Michoń P (Eds) (2023) *School-to-work Transition in Comparative Perspective*. Cheltenham: Edward Elgar Publishing.
- Cefalo R and Kazepov Y (2020) Verso un approccio integrato alle transizioni scuola-lavoro: un confronto tra Italia e Austria. *Quaderni Di Sociologia* 84: 29–57.
- Cefalo R and Scandurra R (2023) What, for whom, and under what circumstances: Do activation policies increase youth employment in the EU? *Journal of European Social Policies* 33(4): 391–406.
- Ciccia R and Javornik J (2019) Methodological challenges for comparative welfare state research: Capturing intra-country variation in cross-national analyses. *Journal of Comparative Policy Analysis* 21(1): 1–8.
- Culpepper P (2007) Small states and skill specificity: Austria, Switzerland, and interemployer cleavages in coordinated capitalism. *Comparative Political Studies* 40: 611–637.
- D'Agostino S and Vaccaro S (2021) *Apprendistato in Evoluzione. Traiettorie E Prospettive Dei Sistemi Duali in Europa E in Italia*. Inapp Report n. 20, Roma. Available at: <https://oa.inapp.gov.it/items/5199ed07-c393-46c3-b185-da7f9f5dac48>
- Della Porta D and Keating M (Eds) (2008) *Approaches and Methodologies in the Social Sciences: A Pluralist Perspective*. Cambridge: Cambridge University Press.
- Desjardins R and Ioannidou A (2020) The political economy of adult learning systems—some institutional features that promote adult learning participation. *Zeitschrift Für Weiterbildungsforschung* 43(2): 143–168.
- Eichhorst W, Rodríguez-Planas N, Schmidl R, et al. (2015) A road map to vocational education and training in industrialized countries. *ILR Review* 68(2): 314–337.

- Emmenegger P and Seitzl L (2020) Social partner involvement in collective skill formation governance. A comparison of Austria, Denmark, Germany, the Netherlands and Switzerland. *Transfer: European Review of Labour and Research* 26(1): 27–42.
- Erk J (2004) Austria: A federation without federalism. *Publius: The Journal of Federalism* 34(1): 1–20.
- Esping-Andersen G (1990) *The Three Worlds of Welfare Capitalism*. Cambridge: Blackwell Publishers.
- Fellini I (2015) Una «via bassa» alla decrescita dell'occupazione: il mercato del lavoro italiano tra crisi e debolezze strutturali. *Stato E Mercato* 3: 469–508.
- Flecker J, Wöhler V and Rieder I (Eds) (2020) *Wege in Die Zukunft Lebenssituation Jugendlicher Am Ende Der Neuen Mittelschule*. Wien: Vienna University Press.
- Frommberger D and Porcher C (2023) On the limited usefulness of comparative politics modelling for understanding VET systems. *Journal of Vocational Education & Training* 2023: 1–18.
- Garritzmann JL, Röth L and Kleider H (2021) Policy-making in multi-level systems: Ideology, authority, and education. *Comparative Political Studies* 54(12): 2155–2190.
- Graf L (2016) The rise of work-based academic education in Austria, Germany and Switzerland. *Journal of Vocational Education & Training* 68(1): 1–16.
- Greinert WD (2004) European vocational training “Systems”- Some thoughts on the theoretical context of their historical development. *European Journal: Vocational Training* 32: 18–25.
- Gross C and Hadjar A (2024) Institutional characteristics of education systems and inequalities: Introduction III. *International Journal of Comparative Sociology* 65(1): 3–9.
- Gross C, Hadjar A and Zapfe L (2022) Institutional characteristics of education systems and inequalities: Introduction II. *International Journal of Comparative Sociology* 65: 3–9.
- Hall PA and Soskice D (eds) (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
- Hadjivassiliou KP, Tassinari A, Eichhorst W and Wozny F (2018) How does the performance of school-to-work transition regimes vary in the European Union. In: O'Reilly J, Leschke J, Ortlieb R, Seeleib-Keiser M and Villa P (eds) *Youth Labor in Transition: Inequalities, Mobility, and Policies in Europe*. Oxford: Oxford University Press, pp. 71–103.
- Héretier A (2008) Causal explanation. In: Della Porta DM and Keating M (eds) *Approaches and Methodologies in the Social Sciences: A Pluralist Perspective*. Cambridge: Cambridge University Press, pp. 61–79.
- Iammarino S, Rodriguez-Pose A and Storper M (2019) Regional inequality in Europe: Evidence, theory and policy implications. *Journal of Economic Geography*, 19(2): 273–298.
- Ibw—Institut für Bildungsforschung der Wirtschaft (2019) *Lehrlingsausbildung im Überblick 2019. Strukturdaten, Trends und Perspektiven*. Wien: ibw-Forschungsbericht Nr. 200.
- INAPP (2021) *Lo Sviluppo Dell'occupazione E Della Formazione in Apprendistato. XIX Rapporto Di Monitoraggio*. Roma: INAPP.
- Kazepov Y (ed.) (2010) *Rescaling Social Policies: Towards Multilevel Governance in Europe*. Farnham: Ashgate.
- Kazepov Y and Cefalo R (2022). The territorial dimension of social investment in Europe. In: Kazepov Y, Cucca R, Barberis E, et al. (eds) *Handbook of Urban Social Policy*. Cheltenham: Edward Elgar, pp. 55–71.
- Kazepov Y and Ranci C (2017) Is every country fit for social investment? Italy as an adverse case. *Journal of European Social Policy* 27(1): 90–104.
- Kazepov Y, Barberis E, Cucca R and Mocca E (eds) (2022) *Handbook on Urban Social Policies: International Perspectives on Multilevel Governance and Local Welfare*. Cheltenham: Edward Elgar.
- Keating M (2021) Beyond the nation-state: Territory, solidarity and welfare in a multiscale Europe. *Territory, Politics, Governance* 9(3): 331–345.
- Lassnigg L (2011) The “duality” of VET in Austria: Institutional competition between school and apprenticeship. *Journal of Vocational Education & Training* 63(3): 417–438.
- Lassnigg L (2020) Different structures, different results? Continental and Nordic education structures compared. In: Moreno Herrera L, Teräs M and Gougoulakis P (eds) *Policies & Partnership with the World of Work—National and Cross-national Perspectives. Emerging Issues in Research on Vocational Education & Training*. Stockholm: Prepress förlag, pp. 233–279.

- Mahoney J (2008) Toward a unified theory of causality. *Comparative Political Studies* 41(4-5): 412–436.
- Marsden D (1999) *A Theory of Employment Systems: Micro-foundations of Societal Diversity*. Oxford: Oxford University Press.
- Müller W (2005) Education and youth integration into European labour markets. *International Journal of Comparative Sociology* 46(5–6): 461–485.
- Müller W and Gangl M (2003) *Transitions from Education to Work in Europe: The Integration of Youth into EU Labour Markets*. Oxford: Oxford University Press.
- National Council of Economy Labour (CNEL) (2019) *Rapporto Mercato Del Lavoro E Contrattazione Collettiva*. Roma: CNEL.
- Oberwimmer K, Vogtenhuber S, Lassnigg L, et al. (eds) (2019) *Nationaler Bildungsbericht Österreich 2018, Band 1. Das Schulsystem Im Spiegel Von Daten Und Indikatoren*. Graz: Leykam.
- Österle A and Heitzmann K (2019) Austringification in welfare system change? An analysis of welfare system developments in Austria between 1998 and 2018. In: Blum S, Kuhlmann J, Schubert K, et al. (eds) *Routledge Handbook of European Welfare Systems*. New York: Routledge, pp. 21–37.
- Pastore F (2015) *The Youth Experience Gap Explaining National Differences in the School-to-work Transition*. Heidelberg: Springer.
- Pastore F (2019) Why so slow? The school-to-work transition in Italy. *Studies in Higher Education* 44(8): 1358–1371.
- Pastore F, Quintano C and Rocca A (2021) Some young people have all the luck! The duration dependence of the school-to-work transition in Europe. *Labour Economics* 70: 101982–101999.
- Peters BG (2022) Can we be casual about being causal? *Journal of Comparative Policy Analysis: Research and Practice* 24(1): 73–86.
- Raffe D (2008) The concept of transition system. *Journal of Education and Work* 21(4): 277–296.
- Raffe D (2014) Explaining national differences in education-work transitions. *European Societies* 16(2): 175–193.
- Ragin C (2014) *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies*. Berkeley, CA: University of California Press.
- Roberts K (2018) Explaining education-to-work transitions: Thinking backwards, situating agency and comparing countries. *Review of European Studies* 10: 72.
- Rodríguez-Pose A (2018) The revenge of the places that don't matter (and what to do about it). Cambridge *Journal of Regions, Economy and Society* 11(1): 189–209.
- Rodríguez-Pose A, Terrero-Dávila J and Lee N (2023) Left-behind versus unequal places: Interpersonal inequality, economic decline and the rise of populism in the USA and Europe. *Journal of Economic Geography* 23(5): 951–977.
- Ryan P (2001) The school-to-work transition: A cross-national perspective. *Journal of Economic Literature* 39(1): 34–92.
- Saar E and Räis ML (2017) Participation in job-related training in European countries: The impact of skill supply and demand characteristics. *Journal of Education and Work* 30(5): 531–551.
- Sacchi S and Vesan P (2015) Employment policy: Segmentation, deregulation and reforms in the Italian labour market. In: Ascoli U and Pavolini E (eds) *The Italian Welfare State in a European Perspective*. Bristol: Policy Press, pp. 71–100.
- Scandurra R, Cefalo R and Kazepov Y (2021) School to work outcomes during the Great Recession, is the regional scale relevant for young people's life chances? *Journal of Youth Studies* 24(4): 441–465.
- Scharpf FW (1997) *Games Real Actors Play: Actor-centered Institutionalism in Policy Research*. New York: Routledge.
- Schindler S, Bar-Haim E, Barone C, et al. (2023) Educational tracking and social inequalities in long-term labor market outcomes: Six countries in comparison. *International Journal of Comparative Sociology* 65: 39–62.
- Schlögl P, Mayerl M, Löffler R, et al. (2020) Supra-company apprenticeship training in Austria: A synopsis of empirical findings on a possibly early phase of a new pillar within VET. *Empirical Research in Vocational Education and Training* 12(1): 17.

- Seawright J and Gerring J (2008) Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political Research Quarterly* 61(2): 294–308.
- Sergi V, Cefalo R and Kazepov Y (2018) Young people's disadvantages on the labour market in Italy: Reframing the NEET category. *Journal of Modern Italian Studies* 23(1): 41–60.
- Shavit Y and Müller W (1998) *From School to Work. A Comparative Study of Educational Qualifications and Occupational Destinations*. Oxford: Clarendon Press.
- Smyth E, Hannan D and McCoy S (2001) *A Comparative Analysis of Transition from Education to Work in Europe (CATEWE)*. Dublin: ESRI.
- Trigilia C and Burroni L (2009) Italy: Rise, decline and restructuring of a regionalized capitalism. *Economy and Society* 38(4): 630–653.
- Vogel J (2002) European Welfare regimes and the transition to adulthood: A comparative and longitudinal perspective. *Social Indicators Research* 59(3): 275–299.
- Walther A (2017) Support across life course regimes. A comparative model of social work as construction of social problems, needs, and rights. *Journal of Social Work* 17(3): 277–301.
- Walther A (2022) Welfare states as transition regimes: Reconstruction from international comparisons of young people's transitions to work. In: Stauber B, Walther A, Settersten RA, et al. (eds) *Doing Transitions in the Life Course*. Cham: Springer, pp. 37–53.
- Wolbers MH (2007) Patterns of labour market entry: A comparative perspective on school-to-work transitions in 11 European countries. *Acta Sociologica* 50(3): 189–210.