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**Governing Sustainable School to Work
Transitions: Lessons for the EU**

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JANUARY 2023

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ABSTRACT

Governing Sustainable School to Work Transitions: Lessons for the EU

The European Commission declared 2022 the “European Year of Youth.” Apart from the obvious aim to enhance its visibility and political legitimacy, the Commission responded to the fact that COVID-19 badly affected especially young people, manifested in the rise of youth unemployment and of youth neither in employment nor in education or training (NEET). The future of young people at all levels of education – especially of the low-skilled and low-educated – is at stake. They must be prepared for the digital revolution accelerated both by the pandemic and the politically enforced transformation of the industrial economy to a sustainable economy that cares both for a healthy ecology as well as for a healthy society. Alongside its 2019-initiative of the “European Green Deal” the Commission established the “Just Transition Fund” aimed at caring for equitable and efficient transitions from fossil to renewable forms of energy, and alongside its 2020-initiative “Next Generation EU” the Commission aims at a “sustainable recovery” from the Corona pandemic to promote the green and digital transition under the condition of “social fairness”. Moreover, in 2020, the Commission made the successful transition from school to work a key priority by reinforcing its Youth Guarantee from 2013. Whereas these initiatives are laudable, experiences so far reveal great deficits in implementation. The increasing complexity of how to navigate young people successfully from school to work is not well understood. The theory of Transitional Labour Markets (TLM), we claim, helps not only to get a structured view of this complexity but promises also plausible strategies for just transitions for youth into decent work.

JEL Classification: J21, J38, J4, J48, J68, R28

Keywords: transitional labour markets, labour market policy, youth guarantee, apprenticeships, vocational education and training, just transitions, governing social risks, Europe

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Executive summary¹

Ursula von der Leyen, the President of the European Commission, announced in her State of the Union address of 15 September 2021 that the Commission would propose to make 2022 the European Year of Youth, arguing: “Young people must be able to shape Europe's future [...] that is greener, more digital and more inclusive”. The proposal was adopted on 22 December 2021 by the European Parliament and The Council. The resulting document enumerates in detail the main objectives of European youth policies and invites to a comprehensive discussion promoting the development of sustainable solutions to help tackle the challenges, including climate and nature crises. This debate should especially provide further impetus to the European support for formal and non-formal education, learning and training.

The aim of this paper is to contribute to this reflection-process and to assess in a preliminary way successes and failures of European youth policies in six steps.

(1) Section 1 starts by setting out the theoretical framework of transitional labour markets (TLM). The TLM approach, developed in the late 1990s and the early 2000s, ultimately aims at a new vision of full employment and is based on two pillars: analytically on the concept of labour market transitions over the life-course, normatively on the concepts of capabilities and capacities, both for workers and employers. We argue therefore in the first section, that much more emphasis should be set on flow data and panel studies that allow to follow-up the long-term careers of individuals, and we also provide empirical examples for this claim. We argue further that the central objective of school-to-work transition, namely employability, needs a dynamic perspective focusing on capabilities and capacities as guiding principles of just transitions. Sustainable employability means not only fitness to (mostly short-term) labour market needs, but also fitness of the labour market to (long-term) individual needs of autonomy, in particular the right to self-determined job careers. Also, in order to transform sustainable employability into a ‘managerial imperative’, individual rights against employers must be established. This will enable individuals to utilise and develop their abilities and knowledge, in other words, to develop power through occupational capacity.

(2) In the second section we draw on the insights of competing approaches of behavioural economics to explain why individual risk perception matters. We emphasise especially the tendencies of myopic decisions, the temptation of overestimating short-term low risks and underestimating long-term high risks as well as the importance of a long expectation horizons for cooperation. We show how this often-contradictory mix of cognitive and emotional views can be met by policy-strategies to deal with risky labour market transitions. The concept of

¹ Any opinions expressed are those of the authors and do not reflect those of their institutional affiliations. The authors thank Christian Brzinsky-Fay, Georg Fischer, Martin Mayerl, Hermann Nehls, Bernd Reissert, Heike Solga, and Christine Trampusch for valuable comments; many thanks go also to Signe Sarka Brunstedt who carefully arranged the finetuning of the literature.

governance, outlined also in this section in a novel way, delivers a fresh view on how to cope with social risks beyond the state and the market. The overriding principles of power sharing and risk sharing require an institutional framework that fosters voluntary and trust-building cooperation among key actors at local, industrial, regional, national, and even transnational level, especially through multilevel negotiations and written agreements (covenants).

(3) The third section is devoted to the empirical investigation of school-to-work-transitions (SWT) in five selected countries: Austria, Denmark, France, Germany, and Switzerland. This selection of countries resulted from the thesis that – according to TLM principles – the dual learning approach, i.e., the combination of theoretical and practical learning, if possible, already concerted by a regular employment relationship, promises a reliable path into the labour market; France with a dominant theoretical school-based system, thereby serving as a contrast to the other countries. After briefly screening the state of the art, we compare the education or employment status across three age groups: 15-19, 20-24, and 25-29 in 2019, the latest year with reliable data. Under the presumption that the youngest age-group (15-19) ends up after ten years in the oldest age-group (25-29), we have a pseudo-transition-sequence that allows us to detect the transition patterns of the chosen countries. We assume that these patterns are relatively stable because they are largely determined by the country-specific governance regimes of school-to-work-transitions. Furthermore, as the age-group 25-29 reflects the ‘final’ transition stage in the youth-life-course, we have a rough basis for assessing and comparing the country performance. According to various criteria, Switzerland seems to perform best in containing NEET and youth unemployment. This holds true even for the age-group 30-34. As some of our results indicate the further extension of SWT into the mature age of the early thirties, we provide also a preliminary assessment for this age group in the Appendix.

(4) In section 4 we deliver qualitative case-studies for our five selected countries, describing and comparing their central features of governing school-to-work transitions. These short yet concise portraits allow us to detect the crucial differences of the education and training systems and to deepen our normatively and analytically developed principles of good governance by empirical evidence. One of the results from these case studies is that the principle of multilevel governance by covenants seems to be a major component for successfully navigating youth transitions into gainful employment and decent work. Furthermore, these country portraits reveal – apart from remaining substantial institutional differences – some remarkable commonalities in the development of SWT: independent on whether vocational education and training (VET) is school-based or apprenticeship-based, we observed an increasing tertiarisation, which means the provision or upgrading of VET in academic institutions. We also noticed an increasing hybridisation of school-track and dual-track based education and training. Furthermore, we observed an extension of the period before transitions into the labour market are completed; this might even be an indication of the definite end of a clear-cut separation of work and education. Our country

case studies thereby substantiate again the slogan of life-long-learning although we would not go as far as the OECD, insinuating that “we used to learn to work, now learning is the work”.

(5) In section 5 we assess the three main European Youth initiatives: the European Qualifications Framework (EQF), the European Apprenticeship Alliance (EAfA), and the European Youth Guarantee (EYG). After working out the strengths and weaknesses of these initiatives, we provide suggestions how to strengthen the European youth policy based on principles of good governance derived from our case studies. We argue that the EQF and the corresponding National Qualifications Frameworks (NQF) contribute already substantially to cross-country comparisons of qualifications which is a prerequisite for higher European mobility. Furthermore, we suggest that the EQF should conceptually better address the individual capacity element of education and training, and operationally better and more quickly address the qualification validation of migrants and low skilled workers. We argue further that the EAfA did, so far, a good job in framing quality and effectiveness criteria for apprenticeships, however, it did not yet – compared to Erasmus for higher education – reach substantially ‘ordinary’ students in school-based or dual-based VET-systems. Finally, we find that the EYG may have stimulated broader national activities to support SWT but that this initiative should improve its implementation capacities and include also elements of a Youth Job Guarantee.

(6) In section 6 we draw lessons from our case studies. We do not, however, elaborate on ‘best practices’ as still commonly done even though this can lead to falsely intended imitations. We outline instead – based on the TLM theory and the country case studies – general principles that can be applied independently from the specific political-institutional context. Drawing especially on the current main institutional differences between our case countries, we identify five principles of good governance which we apply to the possible improvement of European youth policies:

- the principle of cooperative federalism as an ideal arrangement of combining institutional capacities at various levels, with the ingredients of containing veto power, equalising fiscal capacities, governing by multilevel covenants and high-quality standards (a);
- the principle of moral assurance (as complement to containing moral hazard) empowering youth to reject precarious career tracks and to make rational choices in their school-to-work transitions, but also to enhance companies’ absorptive capacity to speed up structural change (b);
- the principle of hybridisation, i.e., enhancing institutional tracks formerly successful yet exhibiting increasingly weaknesses with new and innovative elements, a process also called ‘institutional layering’ (c);
- the principle of flexible implementation, i.e., adjusting implementation mechanisms to the specifics of the target groups and available local or regional capacities (d); and

- the principle of learning by experimentation, especially related to enhancing individual autonomy through freely disposable financial capacities (e).

For each of these principles we offer concrete proposals regarding how to make the European youth policy more effective:

(a) Related to the principle of cooperative federalism, we provide the tentative suggestion: to strengthen EU's fiscal capacity by raising its budget and – in terms of budget allocation and corresponding the principle of subsidiarity – by switching the emphasis from outcome convergence to input convergence. This is, however, currently hampered by ongoing veto power due to the principle of unanimous decision making in several of the key EU decision making processes.

(b) From the principle of moral assurance, (i.e., to assure young people in their most risky phase of compressed decision making through reliable personal social security), we conclude and explain two concrete suggestions: first, setting common standards of unemployment insurance addressed in particular to youth; and second, realising not only the promise of a European Unemployment Benefit Reinsurance Scheme, but also by extending the European Social Fund to a European Employment and Social Fund. Such a fund could take over elements of work-life insurance that support Member States, among others, implementing a kind of youth job guarantee as well as a time-limited and conditional income guarantee. The principle of moral assurance, however, holds also true for employers, which can be met, for instance, through public guarantees of time-limited reliable wage subsidies for recruitment, funding professional instruction or workforce maintenance in case of economic slumps.

(c) Related to the principle of hybridisation or institutional layering we suggest, first, to combine the advantages of apprenticeship-tracks with labour market policy programmes targeted to vulnerable youth; we identified Austria as prominent example for preparing youth to keep pace with the increasingly ambitious VET-tracks. Another possibility is to combine apprenticeships with higher education based on the enterprise-centred German model (e.g., the multinational Siemens) but to complement this with measures to assist disadvantaged youth. Even more promising seems to be taking the Swiss Universities of Applied Science as a model due to their successful combination of professional teaching and high-quality vocational education and training based on in inter-company-arrangements. The anchoring of dual learning either in 'activation' programmes or in the formal education system can contribute to a situation where all youth receive a comprehensive training that includes digital and transversal skills which are also indispensable to make the labour market greener. Moreover, the EU could establish a European University of VET setting up not only scientifically based high-quality standards but also speeding up the diffusion of these standards from frontier to mainstream European enterprises.

(d) Related to the principle of flexible implementation we suggest learning again from Austria where the government made a commitment to guarantee an education or training place to those young people (up to the age of 25) who were unsuccessful when looking for a training position or have dropped out. The

particularity of this approach is that it offers the chance to complete education and training outside the traditional apprenticeship-track. It does so either through inter-company apprenticeship training or through external training combined with company internship phases in one or more companies, in both cases arranged through multilevel negotiated agreements (covenants).

(e) From the principle of learning by experimentation, especially related to enhancing individual autonomy, we derive some lessons from France which introduced and established in a long (and continuing) learning process drawing rights to enhance individual employability during the life-course. Importantly, the French government succeeded at least partially to overcome the neoliberal inclinations of early modes of “individual learning accounts”. The French experiences should therefore encourage the European Union to enhance, for example, the VET-part of Erasmus+ (may be also the European Youth Guarantee) with an element of European drawing rights. These should come in the form of qualified apprenticeships and be targeted to the low-skilled or low-income people in the age group of 25-34.

(7) The last section of this study summarises and concludes, emphasising two suggestions addressed to the European youth policy: first, to revitalise the fundamental idea of dual learning by supporting member states in establishing and upgrading apprenticeships and enhancing dual learning in school-based systems, and second to shift the policy strategy – in contrast to common sense – from harmonised results to harmonised capacity building.

Introduction

The European Commission declared 2022 to the “European Year of Youth”, in short, the “European Year”. Apart from the aim to enhance visibility and political legitimacy of EU activities geared at youth, the Commission responded to the fact that COVID-19 badly affected especially young people, manifested in the rise of youth unemployment and of youth neither in employment nor in education or training (NEET). The future well-being of young people – especially those with low-skills and low education – is at stake. Today, youth enter a labour market that is not only characterized by the recent pandemic and geopolitical tensions but also experiencing ongoing transformations due to the digital revolution and the politically enforced green transition which envisions a sustainable and healthy economy and society.

Ever since the Great Recession 2008/09, which had a disproportionately negative effect on youth labour market integration, the European Commission has put a strong focus on youth. In 2020, the Commission for example made the successful transition from school to work a key priority by reinforcing its Youth Guarantee from 2013. Policy initiatives focusing directly on youth need to be seen alongside wider EU initiatives in the labour market and social policy field. Among the most recent major initiatives are the 2019 “European Green Deal,” with the “Just Transition Fund” that aims at promoting equitable and efficient transitions from fossil to renewable forms of energy, and the 2020 “Next Generation EU” initiative that aims at a “sustainable recovery” from the Corona pandemic by promoting the green and digital transition under the condition of “social fairness”.

Whereas these initiatives are laudable, experiences, so far, reveal great deficits in implementation and the war in Ukraine with its major economic impact makes it even more challenging to achieve the ambitious aims. The increasing complexity of how young people successfully navigate the school to work transition is not well understood. The theory of Transitional Labour Markets (TLM) – we claim – helps to get a more structured view of this complexity and, moreover, promises to provide plausible strategies for just transitions into decent work.

Our study starts by setting out the analytical and normative basis of TLM. We argue in this section – accompanied by empirical examples – that the central objective of school-to-work transition, namely sustainable employability, needs a dynamic perspective focusing on capabilities and capacities as guiding principles of just transitions (1).

We then explain why individual risk perception matters, and how this mix of cognitive and emotional views can be met by policy-strategies to deal with risky labour market transitions. The concept of governance, thereby, delivers a fresh view on how to cope with social risks beyond the state and the market, especially through multilevel negotiations and written agreements (covenants) that foster voluntary and trust-building cooperation among key actors at local, sectoral, regional, national, and even transnational level (2).

The first main empirical section is devoted to the investigation of school-to-work-transitions (SWT) in five countries: Austria, Denmark, France, Germany, and Switzerland. After briefly screening the state of the art, we use a novel empirical approach by comparing the education or employment status in three age groups: 15-19, 20-24, and 25-29 for the latest year of reliable data (2019). Under the presumption that the youngest age-group (15-19) ends up after ten years in the oldest age-group (25-29), we have a pseudo-transition-sequence that allows us detecting the transition pattern of the selected countries. We thereby assume that these patterns are relatively stable as they are largely determined by the country-specific governance regimes of school-to-work-transitions. Furthermore, as the age-group 25-29 reflects the ‘final’ transition stage in the youth-life-course, we have a rough basis for assessing and comparing the country performance. According to various criteria, Switzerland seems to perform best in containing NEET and youth unemployment, even in the age-group 30-34, for which we provide a preliminary assessment in the Appendix, because some of our results indicates the further extension of SWT into the early thirties (3).

The second main empirical section delivers case-studies for our selected countries (Austria, Denmark, France, Germany, Switzerland), describing their central features of governing SWT. These short yet concise country-portraits allow us to detect the crucial differences of the education and training systems and to deepen our normatively and analytically developed principles of good governance by empirical evidence. One of the results from this exercise is that the principle of multilevel governance by covenants seems to be a major component for successfully navigating youth transitions into gainful employment and decent work (4).

Chapter five starts with briefly describing and assessing the three main European Youth initiatives: the European Qualifications Framework (EQF), the European Apprenticeship Alliance (EAfA) and Erasmus+, and the European Youth Guarantee (EYG). We also develop suggestions how to strengthen the European youth policy. We argue, for instance, that the EQF and the corresponding National Qualifications Frameworks (NQF) provide already a good basis for cross-country comparisons of qualifications. This is a prerequisite for higher European mobility but should conceptually better address the individual capacity element of education and training, and operationally target better and more quickly the qualification validation of migrants and low skilled workers. We argue further that the EAfA so far did a good job in framing quality and effectiveness criteria for apprenticeships but did not yet – compared to the early Erasmus programme – reach students in school-based or dual-based VET-systems to a substantial degree. Finally, we find that the EYG indeed stimulated broader national activities to support SWT but should improve its implementation capacities and include elements of a Youth Job Guarantee (5).

Finally, we draw lessons from our case studies not by elaborating on ‘best practices’ (or their falsely intended imitations) but by developing general principles that can be applied independently from the specific political-institutional context. Drawing especially on the current main institutional

differences between our selected countries, we identify five principles of good governance which we then discuss with a view to potential improvements of European youth policies: (a) the principle of cooperative federalism as an ideal arrangement of combining institutional capacities at various levels, with the ingredients of containing veto power, equalising fiscal capacities, governing by multilevel covenants and high quality standards; (b) the principle of moral assurance as an important complement to containing moral hazard; (c) the principle of hybridisation or institutional layering by, e.g., combining company-based vocational training with academic tracks; (d) the principle of flexible implementation, e.g., organising youth guarantees according to individual needs and local or regional capacities; and (e) the principle of learning from social experiments, e.g., increasing individual autonomy through drawing rights to enhancing employability over the life course (6).

Our study concludes with a brief summary and a discussion on how the EU could strengthen its strategic role in vocational education and training and get in a realistic track to implement its ambitious goals in declaring the “European Year of Youth” (7).

1 The Theory of Transitional Labour Markets

The theory of transitional labour markets (TLM) emerged in the mid-1990s as a response to the European unemployment crisis, considered by the majority of researchers as a reflection of ‘Eurosclerosis’. The view that state regulation strangles the adaptable capacities of the market, especially through job protection, led to the recommendation of deregulation as a solution, promoted by the OECD Jobs Strategy (OECD 1994).

Although partly concurring with the diagnosis of a fundamental deficit in flexible employment relationships, the TLM concept contradicted the therapy of deregulation and instead argued for a complete reorientation of labour market institutions towards a new concept of full employment. Whereas the old concept referred to a situation of full-time and stable jobs for all members of the working-age population, implicitly, however, thought only for male breadwinners, TLM’s new concept of ‘full employment’ explicitly included all women and extended the ‘full employment’ definition by a vision of flexible and secure employment relationships over the life course. Not jobs per se but fostering and protecting earnings capacities or employability were put centre-stage (Schmid 1995, 2008).

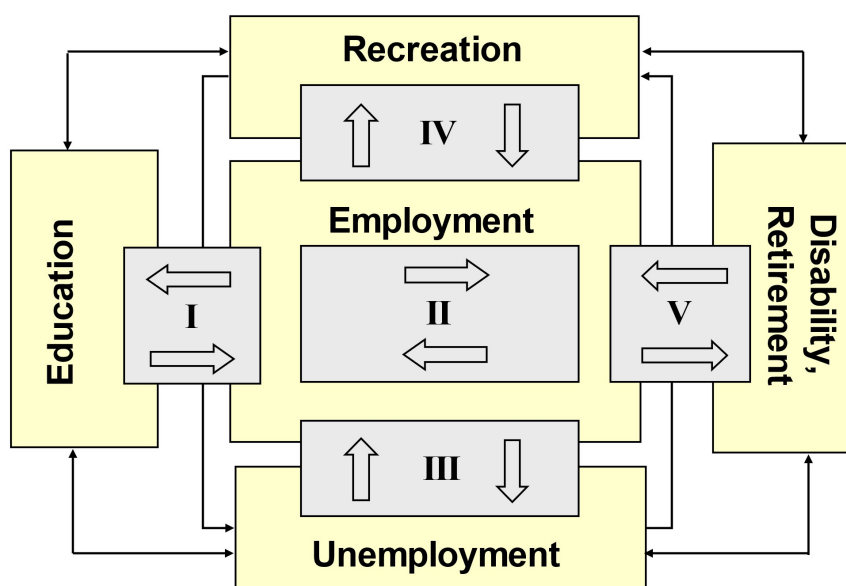
In a normative perspective, TLM considers the labour market as a social institution supporting and ensuring full employment. This not only implies income security, particularly in times of unemployment (freedom of want), but also the support of the capability to freely choose career perspectives over the life course and this includes career breaks for example for care activities, training or other unpaid but socially highly valued activities (freedom to act). Apart from this normative perspective, TLM theory also argues for a new analytical approach to study the dynamics of labour markets: instead of concentrating on stocks (e.g., employment or unemployment rates), flows should be in focus, in particular transitions from one employment status to the other, including combinations of work and education or work and unpaid care. The concept of governing social risks complements TLM theory and translates it into policy strategies in the form of pathways to prevent, mitigate or to cope with the social risks related to life course transitions (Schmid and Gazier 2002; Gazier 2003; Schmid 2006).

TLM’s history, methodology and empirical contributions have previously been reviewed (van den Berg und de Gier 2008; Gazier and Gautié 2009; Rogowski 2008). Starting from a more recent overview (Schmid 2017), this section re-examines the analytical and normative foundations of TLM theory and suggests policy strategies to govern social risks related to the five main critical life course transitions: (1) school-to-work transitions; (2) job-to-job transitions; (3) employment-unemployment-transitions; (4) employment and unpaid care-work-transitions; (5) employment-retirement-transitions. The following two sections provide a short account on TLM with a focus on the nature of risks during the life-course. Only a clear anatomy of risks can guide policy strategies, and – as we later show – on how to guide and support young people in the lengthy process of transitions from school, education, and vocational training to decent work with promising career perspectives over the life course.

1.1 The Analytical Basis of Transitional Labour Markets

The theory of TLM aims at providing a clear analytical framework addressing labour market policy geared to the new world of work, especially related to European Employment and Social Policy initiatives that put increased focus on sustainable development goals (SDGs) and indicators monitoring the green and digital transition. According to TLM, the labour market has to be considered as a system of employment transitions over the life course: transitions (flows) between education and employment or ‘school-to-work transitions’; transitions within employment or ‘job-to-job transitions’; transitions between employment and unemployment; and transitions between employment and the two other forms of economic inactivity, namely recreation (apart from time for leisure, volunteering, or own work especially unpaid family related care-work) and the status of being severely ill, disabled or in retirement (Figure 1).

Figure 1: The Transitional Labour Market as a System of Employment Transitions over the Life Course



The TLM perspective breaks with the still common illusion that all or at least most unemployed come immediately from the status of employment, or – vice versa – that most unemployed transit sooner or later back into employment (Schmid 2008, 165–212). Flows rather than stocks are needed, for instance, to distinguish between structural and cyclical un/employment: If unemployment remains stable because substantial outflows from unemployment into employment in view of increased demand are counterbalanced by inflows from inactivity to unemployment (with those previously inactive now searching actively for employment), the development can be judged as a recovery on the labour market despite the stagnating unemployment levels. The situation is entirely different if

unemployment is stagnating because there are only minimal outflows from unemployment. In that case, flow statistics indicate that labour demand is not improving.

Currently, only transitions between three labour market statuses are regularly available at Eurostat. The most recent flow data for the EU27 total population are represented in Table 1 (Table A1 in the appendix shows gender-disaggregated figures that clearly show the weaker labour market attachment of women).

Table 1: Transitions in labour market status in the EU-27, 2019-2020 (population aged 15-74, as a % of initial status) - total

	Employment 2020	Unemployment 2020	Inactivity 2020
Employment 2019	92.3	2.5	5.2
Unemployment 2019	30.0 (33.1)	39.8 (41.4)	30.1 (25.5)
Inactivity 2019	7.0	3.4	89.6

Source: Eurostat 2022; figures in brackets comparison with the year before.

Of all those employed in 2019, 92.3 percent remained in employment in 2020, while 2.5 percent of those employed in 2019 were recorded as unemployed in 2020, and 5.2 percent transitioned out of the labour force. Of all those unemployed in 2019, 39.8 percent remained unemployed in 2020, a lower rate in comparison with the previous year (41.4%). 30.0 percent (33.1% the previous year) moved into employment and 30.1 percent (25.5% the previous year) left the labour force. Thus, COVID-19 and corresponding labour market measures (especially short-time work or comparable instruments) slowed down the dynamics of unemployment-employment transitions reflected also in relatively higher flows to inactivity.²

From a TLM perspective, two features of this highly aggregated flow statistics must be emphasised: First, with about 40 percent the share of unemployed remaining in their status over one year is very high, reflecting the structural problem of high long-term unemployment in the EU which was further enhanced by the pandemic. As long-term unemployment is the biggest risk for poverty, mitigating long-term unemployment can strongly contribute to reducing poverty. Second, inactive people are more likely to become unemployed than employed people. Flows from inactivity to unemployment and employment will mostly come from the 'care-work status' (affecting especially women) or from the 'education status' (affecting especially youth) in our TLM matrix implying different policy directions: in the case of 'inactive' women it would be more

² Corresponding 2020/2021 figures were not yet available. Yet the figures for the third quarter 2020/2021 show a further slowing down of the dynamics: only 24.4% of unemployed transitioned into employment, and 51.4% remained unemployed.

supply-oriented (e.g., providing more public childcare), in the case of ‘inactive’ youth more demand-oriented (e.g., offering a public job guarantee).

The flow dynamics vary substantively among the EU member states given their differences in terms of labour market and welfare state institutions (not shown): For instance, in the 2019-2020 period only in Denmark outflows from unemployment into employment exceeded 50 percent. In Bulgaria, Romania and Greece, less than 15 percent of those who were unemployed in 2019 were in employment in 2020. Transitions from unemployment into inactivity were particularly high in Italy (44 %), and exceeded 30 percent also in Belgium, the Netherlands, Poland, Ireland, and Finland (Eurostat 2022). The lessons for labour market policy from these country differences are complex and would require comprehensive analysis. We only provide some hints here: Denmark is well-known for its flexicurity model which however also has some flaws (for a recent analysis see Hansen and Leschke 2021). The case of Italy is likely related to an underdeveloped system of unemployment insurance combined with low institutional capacities to support search or recruitment processes; the cases of Greece, Bulgaria and Romania can among others be linked to low job creation dynamics in this period.

The OECD (2010a), which scrutinised the institutional determinants of transitions, identified two interesting results from the TLM point of view: First, large gross jobs and worker flows partially reflect better job opportunities for workers due to a better job-matching process. Voluntary job changes tend to be awarded by wage premiums whereas workers facing involuntary separations suffer from wage penalties even if not connected with a spell of unemployment. Second, the generosity of unemployment benefits appears to have a positive impact on average gross worker flows. A ten-percentage-point increase in the average net benefit replacement rate would increase gross worker reallocation by about one percentage point (OECD 2010b, 169–170). The reasons for such a result that contradicts neoclassical theory (the “moral hazard” of benefit generosity reduces mobility) are not yet well understood but can be related to TLM’s theory of “moral assurance”, which predicts lower risk aversion and higher mobility in case of generous benefits (Schmid 2011, 72-90; Schmid 2020).

From a TLM point of view, the simple flow statistics – even though providing an improvement to the previous exclusive focus on stocks – are still insufficient. In one of the first summary papers on TLM, Gazier and Gautié (2009, 3) highlight the shortcomings: “[...] the boundaries between the (supposedly) stable departure and arrival positions may become blurred. In particular, the traditional distinction between three basic positions or “states” (employment, unemployment, and inactivity) is weakened by the development of a complex set of intermediate positions, depending on public schemes and programmes such as short-time working, progressive early retirement or subsidized employment. The deliberate and concerted governance of these intermediary positions is [...] at the heart of the TLM approach. One has to remark that beyond these intermediate states, the very frontiers of firms also become blurred [...]”

Education and training are of critical importance for successful transitions over the life course. In order to respond to a lack of suitable employment opportunities and to risks of unemployment and social exclusion, individuals need to be enabled to continuously transit between working and learning throughout their life course (e.g., Schömann and O’Connell 2002, 5). Given the transformation of labour markets with a trend towards less stable and more varied employment trajectories, TLM also puts great emphasis on transitions between various employment statuses (permanent, temporary, self-employment, non-employment, education, or training) over the life-course (e.g., Calandrino and Gagliarducci 2005; Delautre et al. 2021). Furthermore, in line with TLM’s ‘new’ full employment goal, the gender impact of transition dynamics is of special importance and a subject of many studies (e.g., Guergoat-Larivière and Erhel 2010; Bussi 2016; Leschke and Finn 2019; O’Reilly et al. 2019; Unay-Gailhard 2016; Behrenz and Månsson 2022).

Of special importance for policy considerations are transition studies focusing on ‘good’ and ‘bad’ transitions, where ‘good’ and ‘bad’ can be defined by various quality criteria: wages (low vs. high pay), working time (part-time vs. full-time), or labour contract (temporary vs. open-ended or dependent vs. self-employment). Furthermore, these quality criteria themselves must be put into context, especially in terms of career perspectives such as ‘bridges’ vs. ‘traps’, ‘stepping stones’ vs. ‘dead-end jobs’, ‘integrative’, ‘maintenance’ or ‘exclusionary’ transitions in the life course perspective (O’Reilly 2003, 1–48).

Another crucial issue for the design of labour market policy is whether placement services for unemployed or inactive people should concentrate more on jobs rather than long-term employability. In labour market policy legislation of many EU-member states (for instance Germany), the priority of job-placement (work-first) is still codified at the time of writing.³ This might – in the worst case – lead to institutional incentives to maximize job placements through for example placements into temporary work agencies, for which there was some evidence in Germany after the Hartz reforms in the early 2000 (Schmid 2019). Many studies confirm that placement strategies according to the principle of “work first” lead to sub-optimal results (e.g., Card et al.; Escudero 2018). Admittedly, ‘work first’ might be a meaningful orientation for placing low skilled jobseekers for which training *on* the job seems to be more effective than training off the job. Efficiency-oriented employment services, however, must look beyond a quick placement and towards ensuring sustainable employability and employment security with a high productivity potential, with the latter requiring continuous education and vocational training over the life course, especially for low and

³ The recent German labour market reform of “basic security” (known as *Hartz IV*) transformed Hartz-IV allowance into *Bürgergeld* and abolished the work-first principle (*Vermittlungsvorrang*) according to our principle of sustainable employability. In the middle of November 2022, however, the draft of the law got stuck in the second chamber (*Bundesrat*) in which the opposition of the current government (CDU/CSU) has the majority, a typical example of the “joint decision trap” (Scharpf 2006) discussed below in section 2.3; the stalemate eventually was solved some weeks later by giving up substantial elements of the reform related to sanctions and means-testing.

medium skilled workers (Schmid 2014). Such an approach requires a stronger focus on job quality in the placement activities of public employment services (Brébion and Leschke 2021), which is valued by both case workers and unemployed (Hansen and Pultz 2022).

The focus on upward transitions over the life course for low skilled workers is also justified by repeated observations that it is the low skilled who are disproportionately affected by increasing forms of non-standard employment (NSE), including part-time work, temporary work (fixed or project-based contracts, casual labour, minijobs or even zero-hour contracts), triangular employment relationships through temporary agencies or subcontracting companies and self-employment. In the EU27, NSE is on the rise and this goes especially for part-time employment, driven mainly by the service and knowledge economy (Leschke 2015; Schmid 2018; Schmid and Wagner 2017). The share of part-time employment was 14.2 percent in 2002 (earliest available data in this time series) and 17.7 percent in 2021; in the same time period temporary employment increased slightly from 13.4 percent to 14.0 percent whereas solo self-employment decreased slightly from 9.6 percent to 8.6 percent (Eurostat 2022, not shown). Developments in NSE were impacted by the Great Recession and the Covid pandemic (e.g., Bekker and Leschke 2021, Ilsøe and Larsen 2021). Importantly, so-called new forms of employment, including platform work, casual work, and voucher-based work, are also on the rise in Europe and beyond (for an overview see Eurofound 2020). These forms of employment are particularly prone to not be covered sufficiently by labour law and collective bargaining regulations as well as social security.

Empirical studies about transition dynamics and their determinants (e.g., Anxo et al. 2007 and 2008; Lassnigg et al. 2007; Muffels 2008), have commonly investigated how national regulatory and social protection systems promote and support transitions that are life course oriented, facilitate a better work-life balance of individuals and households and strengthen the social cohesion of European societies. Transition patterns within work and between various employment relationships are explained against the backdrop of a rapidly changing societal context due to ageing, individualisation, and globalisation, as well as changes in the labour market and in particular the growing importance of non-standard forms of employment.⁴

Muffels (2008, 390) addresses the need of fundamental institutional reforms that would be able to deal with the changing world of work and argues in particular for reconstructing ‘social cohesion’ on the basis of ‘competitive solidarity’. Such

⁴ After the invention of the TLM approach, the European Commission took over the analytical concept in its Employment and Social Reports, yet seems to have stopped this tradition, likely mainly due to data limitations. Tables A4, A5, A6 in the Appendix show examples of transition matrices which are telling even if they are only descriptive. The more recent social scoreboard (<https://ec.europa.eu/eurostat/web/european-pillar-of-social-rights/indicators/social-scoreboard-indicators>) does however include transition rates from temporary to permanent contracts under “fair working conditions”; for a corresponding assessment see, e.g., Leschke (2016).

suggestive – yet unclear – terms leave open, what kinds of new institutional arrangements could bring such “cohesion” and “solidarity” forward. That is why we must be more specific about the underlying values of TLM.

1.2 *The Normative Basis of Transitional Labour Markets*

The normative principles of TLM amalgamate various modern theories of justice: justice as fairness (Rawls 2001; Dworkin 2000), social choice (Sen 2009), and behavioural economics (Kahneman 2011). The core idea is to *empower individuals* to take more risk during the life course: first, by making not only work but by also *making transitions pay* through extending the social insurance principle beyond unemployment and including volatile income risks connected with other critical events over the life course; second, by making not only workers fit to the market but also by *making the market fit to workers* (slogans originally coined by Gazier) by enhancing employers’ and employees’ capacity to adjust to uncertainties by investing in individual capabilities as well as in the workplace environment (Gazier 2003; Jørgensen and Madsen 2007; Schmid 2008, 224-239; Schmid 2015).

In following Amartya Sen’s conclusion that it is not resources but capabilities that should be in focus, i.e., the shift from means of living to actual opportunities (Sen 2009, 253), TLM suggests a new basis for ‘active’ labour market policy emphasising active *securities*, giving people hand-ups instead of only hand-outs. ‘Active’ means, first, investing in people’s employability versus ‘passive’ charity, as in pure market economies; second, protecting people’s investments into employability versus protecting jobs, as in pure socialist economies. Yet it means also, beyond the pure social investment approach (Hemerijck 2017; Solga 2014), to take social conversion factors into consideration that are required to compensate for the diversity of people in their capabilities to live the kind of lives that they want to lead. From this perspective a generous income replacement that allows finding a sustainable new job is a productive investment and not a passive transfer (Acemoglu and Shimer 2000); subsuming unemployment benefits under passive labour market policy is misleading because ‘passive’ connotes only the costs and not the benefits. Equal treatment in public investments is not enough from this perspective, because the legal, institutional, or financial individual resources differ. Young people from a disadvantaged educational background, for instance, need more advice, personal assistance (‘coaching’) or even a subsidy for finding a promising apprenticeship or a decent job (e.g., Bussi 2016, 311 ff).

The second normative emphasis of TLM is its *life course orientation*. Its concept of ‘careers’ acknowledges the right of an individual to a *development* perspective in contrast to the neoliberal concept of ‘workfare’ that restricts work to an obligation as a prerequisite of receiving transfers in the case of need. The right to a career also entails having a voice in choosing jobs and working conditions in contrast to directing people into jobs as in pure socialist economies. Modern labour market services, therefore, have to support *transition securities* beyond the employment-unemployment transition (Anxo et al. 2007; Schmid 2014; Zimmermann 2011).

This leads to a third emphasis, namely *to empower individuals* to switch from one work-situation to another according to changes in the economy as well as according to individuals' changing preferences, other obligations, or work capacities over the life course. *Citizens should therefore have the right to transitions*. 'Work', in this context, includes all activities of social obligatory character, whether paid or not. Typical and commonly used examples are the right to family-related furloughs such as parental or other care leave; other examples are the right to negotiated leaves of absence for training and sabbaticals (Supiot 2001/2016). An early example of a work-related right to exercise voice as essential part of economic democracy (Hirschman 1970) was the granting of time off to representatives of works councils.

Most people accept changes more easily if the risks are shared justly, which is why the theory of justice plays an important role in the TLM concept. Four principles of justice build the *normative pillars of risk-sharing*: first, *justice as fairness*, notably in access to jobs, with inequality only justified if the situation of the most disadvantaged improves; second, *justice as solidarity*, which means sharing responsibilities according to the type of risks and individual capacities; third, *justice as agency*, which means developing individual *and* institutional capabilities to enhance individual autonomy, in other words, freedom to act; fourth, *justice as inclusion*, which means enlarging risk-sharing communities according to the interdependencies of economic and social life.

This normative backdrop of TLM forces researchers and policy makers to concentrate on *risky events* over the life course and to look at whether job-to-job transitions lead to career development and *social integration* or *social exclusion*. This requires sound analytical and empirical instruments to study and present transitions and multi-year transition-sequences or trajectories⁵ (e.g., Brzinsky-Fay 2011; Levels et al. 2022). The perspective of maximising employment opportunities draws the attention also to the adjustment potential of transitions *within* stable employment relationships (for instance, the transition from full-time work to part-time work or the combination of part-time work with part-time education or training and care for children or other dependents), which is of great – and often neglected – importance. Such *internal flexibility* should be considered as functional equivalent to *external flexibility*, relevant particularly in view of the fact that most people still strive towards tenured positions.

This view also justifies a redefinition of the full-employment goal. So far, the maximisation of employment prevails in official (EU) documents. For example, the European Commission's most recent employment rate target with a deadline

⁵ We suggest to distinguish between the terms "transition" and "trajectories", the latter being strictly determined by rules such as the rules for requiring an MA or PHD before becoming tenured at the university, or a vocational licence (in particular in the medical sector), or seniority rules (age-dependency of wage increases), whereas "transitions" are not determined but rather the results of the interplay between institutions, external constraints and individual characteristics or decisions.

by 2030 is 78 percent (from 72.5% in 2020).⁶ In contrast to this kind of maximizing employment stands the classic imperative of minimizing involuntary unemployment (3% by Lord Beveridge), recently set, e.g., at the level of 2 percent by Anthony Atkinson (2015, 139-140).

To some degree, TLM combines these two approaches: It advocates minimizing involuntary unemployment, in particular long-term unemployment, but it rejects maximizing employment per se without qualifying the kind of jobs. TLM's main motivation for raising the nominal employment target is to allow individuals *and* employers greater variation in “*effective employment*” by providing active securities beyond the risk of unemployment, in particular through protected working time variation over the life course.⁷ In other words: The more we allow internal flexibility in an employment relationship over the work-life course, i.e., including non-working phases due to training, parental care, or even sabbaticals, the higher the need of increasing employment participation to keep a certain level of welfare at a given level of productivity. The aim is a win-win strategy in which employers gain greater capacity of work-place adjustment and the workers greater autonomy in the choice of working time and employment. The new full employment goal requires a complex set of indicators for guiding and evaluating labour market policies. In the work-life-course perspective, five core objectives should be considered (see Figure 2, below).

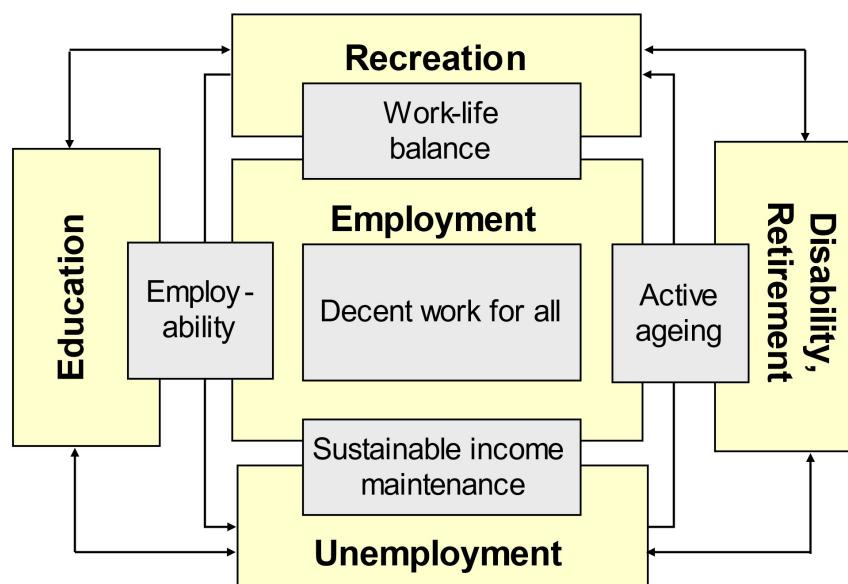
Employability (I), here located between education and employment, is the summary expression for a complex set of individual capabilities (cognitive skills, learning and communication capacities) to achieve gainful employment. Such capabilities are at the core for people entering the labour market because early inequalities in employability determine the long-term career perspectives that can hardly be overturned by later policy interventions. Employability, which is very difficult to measure, is not a fixed parameter but variable and in need of renewal or enhancement over the life-course. Equal opportunity of this basic employability creates the kind of individual autonomy to realize the freedom to act as noted in the theory of justice by Amartya Sen and others (Gazier 1998; Gazier 2022a; Gazier 2022b; Noel and Schmidt 2022). As “employability” is the central objective of just transitions for youth, Box 1 provides a more detailed consideration of this concept elaborated by Bernard Gazier.

⁶ Note, however, that the European Commission indirectly qualifies its employment target: The gender employment gap should be halved (from 11.7 percentage points in 2019); NEET should be reduced to 9% (from 12.6% in 2019), and the number of people at risk of poverty or social exclusion should be reduced by at least 15 million (from 91 million in 2019, out of which 17.9 million were children aged 0-17). Also, employment as measured by Eurostat includes all employment of at least 1 hour in the reference week of the European Labour Force Survey.

⁷ There is a distinction between “nominal” employment rates (those in work-contracts) and “effective” employment rates (those, who are actually at the workplace). The TLM approach [...] can also be understood as a concept for managing the gap between nominal and effective employment rates by enhancing an economy's adjustment capacity in an equitable and efficient way” (Schmid 2015, 74).

Decent work (II) means more than just having a job. The new ‘full’ employment goal emphasises (job) quality aspects such as minimum wages, learning opportunities on the job, healthy working conditions, and options to working time flexibility as extensively explained and developed by ILO (1999).

Figure 2: Objectives of Governing Social Risks over the Life Course



Sustainable income maintenance (III) during periods of unemployment means that benefits replacing wages must fulfil both functions: maintaining sufficient demand, i.e., the economic stabilisation function, as well as securing the acquired individual income status, i.e., the social stabilisation function. The balancing out of both functions requires the institutionalisation of social insurance principles in contrast to means-testing or individual accounts preferred in neoliberal concepts of maintaining income during unemployment (Schmid 2008, 231-35; Schmid 2020; Schmid 2021).

Work-life balance (IV) expresses, apart from recreation activities in the narrow sense, especially the objective of combining unpaid work related to care obligations and gainful employment in an equitable way, e.g., partly by compensating the intermediate loss of wages and regulating the necessary coordination of employers and workers interests. The way this combination is regulated has tremendous impact on employment opportunities and job quality including wages, in particular for women (Eurofound 2017; Arabadjieva 2022).

Active ageing (V) expresses the goal of income security in flexible retirement (e.g., Hartlapp and Schmid 2008) as well as in flexible work arrangements for disabled, e.g., in the form of work-place-adjustment or personal assistance (Deakin 2009).

Box I: Employability: towards a general and dynamic understanding

Towards an enlarged conception of employability: the companies as a core player

Previous work on employability (mainly from economists) focused on labour market policies and on the challenge of placing disadvantaged workers in a job (Gazier 2022b). Since the 1990s, employability is no longer restricted to a personal attribute (being or not being employable) but rather seen as an interactive process in each context. Skills and other labour market attitudes interact with labour market situations and with evolving requirements from employers.

One limit and one conceptual problem remained: companies were mainly seen as constraints, not as full-fledged actors. And the often-made connection to the idea of “capability” (Sen 2009) led to a distorting of Sen’s main tenet, the idea that a “capability” deals with final “functionings”, not with intermediate abilities such as mastering labour market processes (e.g., job search, learning on the job). Recent work in collaboration with researchers from management science and from sociology brought to the forefront the role of companies. “It is much more in a situation of employment and work than in a situation of unemployment, that individuals have the resources and opportunities necessary to prepare sustainable career paths” (Noel and Schmidt 2022, 19).

Each discipline underlined specific enlargements. From the management science point of view (ibid, 19 – 32), employability is becoming more and more a “managerial imperative”, and not only a legal obligation as often the case. In Germany, for instance, the right of disabled people against their employer to a job that enables them to utilise and to develop further their abilities and knowledge, privileged access to firm-specific training, a work-environment that conforms to their disability, and a workplace that is equipped with the required technical facilities (SGB [Sozialgesetzbuch] IX, §81 (4).

Employability facilitates the ability of organizations to adapt to change, enabling them to act in four domains: (I) inclusion (the ability to integrate different types of workers); (II) mobility (from one task/trade to another; from one job to another, from one company to another; (III) flexibility (especially internal flexibility) and (IV) development, especially on the individual’s side (well-being, evolving competences etc.). From the sociology of capacities point of view (Zimmermann 2022), a key distinction should be made between competences (knowledge, skills) and capacity, the latter one requiring latitude of choice and power to act in order to reach outcomes valued by the individual. This leads to a second distinction, crucial here, between “skills-based employability” and “capacity-based employability”. While the first one sums up competences, diplomas, and labour market position, the second introduces the dimension of emancipation. Only a limited group of companies currently develop capacity-based employability. The convergences and complementarities between the three approaches lead to an emerging enlarged and more general conception of employability (Gazier 2022a), but also a more complex one, because such a conception requires various actors to interact.

Employability over the life course: from identity building to transition capacity

Employability is a co-construction evolving over time, with different actors becoming important at different life-stages as every individual goes on his or her personal and professional path, from early childhood to school, then to the first labour market and work experiences, to more stable tenures, lifelong learning and to retirement. Among the main actors are the family, networks, schools and initial education systems and institutions, companies, labour market policies and institutions.

There are various stakes, constraints, and opportunities: choosing one's way, the conflict between quickly earning one's income and "investing" in oneself, living in a given town or region, exposed to a "compressed work career", i.e., finding at the beginning of adult life a trade, a job, a mate, creating a family, having children (Schmid 2008: 177), and later the reorientations during the working life.

It is useful to pinpoint the interactions between these stakes and interventions of actors when exploring the specificities or dimensions of the employability of young people's "initial" employability which is termed here "basic employability". Two traits should be combined. The importance of an early and stable path, in a process dominated by identity building and inclusion, which often relies on enabling contacts with work and companies, as it is the case with well-organized apprenticeship in the "dual system", on the one hand; but, on the other hand, also the importance of self-discovery, personal mobility, which often go with risk-taking behaviours and a strong need for contacts with mates. In a context characterized by segmentation and discrimination, the ability to use "exit" strategies is key, while collective action ("voice") is less frequent and mainly relies on networks, cf. the "great resignation" observed in Europe since the COVID-19 pandemic, especially regarding seasonal jobs in hotels and restaurants.

The role of companies and of professional networks is of course increasing when one considers employability of more mature workers, a "second employability" often dealing with restructuring and retraining. Then we should consider "transition capacities" (Korver and Schmid 2012), strongly determined by the job and trade a person is leaving. The role of adaptive expectations becomes central in the case of disadvantaged workers (Stéphanus and Vero 2022 for the French case), reflecting an objective fact: the strong disproportion between the investment in initial education (15 years as a mean for every person) and for lifelong learning interventions (as a mean, 1 year over the whole working life), making much more costly and risky any reorientation for disadvantaged workers.

Therefore, one should be cautious when interpreting the number of young people in early employment or in "NEET" situations, which may reflect very different constraints, opportunities, and strategies, especially regarding family formation and identity building.

2. Principles of governing social risks

The life course approach of TLM's analytical framework leads to a focus on the main social risks that occur to all people over the life course. The first step of good governance should thus be the proper identification of the risk in focus (Schmid 2008, 281–328).⁸

The following “portfolio” of life-course risks (see Figure 3 below) belongs, first of all, to the kind of risks that are known as “decision risks” or “internal risks”. In other words, these risks follow individual or collective choices (Giddens 1996; Richter et al. 2006). Correspondingly, such decision risks can also be regarded as opportunity either for the individuals or for the common good. Another important aspect is whether risks can be calculated (probability risks) or not (uncertainty), a distinction already emphasised 100 years ago by the economist Frank Knight (1921). The latter distinction is particularly important when it comes to policy interventions.

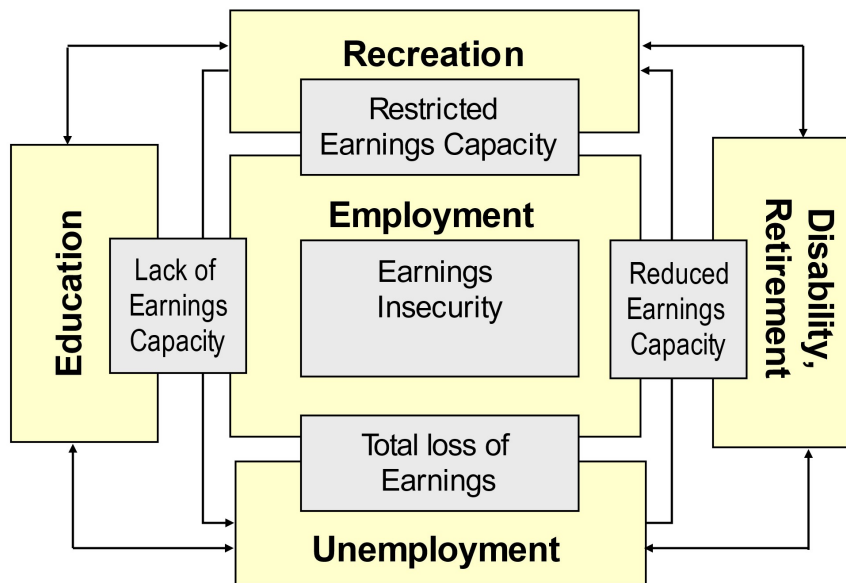
In this section we consider the labour market basically as an institution that regulates the exchange of work against wages and thus concentrate on earnings related risks. We do not consider other important risks related to work (e.g., working conditions inducing accidents, illness, depression) here. This does not mean that we do not recognise the social aspect of work especially in terms of identity building. To the contrary, the labour market is not a pure economic but also a social institution (Solow 1990). Apart from earnings, gainful work also establishes social reputation and self-esteem, in short identity (see Box 1 on employability). Whether a job implies an advancement or a decline in the social ladder (how do others, in particular the peer groups, perceive me?) plays an important role, especially in the early choice of an occupation. Thus, identity risks must be included into the terminology of “social risks”. In the following we summarize the main social risks that occur during an individual work-life-course, drawing on Schmid (2006, 2008, 2017).

- *Lack of earnings capacity* (I) hints to the risk of continuous disadvantage on the labour market since equal opportunity to education (often already in early childhood) and to employment is not realised. The consequences are low wages, often below a decent living standard due to the absence of talent, low cognitive or communication skills, lack of work experience (competence) and problem-solving capacities. These risks are aggravated in case of repeated spells of (youth) unemployment.

⁸ TLM-theory (TLM 1.0) formerly used the terminology of “social risk management” as it was quite common in the 1990s among economists (e.g., Holzmann and Jorgenson 2000) and sociologists (e.g., Esping-Andersen 1999). Today, however, the perception of the term “management” is often narrowly connoted with neoliberal ideas; TLM 2.0 changed the terminology to “governing”, which is not only a more precise reflection of the multi-level complexity to deal with social risks forbidding the application of simple “social technologies”, but also recognition of many peoples’ perception that “management” excludes participation in decisions. TLM 2.0, however, keeps the terminology of (social) risks as an analytical tool, even knowing that many people connote with “risk” only adversity (the negative side) and neglect the other side of the risk-coin, namely “opportunity”.

- *Earnings insecurity* (II) may be due to different reasons of volatility in effective demand. In order not to shift this kind of risk to workers alone (e.g., zero hours contracts or on-call work, especially short-time work), intelligent ‘flexicurity’ arrangements are required to share this risk in a balanced way between employers, employees and the state. Work interruption due to temporary illness, need of recreation or rehabilitation, training or job mobility might also cause wage-income risks.

Figure 3: Typology of Labour Market Risks over the Life Course



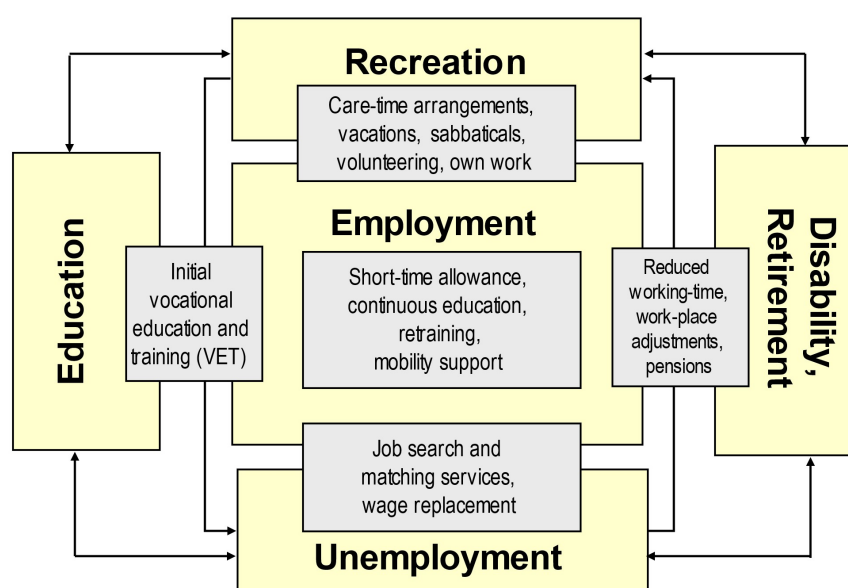
- *Total loss of wage income* (III) can be due to frictional, structural or cyclical unemployment. It has negative repercussions both on demand (required stabilisation of the economy to avoid damaging positive feedbacks in form of chain reactions) and supply (consumption, individual investments or savings). It is well-documented that unemployment is one of the most important causes for individual poverty.
- *Restricted earnings capacity* (IV) presupposes a potential full capacity to enter or (full-time) employment, but that this capacity is intermediately restricted mainly by social obligations of unpaid work for caring obligations. Other reasons of reduced earnings capacities are freely chosen extended vacations (sabbaticals) or the wish to work intermediately on one’s own account. The consequences are not only loss of wage income but also the potential interruption of careers and the start of downward transitions.
- *Reduced earnings capacity* (V) is related to an individual lack of ‘full’ capacity due to (partial) disability, long-term illness or age-related physical exhaustion.

The result is a loss of wage-income due to diminishing employability, often also to the detriment of the social status.

2.1 Policy instruments to govern life-course transitions on the labour market

Dealing with the enumerated risks above requires distinctive policies for different types of transitions. Figure 4 summarizes the main common policy instruments that later shall be explained and exemplified in the context of just transitions from school-to-work.

**Figure 4: Policy Solutions of Governing Social Risks:
The System of Work-Life-Insurance**



As the portfolio of these policy instruments is familiar, we only provide a few examples drawing on European social policy initiatives:

- Already in 2008, the European Parliament and the Council issued the Recommendation on the *European qualifications framework* (EQF). It was revised and strengthened in May 2017. The purpose of these frameworks, adopted by 35 countries (including, e.g., Switzerland and Turkey) and reinforced through respective national qualification frameworks (NQF), is to make skills and competences comparable to foster mobility on the (still developing) European labour market. The EQF recommends implementing a learning outcomes approach in contrast to measuring qualification purely by the length of schooling and its institutional background: NQFs should enable workers to make their skills and competences more visible no matter where they acquired them.

- Until the Great Recession 2008/09, the use of short-time work (STW) was mainly a characteristic of German labour market policy that survived this crisis without increasing unemployment. With this model in mind, the initiative *Support to mitigate Unemployment Risks in an Emergency* (SURE) became one of the first concrete steps the European Commission took in the COVID-19 pandemic.
- Also in response to the Great Recession which affected youth disproportionately, in 2013, the European Commission launched a *Youth Guarantee* which was reinforced in 2020. This initiative is geared at youth under 30 and aims at good quality offers of employment, education, apprenticeship or training no later than four months after having become unemployed or finished formal education.
- The *European Alliance for Apprenticeships* (EAfA) unites governments and key stakeholders with the aim of strengthening the quality, supply and overall image of apprenticeships across Europe, while also promoting the mobility of apprentices. In July 2020, the European Commission launched the renewed EAfA as part of the Youth Employment Support Package. The reinforced alliance calls for new commitments on digital and green apprenticeships, focusing on the economic sectors that will be at the front line of the transition to a climate-neutral Europe.
- According to the new objectives of the *European Pillar of Social Rights Action Plan* (EPSAP), at least 50 percent of Europeans aged 25 to 64 should be participating in training in any given year by 2025, and at least 60 percent by 2030.

There are however some challenges in implementing these policy instruments successfully. Much depends on individual risk perception and the corresponding framing of policies; other requirements are proper timing (anticyclical vs. procyclical), sufficient financial resources and a supporting institutional infrastructure, and – last but not least – the ability to learn from successes or failures, i.e., learning by monitoring. To meet all these requirements, coordination of individual and collective actors is required, in other words, the governance of social risks that goes beyond the (labour) market and state actors. Before turning to the details of policies, therefore, two strategical aspects of governing social risks require attention: first the way how individuals perceive risks (2.2), and second the way how individual actors overcome uncertainties in sharing risks (2.3).

2.2 *Risk perception and how to make rational risky choices*

In contrast to the mainstream of rational choice theory the new paradigm of governing social risks takes into account that people tend to myopic decisions or – depending on the framing of risks – to engage in unreasonable speculations or, in turn, extreme risk aversion. These tendencies are predicted and explained by the theory of intuitive judgements and choice, developed and represented mainly by Daniel Kahneman (2011), Nobel Prize winner in economics. His prospect and framing theory contain four core ideas regarding asymmetries of risk perception:

1. First, the carriers of utility are events and not states. That means that people assign utility to gains and losses relative to a reference point which is often the status quo. Critical transitions from one employment status to another during the life course are prominent events where people compare utility and disutility, often with reference to wages or income of peer groups.
2. Second, in assessing the prospects of events, losses usually loom intuitively larger than gains. Many experiments suggest that the loss/gain coefficient is about 2:1, which means that losses are valued double than gains.
3. Third, there is an endowment effect which implies that present or past experiences intuitively get higher values than prospects. The German comic talent Karl Valentin expressed this insight once in the statement: “In the past, even the future was better.” Thus, the transition from the status quo to a new state which promises some (uncertain) benefit is valued less than the transition from the status quo to a new state that implies (certainly) giving up something. This endowment effect often leads to myopic decisions and thereby violates a substantive condition of rationality, namely utility maximisation.
4. Fourth, framing may violate another assumption of rational choice theory, namely the consistency of decisions. Framing theory refers to the fact that alternative formulations of the same situation make different aspects accessible to actual perception thereby leading to different reactions. The same objective outcomes can be evaluated as gains or losses, depending on the framing of the reference state. In experimental situations, for example, the prisoner’s dilemma was played out several times, once formulated as a Wall Street game and the other time as a community game. It turned out that people were more inclined to cooperate in the community game than in the Wall Street game.⁹

These asymmetries of risk perception lead to four hypotheses as crucial starting points for governing social risks:

1. First, if there is a choice between certain and uncertain *gains*, most people tend to be *risk-averse*. They choose the certain alternative, even if the objective value of the prospective gain is greater than the value of the certain gain. In other words, they prefer the bird in the hand to two birds in the bush.
2. Second, if people have to make a choice between certain and uncertain *losses*, however, they tend to be speculative *risk-takers*. Since they don’t like to lose anything, they tend to prefer the uncertain loss to the certain loss, even if the objective value of the prospective loss is higher than the immediate and certain loss. In other words, they tend to behave like a player in the roulette game who tries to recoup his loss again and again until he/she ends up with nothing.

⁹ To provide another example, inflation is perceived less dangerous if framed in connection with reducing the unemployment rate from 10% to 5% but considered more dangerous if framed with increasing the employment rate from 90% to 95% (Bernstein 1996, 274, referring to Amos Tversky, a collaborator of Kahneman).

3. Third, most people *overestimate minor risks* that are immediately in sight, such as the possibility of becoming ill shortly before a planned journey. On the other hand, most people *underestimate major risks* that lie in the somewhat more distant future, such as becoming unable to work through disability or being forced to change the occupation. In consequence, people are much more likely to buy travel than to buy disability insurance. They are also less willing to save for education or training that may be necessary in the future.
4. Fourth, individual risk-perception depends also on values, in particular *justice and fairness*. Reciprocity, i.e., a felt balance of giving and receiving, is guiding individual behaviour. Social insurance of risks, however, requires per definition the readiness to some kind of solidarity, i.e., to give and not to receive. Apart from pure altruism, most solidarity depends on trust that something will be given back, at least in the long run. This trust, in turn, depends – among others – on how decisions are made and how non-compliance is controlled or sanctioned. Procedural justice will thus foster solidarity. The feeling of not being included or respected in a decision process, or the impression that agreements are not under control and potentially open to misuse can even lead to negative reciprocity, i.e., to retaliation even on the costs of individual utility, sometimes also labelled ‘altruistic punishment’ (Fehr et al. 1997). Trust building capacities is an essential element of good governance which we address further down.

Before translating these hypotheses into policy strategies, we would like to emphasise that the prospect theory of Kahneman and other colleagues of this school (e.g., Thaler and Sunstein 2009) is – at least partly – contested by the school of uncertainty or rational heuristics, most prominently represented by Gerd Gigerenzer (2002, 2013). There are two main differences between these schools: The school of uncertainty, first, emphasises the common misperception of probabilities, second the impossibility to calculate real-life risks in a reasonable way. Most people do not understand or even gravely misunderstand probabilities. This “statistical innumeracy” – as Gigerenzer persuasively demonstrates – is common, causing thereby unnecessary myriads of individual misery and suffering. Framing risks in the terminology of frequencies dramatically improves the understanding of probabilities. Second, one barrier to understanding numbers is our seeming inability or reluctance to live with uncertainty leading to a nearly universal tendency to create an “illusion of certainty” that often resembles the illusion of turkeys or geese.¹⁰ Developing “mind tools” that are easy to learn, to remember and to apply is therefore crucial to overcome risk-innumeracy. Looking back to history, Gigerenzer maintains, heuristics proved useful in the evolution of humanity. Intuitively understandable devices of communicating risks (in particular through natural frequencies) are better tools than Kahneman’s rational

¹⁰ The probability, that something happens again if it happened before already n-times, is $(n+1) / (n+2)$. That means that after the first day, the expectation to live at the next day is $2/3$, i.e., 67% for a turkey or a goose; after 100 days it is already $101/102 = 99\%$, which does not help these poor animals on Thanks-giving or Christmas day.

“slow thinking” to overcome the illusion of certainty or to misunderstand probabilities.¹¹

These insights can be used to design and gain acceptance for strategies of governing social risks.

1. First, a feasible *strategy against risk aversion* is to provide for a large opportunity set in critical events during the life course. Such an opportunity set would reduce the high subjective valuation of the smaller but more imminent loss against the greater but uncertain gain in the future. It would also increase the probability of the possible gain by extending *and* securing available alternatives in case that the first risky choice might fail. The preference for ‘one bird in the hand to two birds in the bush’ might change if more bushes were in sight. Establishing such a variable opportunity set with reliable ‘stepping stones’ or ‘bridges’ is one of the main objectives of TLM.

Let us recall the basic theory of insurance which recognises two main decision problems related to imperfect information. The first arises before the contract and may jeopardize the market if ‘good’ risks choose not to be insured while ‘bad’ risks are unable to finance it. This is the “*adverse selection*” problem. The second comes after the signing of the contract and stems from the behaviour of the insured agents, who may (e.g., related to car insurance) neglect prudent driving. This is the “moral hazard” problem. Various solutions have been conceived and implemented, e.g., mandatory insurance with prices partly reflecting the expected intensity of risks (fighting adverse selection) and deductible payments limiting abuses (fighting moral hazard). TLM emphasize the fight against exclusion, and many policy priorities pertain to the adverse selection class of problems, for instance enforced solidarity through mandatory unemployment insurance and an enlarged pool of unemployed.

The other side, however, is no less important but less well-known. In contrast to the (often exclusive) neoliberal emphasis on *moral hazard*, TLM accentuates *moral assurance* (Schmid 2020, 469), i.e., the incentive to take more risks through active securities. There are many examples for such active securities and we spell out some here along the line of the five main life-course risks: (I) the permeability of educational tracks so that the early choice for a vocational track does not exclude entering a professional or even academic track later in the life-course; strengthening the image of historically low status jobs like caring services¹² or physically demanding jobs; (II) the combination of

¹¹ Single-event-probabilities – apart from relative risks and conditional probabilities – can lead to miscommunication because people tend to fill in different reference classes. This type of miscommunication happens frequently with mundane statements. Gigerenzer’s favourite illustration are weather reports: Hearing that “there is a 30 percent chance that it will rain tomorrow,” some people think that it will rain 30 percent of the time, others that it will rain in 30 percent of the area, and still others that it will rain on 30 percent of the days that are like tomorrow. Although the third option is the intended message, approximately two thirds of the people will interpret this statement incorrectly.

¹² In Germany, for instance, Ebbinghaus (2022) finds that the risk of status loss is an important determinant for choosing or not choosing the vocational track of nursing care services

(intermediate) risky part-time jobs with part-time unemployment benefits possibly combined with the right to enter a full-time job when opportunities arise; (III) the right to compensatory income transfers in case of intermediate lack of effective demand (i.e., short-time-work); the guarantee to keep acquired unemployment benefit entitlements when transiting into self-employment; the transformation of unemployment benefit entitlements to capital support for start-ups or to investments in further education or training or to wage-cost subsidies for recruiting unemployed; (IV) compensatory income transfers in case of parental or care leaves which encourage family formation; the accumulation of drawing rights to training or mobility funds which would enhance individual autonomy in contrast to unemployment benefits depending on the years of contributions; (V) public support for workplace-adjustment to counter employers' risk aversion to hire disabled or chronically ill people.

2. Second, the proper *strategy against loss aversion and unreasonable risk-taking* would be to establish disincentives for gambling, for example through high taxation of speculative gains (winner-takes all). As far as loss aversion is related to concerns of relative wages, progressive income taxation would not only be fair but also efficient.¹³ Moreover, the level or duration of unemployment benefits affects the relative position. Generous unemployment benefits might be efficient in terms of search for sustainable and productive jobs, but might also be considered as unfair by (employed) taxpayers who fear opportunistic take-up in favour of changing the relative income position; fair controlling of moral hazard would be necessary under this perspective. Furthermore, job protection can be rational in the sense that it avoids speculative search behaviour on the supply side and irresponsible hire and fire policy on the demand side. Both behavioural tendencies lead to high fluctuation costs for the economy. As empirical studies have shown, however, high job protection works best in combination with activation policies, for example with the obligation of further training or the obligation of flexibility through taking over different tasks within the protected employment relationship (e.g., Bertola et al. 2000; Card et al. 2010; Escudero 2018). Otherwise, job protection turns into insider monopoly and corresponding segmentation of the labour market.
3. Third, the proper *strategy against overestimating short-term (small) risks and underestimating long-term (high) risks* would be to extend the expectation horizon for people engaging in risky employment relationships. One way to do this would be to establish social rights and entitlements, for instance the entitlement to continuous training opportunities on the supply side and job

(*Pflege(fach)kräfte*); apart from the not attractive wages for these occupations, children from middle or high educational background fear a status loss due to the low image of this profession: their peer groups, friends or parents connote with "caring", e.g., low intelligence or low education.

¹³ For a thorough discussion of this intricate issue see Giacomo Corneo (2002) who argues that people are not only concerned about the level of wages but also about the relative position ("rank", "status") of their wages. The more the egalitarian principle of "equal wages for equal work" is emphasized, the more should opportunistic (or monopolistic) claims for higher wages be discouraged through progressive taxes.

guarantees on the demand side. Another way would be to set up incentives or obligations for preventing or mitigating risks with high and long-lasting damages, for instance incentives for preventative measures (such as training investment), or the requirement to participate in universal private or public insurance schemes (such as invalidity insurance), or the requirement for the employers to take positive actions towards disabled people, for instance through work-place adjustment or quotas for disabled. Furthermore, default options could solve the underestimation of long-term risk, for instance the combination of automatic membership to unemployment insurance and vocational disability insurance or automatic work-place pensions at each employer or work contract with opting-out rules. Also, employers could be obliged to pay higher insurance contributions as a function of the higher risk of downward transitions to unemployment related to fixed-term contracts or temporary work.

4. The most important strategy to *support procedural justice* and thereby *recognising fairness consideration in risk perception* is to give people a voice in decisions dealing with risks and to connect resulting public transfers with conditionality. Downward wage flexibility, for instance, may be accepted by workers for the employers' commitment of job security or later wage increases through productive investments; wage contributions to (un-) employment insurance will be accepted under the assumption of effective control of moral hazard (e.g., Meuleman et al. 2018 based on the European Social Survey. Vandenbroucke et al. (2018) complemented this finding drawing on a sophisticated customised survey which shows that EU citizens are ready to share the risk of unemployment across borders yet opt for generous benefit packages only if they are combined with education and training to all unemployed citizens; moreover, in most countries support is stronger if the implementation of risk-sharing is decentralised and co-determined by social partners.

Taking into consideration individual risk perception is one way for establishing proper risk-governance-strategies, but this does not suffice. Preventing, mitigating and coping with risks is – in practice – usually the outcome of the interplay of many actors at different levels: 'vertical' (local, regional, national, transnational) and 'horizontal' (firms and collective actors, in particular trade unions and employers' organisations). From the actor's point of view, one therefore has to ask: What can the state of the art of multilevel governance research tell us about dealing with labour market risks?

2.3 *Multilevel governance of labour market risks*

The term governance came into the debate in the 1990s to describe the reality of politics in the European Union (Marks et al 1998). It was celebrated as a fresh alternative to traditional state-centred analyses demonstrating how subnational, national and supranational actors cooperate in the process of European integration. Labelled quickly as 'multi-level-politics' approach, the term "governance" fostered since then a myriad of studies and scholarly careers. Its

state of the art can be visited, for instance, in a recent special issue of *The British Journal of Politics and International Relations* (e.g., Hooghe and Marks 2020).

Most of the governance-followers took over the sceptical view from the founders of this school that the future of European integration looked rather gloomy, especially due to the alleged fact that “hierarchical imposition exists as the last resort only for one specific type of politics” at the EU-level. In functional terms, this type of politics was labelled “negative integration”, in other words, “policies that abolish and prevent national regulations and government actions that interfere with the free movement of goods, services, capital, and persons in the European market” (Scharpf 1997, 210). Positive integration, i.e., policies that would restrict free movement of goods, services, capital, and persons with the aim of ensuring European common goods or values (e.g., the guarantee of necessary social services at the local level, social standards like minimum wages or skill requirements to exercise a profession, cross-national public transfers), was considered out of reach, in particular in the social policy area including labour market policy.

One possible way forward, we suggest, is to take up the idea of covenants, first introduced – in the spirit of TLM – in a contribution by Korver and Oeij (2008), then deepened and extended by Korver and Schmid (2012). The starting point of this concept is that the formation of sustainable employability requires the cooperation of (prospective) workers, employers, and public authorities at an equal level-playing field.¹⁴ A one-sided control of skill development and deployment does not work, as, for instance, the erosion of the internal labour market (with employers’ dominance) signals. Control is part of governance, with governance as a shared responsibility and interest of employers and workers alike. Since employability is of public interest, governance should include the relevant local public authorities (Schakel 2020). Local authorities and the civil society need also to be included both for participatory reasons¹⁵ as well as for ‘social control’ reasons.¹⁶ The question is how to define and codify common interests and thereby to balance diverging interests.

Covenants are the appropriate mechanism for defining and codifying such common interests by way of undersigned written agreements, or a system of agreements, between two or more parties, at least one that is or represents a public authority, meant to effectuate governmental policy. There is not one format of covenants, but they share common features: enough overlapping interests of participants, mechanisms bringing about both definition and the machinery of achievements, the parties cooperate, and formal sanctions are absent, yet parties

¹⁴ For an explicit and theoretically insightful conceptualisation of decentralised cooperation related to skill formation we recommend Emmenegger et al (2019).

¹⁵ The EU regulation of *Territorial Just Transition Plans (TJTP)* requires according to Article 11 (3) Reg (EU) 2021/1056 the involvement of civil society in the development of the TJTP.

¹⁶ Remind the power of “altruistic punishment” for the realization of shared social norms as argued in section 2.3. A mundane example is the punishment of smoking in public areas which was a generation ago considered as “normal”; poaching of skilled labour could or should be an example relevant to our topic.

can go to court in case of another party's default. Covenants are, in other words, a kind of “negotiated flexibility and security” that helps to ensure both sustainable individual transitions over the risky life-course as well as a flexible and innovative labour pool able to adjust to the challenges of the digital economy and green structural change.¹⁷ The criterion for the first is the fair distribution of opportunities for the *development* of skills (e.g., by promoting talented youth with vulnerable background); the criterion for the second is the efficient distribution of the opportunities for the actual *deployment* of skills (e.g., by including talented migrants). Covenants aim at bringing these two requirements together by pursuing the mutually agreed goals and following the ‘pacing device’ of learning-by-monitoring. In such a process there is no need of “hierarchical imposition” as a starting point but the need of common values and objectives, yet supported by the “shadow of hierarchy”, for instance in the form of agreed quality standards. Covenants between representative actors at various levels ensure diversity of interests and capacities, and learning-by-monitoring can safeguard that such diversity leads to the sharing of knowledge and, ultimately, to an efficient redesign of the governance of labour supply or demand and thus of the labour market.¹⁸ Moreover, recent studies emphasise the importance of sharing knowledge for innovation and development instead of establishing property rights related to ‘human capital’ (Lu et al. 2022; Stiglitz and Greenwald, 2015).

We now turn back to our target group, the youth, i.e., to the most important transition-phase during the life course. We tackle the question how the normative target of sustainable employability (see Box I) can be reached? Before exploring the empirical evidence, we try – in the concluding section of this chapter – to develop some strategies that are consistent with the insights of risk perception and risk governance.

2.4 Governance strategies of sustainable employability

Lack of *sustainable earnings capacities* or even the risk of *un-employability* are the core-risks in the transition phase from school-to-work (SWT). Governing these risks means – first – sufficient investments into ‘human *and* social capital’, especially in general competences like reading and mathematical skills, communication skills, learning abilities, and (complementary to natural endowments) secondary virtues like endurance or ambiguity tolerance. By emphasising human *and* social capital to develop earnings capacities, young people become fit for the market, able to raise their voice and thereby to shape the market. A high earnings capacity, the core element of sustainable employability, is the best insurance against all other social risks that occur during the later life

¹⁷ For an application of this concept at micro-, meso-, and macro-level see Schmid (2008, 314-325); Korver and Schmid (2012, 42-50).

¹⁸ For a deepening discussion of covenants as model for multilevel governance, especially related to the extended definition of the “public good” based on John Dewey (1954, 15ff, 166 ff), warding off negative externalities or calling forth positive externalities, and solving “joint decision traps” based on Albert Hirschmann (1958, 2-7) and Fritz Scharpf (1997, 144) see Korver and Schmid (2012).

course. Second, governing the risk of un-employability over the life course cannot only consist of providing high levels of formal education. Education must be related to market needs, i.e., to the skills required to produce the goods or services that consumers demand. And third but importantly employability has to pass the test of capacity, i.e., the test of self-reliance and emancipation (see Box I).

Recalling the general principles of governing risk, especially creating large opportunity sets, setting disincentives for speculating risk taking (gambling), extending the expectation horizon, and giving people a voice, the theory of TLM suggests five strategies to support basic or grounded employability, i.e., employability that has to be maintained and further developed during the later life course: (1) the combination of learning, working, earning *and* identity building; (2) the combination of job-specific *and* general skills; (3) the reduction of information asymmetries by voice *and* trust; (4) a fair risk sharing of costs and benefits related to the investment; (5) guarantees for further education or jobs as last resort.

(1) New jobs often require new skills (e.g., European Commission 2012, OECD 2022). But not all new skills require formal education: Time served in schools or universities is not enough; what counts is what people can do with what they know, especially in situations when new problems arise (coping with uncertainty). Only confidence into these individual capabilities encourages youth to make risky choices if the labour market dynamics change the demand of skills and competences. This becomes all the truer with the internet revolution and its rapid access to all the passive knowledge that one may need. Furthermore, skills acquired in the formal education system may not suffice over the whole life course. With lifelong learning there is more at stake than a further extension of formal schooling, particularly in view of complementarities in the learning processes. The law of ‘dynamic complementarity’ requires programmes that build character and motivation that do not focus exclusively on cognition (Heckman 2008).

Finally, not all young people prefer ‘knowledge’-related work. Many prefer practical and meaningful work which gives them a personal identity. As risky choices always contain an element of uncertainty – uncertainty of individual preferences as well as uncertainty of future skill demands – permeability of vocational education and training systems is of utmost importance. Good governance of SWT should not lead to early and irreversible tracking but should instead maintain the option of switching to other tracks. Sustainability of earning capacities, moreover, implies not to link educational or vocational tracks closely with social and economic status; the stigma often attached to vocational training should be avoided in any case.

(2) Due to this complexity of acquiring basic employability it makes sense to establish *dual learning systems* in particular – but not necessarily only – in the phase of transition from school to work. Dual learning systems are the paradigm of TLM, offering *institutional bridges* between work practice on the labour market and education in schools. Part of the underlying theory is the insight that

human *and* social capital is not only developed in schools but also on the job. Externalities of human capital formation, among others Heckman's insight "learning begets learning", underscore, e.g., empirical findings that post-school-learning in firms accounts for almost half of all skill formation in modern economies (Heckman et al. 1998, 33).

Yet the link to the job should not be too close. Governance of uncertainty requires loose coupling and warns of too early and too narrow specialization. The flipside of this insight is that the longer people remain jobless the more their acquired human *and* social capital deteriorates. So, a key focus has to be placed on avoiding (in particular long-term) unemployment or.

(3) In the process of preventing, mitigating or coping with long-term unemployment, the lack of *voice and trust* are at the core of implementation failure. So far, the representation of youth in institutional bodies of "social partnership" is low, and the trust of youth in the efficiency of public employment services (PES) is particularly low for various reasons: low trust in schools due to cognitive failures or even open discrimination will reproduce itself in confrontation with case workers of PES whose power of disciplining is often seen as greater as their professional power or capacity to handle complex difficulties accumulated during failed within-school-transitions. Necessary coordination of various assistance services (financial, psychological, pedagogical, and social) is often non-existent or low developed.

(4) Another essential element of TLM-theory is *fair risk sharing* of costs and benefits related not only to human capital investments but also relevant to other investments in employability, mobility or work-place adjustments related to innovation. Employers will be reluctant to invest in training or education if they have to fear that workers who have benefited from training or education will move to another job at their own initiative or will be poached by employers that have not contributed to the investment (free riding). Furthermore, as far as knowledge is a public good (non-rival and non-excludable), the accumulation of knowledge will inevitably create external spillovers and generate social benefits which private firms are unable to appropriate. Protecting their intellectual ownership through property rights laws would also be difficult. Without public support for the in-appropriable positive social benefit, firms tend to underinvest in innovation because the risk they bear by investing in the R&D projects is not properly compensated (Lu et al. 2022; Stiglitz and Greenwald 2015).

Workers, in turn, will not invest in firm specific skills if their investment is not rewarded by fair wages, good working conditions and some job security. The state or the social partners (trade unions and employer associations) can play a crucial role in solving these conflicts by co-financing (in particular education infrastructure), by defining and controlling marketable quality standards, by wage coordination, and by reasonable employment protection. In the increasing process of globalisation, poaching skilled labour force becomes even an issue of transnational policy, in other words and in our context, an issue of EU governance bodies.

Risk-sharing is the main place where multi-level governance with covenants as paradigm should unfold. Through the standardisation of training contents, social partners and public authorities at various levels can ensure or assure high-quality standards through monitoring and certification. Participation in the definition of quality standards by employers and employees (usually via their industrial, occupational, or professional interest representations) and their effective control guarantees that workers trust that their skills are valued on the market; but it guarantees also that employers can rely on the competences of graduates entering the labour market (moral assurance). Certificated (i.e., legally acknowledged) skills are also ‘marketable’ and enhance thereby the mobility of workers. Furthermore, international acknowledgement of skills gains importance, not least because migration flows – into and within the EU – are steadily increasing. Furthermore, the concept of covenants emphasizes the interplay of diversity of skills as essential element for innovation.

(5) Because scarring effects of unemployment for youth weigh heavier than for adults (e.g., Schwandt and Wachter 2020; Zuccotti and O’Reilly 2019), guarantees to further education or jobs for youth should be introduced as last resort.¹⁹ Early placement services by public employment agencies during the final phase of apprenticeship might already help as the experience shows that a change of enterprise without occupational change is rewarded by slightly higher entry wages, whereas a change of enterprise with occupational change is punished by slightly lower entry wages. Finally, it might be necessary to provide education, training, or job opportunities in special public institutions as last resort to prevent long-term unemployment which may end in permanent un-employability in particular for disadvantaged youth.

To sum up by emphasizing governance and looking at the main concerned actors, good governance of school-to-work-transitions (SWT) would ensure:

- first, that vocational training and education (VET) or higher professional education (HPE) lead to decent work, i.e., to well-paid jobs that guarantee an autonomous living standard for all, therefore privileging free and informed choices by young workers;
- second, as changing technologies and world-wide interdependencies require continuous adjustment, policy interventions should ensure participation of firms in defining the necessary skills for exercising an occupation and by providing financial incentives for apprenticeships, internships, or professional career tracks on a collective basis (e.g., by industry or region) to prevent free-riding;

¹⁹ As Table A3 (Appendix) shows, these scar effects become evident even in the – as we will see later – relatively successful dual system of Germany. On average, about four in five youth (59.6+21.2=80.8%) smoothly transit into employment after having finished their apprenticeship, however, about 20 percent (19.3%) must bridge a period of unemployment. Most unemployment is short time, however, even a period of short-time unemployment is already punished by lower entry wages of 11.3 to 18.8 percent; longer-term unemployment (4 months and more) is punished by 16 to 25.6 percent lower entry wages (Seibert and Wydra-Somaggio 2017).

- third, as vocational or professional knowledge are public goods, good governance would create and support an infrastructure through which VET training and certificates are valid beyond the individual firm to prevent stagnation and immobility;
- fourth, good governance would also ensure that VET certificates give access to HPE, which requires cooperation of VET-institutions with institutions of so-called “tertiary” education; the principle of permeability, moreover, requires mutual acknowledgement of certificates;
- fifth, good governance of SWT suggests that the state, alone or in partnership with relevant non-profit and for-profit actors provide education, training, or job opportunities of last resort to prevent long-term youth unemployment.

Against this backdrop of general governance strategies, we will now assess current real policy strategies of school-to-work-transitions (SWT) in a comparative perspective: first by exploring the empirical evidence of SWT in selected countries and in Europe (chapter 3); second by case studies of the respective governance systems (chapter 4), third by European level responses related to the SWT crisis based on what we learned from the country studies for good governance (chapter 5).

3 Governing school-to-work transitions in comparative perspective

School-to-work transitions largely determine the range of employment opportunities over the life course and have been extensively studied, especially in response to pervasive youth unemployment in Europe (e.g., Brzinsky-Fay 2011; Bussi 2016; Levels et al. 2022). The STYLE research network, a recent example, coordinated by Jackie O’Reilly deployed the TLM approach (O’Reilly et al. 2019), and the ILO also recently used the TLM approach by emphasizing the life course perspective (Delautre et al. 2021). What are the main messages related to youth-risk-analysis?

3.1 Risks related to school-to-work transitions

Apart from flow data (transition probabilities) that would be necessary to properly assess the employability risks of young people, the best stock indicator available for representing the risk of school-to-work transitions is the share of youth in age 15 to 29 not in education, employment or training, the so-called NEET-rate. In contrast to the common youth unemployment figures, the following figures show the risk related to the corresponding total population (and not related to the corresponding “active” labour force (i.e., unemployed plus employed); furthermore, the “youth” definition includes young adults aged 25 to 29 to reflect the extended education period during the last decades (Table 2).

Table 2: *Young people not in education, employment, or training (NEET) as percent of the 15-29-year-old population: EU and selected countries*

NEET 15-29	2014	2017	2019	2020	2021
EU-27 total	16.1	14.0	12.9	14.0	13.1
Men	14.5	12.2	11.1	12.5	11.8
Women	17.6	16.0	14.8	15.5	14.5
Euro area	15.8	14.0	12.8	14.0	13.0
Austria	9.7	8.8	8.6	9.9	9.4
Denmark	8.0	9.8	9.6	10.2	8.3
Germany	9.8	9.6	8.6	9.6	9.2
France	13.4	13.2	12.4	13.4	12.8
Switzerland	7.7	7.2	6.2	6.3	n.a.

Source: Eurostat; update 07-06-2022; Note: The EU-27 overall unemployment rate (as % of 15-74 labour force) fell from 7.1% in 2021 to about 6.5% in 2021 and 6.2% in February 2022.

The COVID-19 crisis has led to an interim trend change. Whereas the NEET rate for the EU 27 had decreased from 16.1 percent in 2014 to 12.9 percent in 2019, it increased again to 14 percent in 2020, yet declined again in the second COVID-19 year to 13.1 percent. This is in line with the overall improvement of European unemployment mostly due to favourable macroeconomic conditions with

unexpectedly large GDP growth rates (the initial forecast for 2022 had been 5.3% for the EU27) until the start of the Russian war in Ukraine. The NEET gap is in favour of men but the gender difference is lower in 2021 than in the previous years. The NEET level in France remained remarkably stable and moves along the EU-27 average, whereas Austria, Denmark and Germany have relatively low figures. Figures are particularly low for Switzerland which is not exclusively due to macroeconomic determinants but can also be explained by the institutional set-up that mitigates the risky transition phase of young people (see case study on Switzerland below).

The disaggregation of the NEETS figures in Table 3 helps us to better understand some of the reasons for risky youth transitions. This table also highlights the heterogeneity of people, a fact also emphasised in the seminal study by Levels et al (2022) as well as the early contribution on the issue by Eurofound (2012), Mascherini (2019), and Eurostat (2022).

Tab. 3: Disaggregated NEETs aged 15-29 in 2013 and 2019 as % of total

	AUS	DEN	FRA	GER	SWI	EU-27
Re-entrants	<i>8</i> 10	<i>12</i> 12	<i>13</i> 14	<i>8</i> 9	n. a.	<i>7</i> 10
Short-U	<i>32</i> 26	<i>27</i> 26	<i>31</i> 24	<i>26</i> 19	n. a.	<i>25</i> 21
Long-U	<i>9</i> 7	<i>7</i> 4	<i>21</i> 16	<i>13</i> 9	n. a.	<i>24</i> 14
Illness-Dis	<i>13</i> 14	<i>21</i> 24	<i>5</i> 7	<i>10</i> 10	n. a.	<i>6</i> 10
Family- Res	<i>24</i> 30	<i>11</i> 9	<i>14</i> 15	<i>30</i> 31	n. a.	<i>19</i> 24
Discouraged	<i>2</i> 1	<i>1</i> 1	<i>2</i> 2	<i>1</i> 1	n. a.	<i>7</i> 5
Other	<i>11</i> 13	<i>21</i> 24	<i>14</i> 21	<i>13</i> 20	n. a.	<i>11</i> 16
Total NEET	<i>9.0</i> 8.6	<i>8.2</i> 9.6	<i>13.0</i> 12.4	<i>9.9</i> 8.6	<i>8.0</i> 6.2	<i>16.5</i> 12.9

Source: Eurofound 2021, additional material for the report and Eurostat (update 07.06.22)

Importantly, table 3 refers to the pre-Covid period 2019 (bold), a quite favourable year for European youth. The 2013 figures in italics (after the recession 2008-10) might be more representative for the current situation in 2022. Moreover, the category “other” is somewhat problematic as we do not know who exactly falls into this category which makes up almost one fifth of the group.²⁰

²⁰ According to Eurostat (2021) the category ‘other’ is made up of those who did not specify any reason for their NEET status. This is likely to be an extremely heterogeneous group including the most vulnerable and the most privileged including those waiting for a specific opportunity or who are following alternative paths, such as careers in the arts.

The overall structure represented in Table 3 is not surprising: One third to one half of NEET's are related with unemployment, and about a quarter with family responsibilities. While short-term unemployment and discouraged workers and above all long-term unemployment have been decreasing between 2013 and 2019, re-entrants, sickness and disability, family reasons and the category 'other' have increased over time. Interesting are, however, some peculiar country characteristics: First, the persistent high importance of long-term unemployment in France, probably related to internal labour markets that are still a dominant feature in this country (see case study on France below); second, the persistent high importance of illness/disability in Denmark, probably related to Denmark's strict activation policy²¹ (see also case study Denmark below); third, the high importance of family responsibility for being in NEET in Austria and Germany, which corresponds to the predominance of the conservative welfare state with women's greater role in unpaid care work than in Denmark and France.²²

3.2 Comparative dynamics of school-to-work-transitions (SWT)

While a vast range of country studies have dealt with SWT (e.g., in O'Reilly et al. 2019; Levels et al. 2022; Frommberger et al. 2018, 2019), studies looking at this topic in a comparative perspective are sparser. This goes especially for qualitative studies which systematically relate the dynamics of SWT to different institutional settings (e.g., Pohl and Walther 2007, Graf 2013).

A more recent study in this direction finds that various institutional configurations in Europe appear to be in a state of flux, blurring the distinctive characteristics and internal coherence of STW transition regimes (Hadjivassiliou et al. 2019). The authors also detect that institutional and policy changes "could be viewed as a potential sign of convergence across regimes in terms of their underlying logic of SWT transitions", among others in the field of vocational education and training (Hadjivassiliou et al. 2019, 97). One important reason for the limited number of comparative quantitative studies is the lack of reliable individual-level longitudinal data that allows capturing transitions. Box II (below) demonstrates two different approaches how transitions dynamics could be studied.

In the following, we look deeper at the current risky situation of youth by using comparative indicators of the education and labour force (or "work") status of youth across European countries with different institutional frameworks governing the SWT. Our focus is on countries which are known for successful dual education systems combining vocational training in firms with theoretical vocational training in schools (Germany, Austria, Denmark, and Switzerland). We also add France as a contrasting case without a full-fledged developed

²¹ The latest reforms of the Danish unemployment benefit system UB some years ago enforced all young people to either take up employment or education in order to remain eligible for unemployment benefits, the only way around this is likely illness or disability status; for background information on activation of young people in DK see: <https://star.dk/en/active-labour-market-policy-measures/tackling-youth-unemployment-in-denmark/>.

²² The more detailed age break-down in the Appendix (Table A2) confirms these interpretations.

apprenticeship system but a number of recent interesting transformations in view of promoting vocational training.

Box II Studying the Dynamics of Youth Transitions: Two approaches

The Dynamics of Marginalized Youth in NEET

Mark Levels, Christian Brzinsky-Fay, Craig Holmes, Janine Jongbloed and Hirofumi Taki (2022) compared in their recent seminal study *The Dynamics of Marginalized Youth Not in Education, Employment, or Training* in England, France, Germany, Japan, and the Netherlands. The research team was able to follow a group of school leavers up to ten years and using advanced statistical methods (among others *optimal matching*) to identify complex patterns of individual transitions under the viewpoint if, how often and how long individuals of their chosen cohort experienced NEET. They found that about 50 percent encounter the risk of NEET, but that not all NEETs are equally disadvantaged and that most NEETs (re-) enter the educational system or labour market within a ten-year period. Only a small proportion of youth remain in a NEET status long-term, the highest being 32 percent in Japan, the lowest in Germany (12%). Thus, for most of the youth, being NEET is not a long-lasting pathway, but rather a short, transitory life stage. Furthermore, the NEETs are far from being a homogeneous group so that policy conclusions should at least clearly distinguish between individuals with long-term unemployment risks (the low skilled and youth with migrant background) and individuals excluded long-term from any labour market activity (education or employment) mainly due to care responsibilities – unsurprisingly especially women (a feature most pronounced in Germany and France).

In a follow-up study, Brzinsky-Fay (2022b) measured for Germany the impact of transitions on the economic and social status in the age of 30, and came up with the following two main results:

- First, young people who start one of three problematic types of career path have significantly less monthly income at the age of 30: for type 1 (late transition to NEET) this is around Euro 800 less, for type 2 (long NEET phases) even about Euro 1,500 less compared to people who do not have a NEET phase in the first 10 years after leaving school. People in type 3 (repeated, short NEET phases) have an average income of Euro 700 less at the age of 30. NEET phases that occur together with a course of study in the course of employment after general education school do not have a negative impact on income. Higher education thus seems to offset the negative consequences of NEET periods.

- With regard to social status, the author finds that young people who continue their education after general school at a university do not have to fear any disadvantages from NEET phases in their employment biography; their professional status at the age of 30 is still well above average. The greatest risks in the problematic transitions-types described above are particularly evident for young mothers: they must expect a significantly lower professional status at the age of 30.

The establishment of youth on the labour market in Sweden

Another smart way to look at transition dynamics in the spirit of the TLM approach would be to follow up a chosen cohort for a longer period year by year and to compare the outcome in selected European member states. We provide an example of this approach for the case of Sweden.

Lars Behrenz and Jonas Mansson (2022) followed the paths into the labour market for all individuals born in 1979 on their journey into the labour market from 1995 to 2017, i.e., from ages 16 to 38. They analyse successes and setbacks for this cohort in achieving the objective of some degree of – what they call – self-sufficiency measured in terms of wage income (one essential element of capability and capacity in the spirit of Sen’s “functioning”). The authors’ dynamic analysis of – what they call – the “establishment process” into the labour market captures various degrees of self-sufficiency, i.e., not merely assuming a specific (and arbitrarily chosen) threshold for what is regarded as established: from being entirely outside the labour market to the highest degree of economic “establishment” with an annual earned income over SEK 1.1 million (about 103.000 Euro at 22.06.2022). The authors do not study the duration of time spent in various stages within the scope of this report, e.g., how long a person is in a certain stage or how a specific individual moves between different stages. Instead, they study the individual's establishment situation each year which can improve or worsen. Some of their results are quite illuminating in the context of our study, e.g.:

- Approximately 80 percent of the cohort was established at age 38, but 20 percent did not have a total income that was adequate to be considered self-sufficient in 2017.
- Among those in the cohort who were well-established in 2017, 65 percent were men, and 35 per cent were women, despite the fact that the proportion of women with post-secondary education in the cohort is higher than men. The difference between women and men as regards degrees of self-sufficiency is substantial from ages 20 to 30 and decreases thereafter.
- For the group that chose to forego or did not complete an upper secondary education, the picture was dismal, with only approximately 20 percent being established in the labour market at age 38.

Tables 4.1, 4.2 and 4.3 (below) show the transition from school to work as a share of population by education and labour force status of three age-groups (15-19, 20-24, 25-29) for selected European countries that are members of OECD (EU-22). The data are compiled from OECD statistics. The figures are not flow-data (directly measured transitions) but stock-data that measure the education and labour force status for these broad youth groups at a specific point of time (mostly 2020). The transition-dynamics, therefore, can only be detected indirectly by following the three consecutive cohorts under the assumption that the youngest cohort (15-19) will – under steady state conditions – end up in about ten years in the position of the oldest cohort (25-29). Furthermore, as the selected countries

represent quite different institutional frameworks of school-to-work transitions, we can compare the outcomes in three steps related to dual learning or apprenticeship systems (Austria, Germany, and Switzerland), the rather formal schooling system (France) and a system that integrates substantive parts of vocational and educational training in schools (Denmark).

It is evident that the “normal” status of the youngest cohort (15-19) is being in education (on average about 90%), the majority in secondary school. Switzerland, however, is the clearest representation of a dual system: over one third (36.2%) of this youth cohort combines vocational training in firms with vocational school education (“apprenticeship”); Austria follows with one in five (19.9%) and Germany with 14.8 percent.

If we differentiate by gender (tables A7.1a, A7.1b in Appendix), we see that dual education and training is clearly dominated by men. The biggest gap is found in Switzerland where 43.1 percent of teenage-men are in apprenticeships compared to 28.9 percent of teenage-women. German teenagers have the weakest labour market attachment, i.e., only 7.8 percent are in the labour force which holds true both for men and women. German teenagers also have the lowest risk (2.8%) of not being in education or employment (NEET), whereas French teenagers – and male teenagers to a larger degree – already face a substantially higher risk of exclusion from the labour market (6.6%).

The picture changes drastically with the youth cohort 20 to 24. Very roughly, half of this cohort is still in education, the other half in one of the labour force categories, most of them in “regular” employment, Austria at the top (47.8%), Denmark at the bottom (34.6%), with only small differences in favour of men.²³ Within the educational status, the dual training lost importance, except in Germany where it is still strong (13.8%; men 15.1%, women 12.4%). Many young people in this age group face already considerable risks of exclusion, either in form of involuntary unemployment or not any more being “protected” in the educational system, in particularly in France where almost one in five faces this risk (18.9%), whereas in Switzerland and Germany it is less than one in ten (8.4%, 8.9%) – in both cases slightly more women than men.

²³ „Regular“, here, means just having a formal employment relationship, independent of “standard” (full-time, permanent) or “non-standard” (part-time, fixed-term, self-employed).

Tab. 4.1: Transition from school to work: Share of population by education and labour force status, age 15-19, 2020 (Denmark, Germany 2019), total

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	19.9	X	5.5	14.8	36.2	m
	2. Other work ¹⁾	4.8	34.1	1.5	8.5	6.8	8.3
	3. Inactive or no work ²⁾	63.2	56.2	83.2	68.9	45.5	81.6
	4. Sum	87.9	87.9	90.3	92.3	88.5	91.7³⁾
In Labour Force	5. Regular Work	6.4	5.4	3.2	5.0	6.3	3.8
	6. Inactive	3.2	3.6	3.9	1.7	3.7	3.3
	7. Unemployed	2.5	0.9	2.7	1.1	1.5	1.6
	8. NEET (6+7)	5.7	4.5	6.6	2.8	5.2	4.9
	9. Sum	12.1	9.8	9.7	7.8	11.5	8.5

Tab. 4.2: Transition from school to work: Share of population by education and labour force status, age 20-24, 2020 (Denmark, Germany 2019), total

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	4.1	x	7.7	13.8	9.7	m
	2. Other work ¹⁾	14.1	31.1	5.8	17.6	21.4	14.9
	3. Inactive or no work ²⁾	20.1	21.6	31.0	24.1	21.4	34.1
	4. Sum	38.4	52.7	44.5	55.5	52.5	50.0³⁾
In Labour Force	5. Regular Work	47.8	34.6	36.5	35.7	39.1	35.4
	6. Inactive	7.2	8.1	8.8	6.0	4.6	8.4
	7. Unemployed	6.7	4.6	10.1	2.9	3.8	6.5
	8. NEET (6+7)	13.9	12.7	18.9	8.9	8.4	14.9
	9. Sum	61.6	47.3	55.5	44.5	47.5	50.0

Tab.4.3: Transition from school to work: Share of population by education and labour force status, age 25-29, 2020 (Denmark, Germany 2019), total

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	0.5	x	1.0	2.3	2.6	m
	2. Other work ¹⁾	10.4	14.4	3.4	10.1	13.4	8.3
	3. Inactive or no work ²⁾	7.4	12.0	4.2	7.8	5.5	7.0
	4. Sum	18.2	26.4	8.6	20.3	21.4	15.4³⁾
In Labour Force	5. Regular Work	67.9	56.8	70.9	67.5	71.5	67.5
	6. Inactive	9.5	9.2	11.3	9.1	3.9	11.0
	7. Unemployed	4.4	7.6	9.2	3.1	3.2	6.5
	8. NEET (6+7)	13.9	16.8	20.5	12.2	7.1	17.5
	9. Sum	81.8	73.6	91.4	79.7	78.6	84.6

x = value contained in another category; m = missing value

¹⁾ Work combined with school or study or volunteers, work-based preparatory courses to enter an apprenticeship or to gain a school certificate.

²⁾ "Inactive" on the labour market due, mostly, to school, college, university; usually only a minority looking for (probably) part-time or occasional jobs

³⁾ Not exactly the sum due to missing values or rounding; source: own compilation from OECD-Statistics, https://stats.oecd.org/Index.aspx?datasetcode=EAG_TRANS

The next cohort-group (25-29) represents, so to speak, the primary outcome of the different SWT-systems. The great majority (84.6% for EU-22) is in the labour-force, yet with remarkable differences between the selected countries. Unexpectedly, France is at the top in terms of transitions to work (91.4%) and Denmark is at the bottom (73.6%). At the other side of the coin: only 8.6 percent of mature youth in France are still in the education system, but more than one in four (26.4%) in Denmark. Both countries, however, face the highest NEET-rates: one in five (20.5%) of French youth between 25 and 29 years are neither in employment, education or training; the figure for Denmark is 16.8 percent.

In all selected countries and in particular in Germany, the NEET-rates are higher for women. Yet the heterogeneity of the NEET-category becomes evident particularly when looking at mature young women. Moreover, in the age-group of 25 to 29, the NEET-rate is clearly driven by the status of “inactivity” (i.e., young adults not in education or training), and not by unemployment, and it is in particular women who are affected: In Germany, “only” 4.3 percent of mature young men are “inactive”, whereas the corresponding share for women is 14.2 percent. This emphasises the need for specific labour market policies geared at young women, a result that is also in line with the in-depth analysis by Levels et. al. (2022).²⁴

If we consider the NEET-rate as one of the most important performance indicators, the transition-from-school-to-work-system of Switzerland clearly ranks at the top: only 7.1 percent of mature young people in Switzerland face the risk of labour market exclusion, a risk that also can be interpreted as the risk of exclusion from decent work, in particular the exclusion from rewarding, encouraging and identity building work careers over the life-course. Furthermore, as already predicted in the theoretical framework, the two other dual learning and education systems, Germany (12.2%) and Austria (13.9%) perform quite well (better than the EU-22 average) – yet certainly not satisfactorily – according to this indicator. Yet again, even in Switzerland, mature young women face a higher risk of exclusion (9.4%) than men (4.9%), in particular related to “inactivity”.

One further observation, however, deserves critical attention: the share of mature youth in the status category “other work” (belonging formally to the education system) is still quite high in all the dual transition systems, highest in the “vocational schooling system” of Denmark (14.4%), but also in Switzerland (13.4%) with the strongest apprenticeship system. Obviously, these young adults are still in some kind of “transition system”²⁵ with uncertain or at least risky outcomes in the upcoming years (30 years and older). In other words, we would have to look more closely into the transition systems to come to a final conclusion regarding the quality of school-to-work-systems in international comparison in general, and for deriving policy recommendations. The high share of mature youth in the dual transition systems (SWI, DEU, GER, AUS) might hide serious

²⁴ See in this volume in particular the country case study (Germany) by Christian Brziszky-Fay.

²⁵ In Germany called „Übergangssystem“.

transitions problems, whereas the high French share of mature youth in NEET makes this problem transparent.

A final observation builds on the gender-differences of our selected countries related to the average figures (for women see Tables A8ab and A8.ac, Appendix). Women are always slightly better off in terms of unemployment, however worse off in terms of inactivity, in particular in the age in which many women already have children. This age is probably the riskiest period in life for you women (and men) as at least five decisions need to be taken within a short time span: to decide upon the occupation, to find a job, to choose a mate, to find a home and possibly to found a family and have children. This “compressed work career” (see Box I) leads for the most able and informed individuals to a behaviour of agile forerunners (exploring new occupations, new life-styles, new balances between work and personal life, and so on) while others less favoured start to live as vulnerable outsiders and becoming often passive risk-averters. Furthermore, comparing the gender-differences in NEET between the selected countries, Denmark displays the least differences, which leads us to the assumption that Denmark might be a role model in gender-neutral governance of youth labour market transitions. On the other hand, Denmark’s mature young women have still a low labour market attachment measured as a share of being in the labour force (70% against 90.3% in France). This implies that many mature young people are still in some kind of protected “transition system” and not yet fully independent as would be the ultimate goal of just transitions for youth.²⁶

High quality studies of transitions out of the “education transition systems” into decent work or sustainable work careers are rare. For the German context, however, two authors looked at school leavers not finding a regular apprenticeship or a regular job (Holtmann et al. 2021, Holtmann and Solga 2022). The results can be generalised regarding the education-category “other work” or “transition system” in all youth cohorts. The authors find that many low achieving school leavers but in particular the most disadvantaged, benefit from participation in prevocational programmes. From the TLM-life-course-perspective, this is an important result. Even in Germany's highly stratified education system, prevocational programmes after leaving school (the so-called transition system) help reduce disadvantage at earlier stages and, thus, inequalities generated by the general school system. Moreover, programmes in which young people attain a school certificate allow participants of the “transition system” to enter training occupations with a higher status.

The findings confirm that certificates, skills, and firm contacts acquired during prevocational programmes are recognized and valued by employers. They also, in general, suggest that employers' uncertainty about the trainability of school leavers with low formal qualifications can be reduced by different means: by educational programmes enabling low achievers to attain a higher school

²⁶ In Denmark, it is very common to take one or two gap years before starting to study for example; financial independence is secured through non-repayable grants which makes such choices relatively straight-forward and easy.

certificate (serving educational signalling) or by firm-based programmes (serving as on-the-job screening). In terms of policy implications, the authors conclude, however, that about half of the prevocational programme participants do not enter regular apprenticeship programmes afterwards. Many of them enter a second prevocational programme, a low-wage job, or unemployment. Nonetheless, even though the programmes do not help everyone, these findings suggest that many low-achieving youths are better off afterwards than they would have been without the programmes in the “transition system”.

Looking at the mature group of youth (25-29 years) we already got some indications about the performance of different regimes governing school-to-work-transitions (SWT). The picture would become clearer if we had useful indicators of SWT-performance for early adulthood (the age group 30-34 years). In other words: What we are looking for is a set of indicators for full-fledged and sustainable employability as the ultimate aim of SWT. Some of these indicators are already included in the previous sub-chapter, some more must be added from a performance-oriented view, in particular indicators that qualify the long-term employment opportunities, in particular earnings and structural adjustment capacities.

The tentative exercise (see Table A9, Figures A10, and A11, Appendix) again concludes that Switzerland performs best in most of the chosen SWT-performance indicators, whereas Austria – unexpectedly – comes close to the mostly ‘worst’ performer France. Related, e.g., to the qualification level reached by young adults (30-34), Switzerland performs best at the low and high level; not surprisingly, dual VET-countries Austria and Germany perform best at the middle level. Denmark scores highest (except for low-skilled) in terms of full-time equivalent employment rates for women, accompanied by France in the high-qualification segment; in this respect, Austria displays the lowest scores in any category; Switzerland also tends to score low, probably due to high part-time employment rates. Employment, however, can go hand in hand with in-work poverty. Although those in in-work poverty are usually better off than unemployed, complementary social policies in the form of welfare transfers and – especially – supporting labour market policies (training, subsidies) are still necessary to keep in-work poverty at low levels (Wolf et al. 2022). Our observations show, that in-work-poverty in the age-group 30-34 is highest in Austria and Germany (above EU-27 average), by far lowest in Denmark, whereas France also scores lower than the EU-27 average in this respect.

Having identified empirically strong and weak European performers in SWT, we now ask whether we can distil some patterns by way of connecting these observations with distinctive features of the selected countries’ governance systems.

4. Looking for models of good governance

Our empirical study, so far, has shown that the Swiss governance system of youth transitions might be a model for EU member states. Switzerland seems attractive for its successful public-private-partnerships (governance by covenants), for its established culture of dual learning approaches without the vehicle of a legal youth guarantee in general and the institutionalised permeability between vocational and academic career paths. However, the Swiss governance system has also weaknesses and depends, among others, heavily on imported skills. More important, however, is the fact that the (albeit slow) development of a European labour market will also have spill-over effects on the national governance systems of SWT. Indeed, complexity-theory (among others Cohen and Stewart 1994) predicts a strong impact on ‘living systems’ from changing environments, here the changing focus from national to transnational labour markets. Finally, the institutional characteristics of SWT governance regimes might carry in themselves features of flexibility or adaptability so that the likelihood of convergence is higher than of polarization. In the following sections we look a bit deeper into the national governance systems of the selected countries to find promising institutional configurations from which all EU member states might learn.

4.1 Switzerland as the prototype for governance by covenants?

Switzerland is the most eminent example for firm-based apprenticeship training in OECD countries, featuring – according to the Varieties of Capitalism (VoC) literature – the interesting mix of a coordinated and liberal market economy. A further Swiss peculiarity is a kind of dualism in the SWT-governance regime: whereas regulation of the educational system lies predominantly in the hands of the cantons, regulation of vocational education and training (VET) is highly centralised at the federal level. Furthermore, there are strong differences between the various regions in Switzerland. In the German speaking cantons, the average share of students enrolling in dual VET programmes is much higher than in the French- and Italian speaking ones, where a larger share of students at the upper secondary level enters the academically oriented schools.²⁷

The overall Swiss VET-system is collectively governed by the Confederation (*Bundesstaat*), the 26 *Cantons* and various professional organizations of the labour market, including the social partners. These three key actors cooperate under the Federal Vocational and Professional Education and Training Act (VPETA) and its corresponding ordinances, a kind of multilevel cooperation that can be considered as a prototype of governing by covenants (see section 2.3). The

²⁷ We concentrate in the following on the German speaking part of Switzerland; for considering the specifics of the Italian and French speaking parts, we refer to Battaglini and Giraud (2003) and Gonon and Maurer (2011).

following section briefly summarizes the main roles of these key partners in this multilevel policy ‘game’ (SERI 2021, 8-10).²⁸

The basic elements of the Swiss governance system

The strategic governance of SWT lies in the hands of the Swiss Confederation. It is responsible, among others, for quality assurance, ensuring comparability and transparency of courses throughout Switzerland, enacting around ordinances for about 240 occupations, recognising preparatory courses for the federal vocational baccalaureate examination and organising this examination, recognising examinations of non-formal continuing education and training programmes at professional education institutions as well as training courses for teachers, trainers, instructors, career guidance counsellors, and – most important – contributing funding to cover one-fourth of public sector expenditure for the SWT system. As this fund is distributed in form of lump-sums to the actual number of VET/TPE-students, the Cantons have a strong incentive to support the creation of training places. In addition to its steering and funding functions, the Swiss Confederation supports research and projects to induce continuous reforms for adjusting the system to the changing needs of the labour market under the lead of the powerful State Secretariat for Education, Research, and Innovation (SERI). Furthermore, the Swiss Federal Institute for Vocational Education and Training (SFIVET) provides basic and continuing training to teachers, trainers, instructors, and examiners working at both upper-secondary level (VET sector) and tertiary level (professional education sector). Moreover, the 2002-reform gave the Federal authorities the right to declare collectively agreed funds generally binding if certain criteria are met, thereby contributing to hold decentralized cooperation failure (here ‘free-riding’ or poaching of firms) effectively under control. Finally, and in terms of fair risk-sharing, the Swiss central state also uses its potential as regional redistributor albeit with diminishing power: For instance, in 1970, the Swiss government launched a large federal programme for public investment in the mountain regions and provided subsidies to these regions under the condition that different communes agreed on a joint regional development plan. This programme prevented youth moving to places where the money is and instead allocated the money to where jobs for youth are needed. Although such an ‘endogenous development policy’ seems to become more and more difficult it is still a major impetus of the Swiss regional policy (Linder and Mueller 2021).

Social partners (employers’ and employees’ organisation), professional branch organisations and companies determine the content of training and national qualification procedures, and organise courses at upper-secondary (VET sector) and tertiary level (TPE). Companies voluntarily provide apprenticeships and traineeships. The VET/TPE participation rate of companies/firms was only 18.4 percent in 2008, yet it seems to be relatively constant, however, declining with

²⁸ The following is based on Ebner (2012); Frommberger and Schmees (2018); Gonon and Maurer (2011); Graf (2013); Linder (2007); Linder and Mueller (2021); SERI (2021); Trampusch (2010, 2020); Aerne and Trampusch (2022); and Wettstein et al. (2014). We are grateful to Christine Trampusch for commenting on earlier drafts of this case-study.

firm-size (Wettstein et al. 2014). Interestingly, the risk-sharing features of apprenticeships seem to be more favourable for Swiss than for German companies, not only in the short-term.²⁹ Furthermore, firm-training partnerships (firms share the training obligations ensuring thereby the required scope of competencies within a certified occupation) and especially VET-associations (professionalised firms manage the vocational training of companies or firms that are contributing members) play an increasing role in maintaining the required level of VET/TPE-places. Apart from providing apprenticeship places, the role of these public-private actors is to define and to teach the training content of VET programmes and study programmes at professional education institutions; establishing national qualification procedures for these programmes; developing new training courses, organising branch courses, and managing VET funds. Swiss social partners even play an important role in regulating occupational standards with the aim of protecting workers against competitive migration.

The construction industry in the German speaking part of Switzerland is a particularly interesting case because the social partners focus here not only on the prevention of wage dumping but also on skill dumping, among others through collectively agreed minimum wages according to occupational qualification, deposit rules for foreign subcontractors³⁰, foreign qualification recognition, recognition of experience and industry-wide training (Trampusch 2020; Aerne and Trampusch 2022). Generally, however, experts observe a strong historical cleavage of the Swiss social partnership between large and export-oriented companies on the one hand (with a dominant role of employers), and small or medium sized companies focused on local or regional markets where the social partnership seems to be more balanced (Trampusch 2010).

The 26 Cantons are generally responsible for education in Switzerland. Related to VET/TPE they carry only responsibility for the implementation. National

²⁹ In a comparison of German and Swiss apprenticeships, Muehleemann et al. (2010) analyse the average costs and benefits of vocational training and find that in Switzerland the average costs for the reference year of 2006 are €18,046 and €15,517 respectively in Germany. The average benefit in Switzerland is even higher at €19,147, while in Germany it is only €8,024. The higher costs of vocational training in Germany, however, are amortized over a longer period of employment. The takeover rate of apprenticeships in Germany is significantly higher than in Switzerland. In Switzerland protection against dismissal is much less strong than in Germany. Moreover, works councils play a bigger role in Germany than in Switzerland. This is why it is far more difficult to dismiss skilled workers in Germany, so that in-company vocational training is a suitable means of getting to know trainees and then employing them for a longer period of time if necessary. Why Swiss companies, despite low retention rates of apprentices and high external mobility, are more willing to engage in apprenticeship training than in Germany is explained in Muehleemann and Wolter (2014) by the argument, that a balanced cost-benefit ratio is helpful if the competition among SME intensifies.

³⁰ Deposit schemes (subcontractors must pay a deposit of 20,000 CHF (€18,000) out of which any fines for non-compliance with collectively agreed wage standards are paid) are a matter of controversy between Switzerland and the EU Commission. In the current bargaining process on an overarching agreement between the EU and Switzerland, the Swiss government successfully insisted on retaining the unique deposit scheme, which the Commission finds discriminatory and the Swiss trade unions have vehemently defended (Trampusch 2020, 168).

cooperation through the institution of “Conference of Cantonal Ministers of Education (EDK)” complements and reinforces cantonal authority. Apart from their overall implementation responsibility, the main roles of cantonal actors are supervising apprenticeships, vocational schools and professional education institutions, providing vocational, educational and career guidance services, and issuing permits authorising host companies to take on apprentices and/or trainees. The 26 Cantons carry also the main burden of public funding (about three fourth of the budget). Other public funding seems to play a minor role (e.g., some branch related contributions by firms; some cantonal VET funds); individual trainees or students share a substantial amount of the costs of VET/TPE-programmes.

Main features of Swiss SWT

The Swiss system of school-to-work-transitions (SWT) is characterised by a close integration of the education and training system. It is divided into two sectors: upper-secondary level of vocational education and training (VET) and tertiary-level of professional education (TPE). Remarkable at first glance is also that the vocational orientation starts early in class 7 at the primary education level by integrating “Vocational Choice Education” (*Berufswahlunterricht*) into the syllabus, supported among others by *Stellwerk*, a sophisticated standardised (yet individually adaptive) instrument to measure the performance in vocational relevant subjects like mathematics, science, and various languages.

Almost two-thirds of all young who finish compulsory education (age 15/16) transits in vocational education and training (VET) providing a solid foundation in each occupation out of 240. TPE builds on upper-secondary level vocational education and training (VET) preparing youth with specific competences for, e.g., technical, science or managerial positions. Furthermore, there are around 400 federal professional examinations as well as 55 study programmes at professional education institutions (Tables 5 and 5, below).

Most important is the institutionalised bridge between the vocational training and academic education tracks, so-called “passerelles” (Graf 2013, 166): The Federal Vocational Baccalaureate (FVB) opens the way to Swiss universities of applied sciences (UAS). FVB holders who go on to pass the University Aptitude Test (UAT) have the option of enrolling in a cantonal university or one of Switzerland’s prestigious two federal institutes of technology (ETH Zurich and EPFL Lausanne). The vocational training track, thereby, does not suffer as much from a low (and discriminating) image as in many other countries, in particular France (Danner et al 2021). Moreover, vocational learners may pursue more advanced education and training opportunities, switch from vocational and professional pathways to general education or university pathways and later change the course of their working lives with relative ease. Continuing education and training (CET) options are also available at all levels.

Most VET programmes are of the dual-track nature, i.e., the training content is divided between different learning locations (part-time classroom instruction at a vocational school, part-time workplace training at a host company and for some occupations also branch courses at a branch training centre). The school-based

variety of VET programme (i.e., full-time classroom instruction without an apprenticeship) is less common in Switzerland (Table 6). Nevertheless, TPE programmes also combine some classroom instruction with work-based training to ensure a smooth transition to gainful work.

Table 5: Switzerland: Transitions in upper-secondary level 2019

Tracks	Number	as %
Dual-track VET programmes	65,503	63.3
School-based VET programmes	7,506	7.3
Baccalaureate school or specialized schools	30,450	29.4
Total	103,458	100.0

Source: SERI (2021), p. 11

Table 6: Switzerland: Completion rates in 2019 according to degree

Upper secondary level of VET	Total	% Total	% Women
Federal VET diploma	61,251	73.4	44.9
Federal VET certificate	6,707	8.0	41.4
Federal Vocational Baccalaureate	14,524	17.4	46.9
University Aptitude test	1,027	1.2	47.4
<i>Total</i>	<i>83,509</i>	<i>100.0</i>	<i>45.0</i>
Tertiary professional education	Total	% Total	% Women
Study programme at professional education institution	9,732	35.2	49.0
Level-two federal professional education	2,876	10.4	33.9
Level-one federal professional education	14,717	53.2	40.4
Professional education not recognised by the Confederation	322	1.2	73.0
<i>Total</i>	<i>27,647</i>	<i>100.0</i>	<i>43.0</i>

Source: SERI 2021, p. 5, and own calculations; the figures refer to the number of qualifications awarded, not the number of holders (some of whom may hold several qualifications).

Summary and conclusions

To sum up, governance of the Swiss vocational and training policymaking is – compared to Germany – relatively centralized as federal and inter-cantonal elites are the key actors on the part of the state. Central and performance-oriented co-funding, development and monitoring of uniform high-quality standards and

public recognition of collective agreements are important instruments to keep the VOC-system on an international competitive track. The highly differentiated regional and sectoral character of the implementation system, however, ensures both stability as well as flexibility through decentralized self-regulation. Employers and their associations, thereby, usually play a stronger role than trade unions, yet business is split in its interests in training according to the size of the firm: large and export-oriented companies shift the VOC-system towards more generalized and professional skills, whereas small firms depending on internal markets including their workers' representatives are the guardian of the conventional dual apprenticeship system, which raises some critical concern about the possibly too traditional orientation of occupations leading to deficits in particular in the health, care and IT sectors. On the other hand, by establishing the institution of occupational maturity (*Berufsmaturität*) Switzerland prevented the stigmatization of the vocational track by building reliable bridges between vocational and academic education and training.

The overall political system of Switzerland already corresponds with the concept of governance by covenants: prominent Swiss experts characterize Switzerland as 'concordance democracy' based on consensus and proportionality in contrast to the 'majoritarian democracy' (Westminster model) based on competition and winner-takes-all (Linder and Mueller 2021). Proportionality guarantees power-sharing and corresponding risk-sharing, whereas the referendum as element of direct democracy guarantees proportional representation. Combined, both linchpins of the Swiss democracy turn all legislation into a process of negotiation: The central government (*Bundesrat*) is always a grand coalition, and if their negotiation threatens important interests of minorities, the ever-present option of referendum (acting like a Damocles-sword) might knock-down their decisions.

Critical voices warning that such a system leads to conservatism or even immobility and lack of innovation, however, have not been proved right so far (Trampusch 2010), on the contrary, as the following observations confirm. First, pressure from 'globalisation' is an important reason why export-oriented Switzerland (not being a member of the EU) as a small country cannot allow itself to stand still (Katzenstein 2015). Furthermore, Linder and Mueller (2021) – among others – hint to the increasing "Europeanisation" of Swiss legislation due to its great dependency on the European common market. Nevertheless, it is interesting to see, that the growing conflict between "Bern" and "Brussels" is well fed by labour market issues, especially related to the EUs 'freedom of movement' principle.³¹

Second, Schultheiss et al (2022) find that the Swiss governance of SWT puts much emphasis on VET-curricula updates which enhances firms' "absorptive capacity" by which the authors mean the speed of diffusion of new technologies from frontier firms (often big) into mainstream firms (often small and medium sized) which are the backbone of dual VET systems. Curriculum updates thereby

³¹ The Swiss construction sector (which is more domestic and less export oriented) is a particular telling example in trying to restrict free movement (Trampusch 2020).

heighten not only the technological awareness of firms by the time the new curricula are introduced but also increase the supply of workers with future-oriented skills after the first apprentices graduate from the updated programs. While apprentices bring the ability to internalize the knowledge on new technologies into firms early on, it is quite likely that the Swiss apprenticeship training in inter-company training courses at training centres provides apprentices a hands-on experience with new and expensive machinery, even if this machinery is not yet available at their training firm.

Finally, although small Switzerland affords the institutional luxury of 26 Cantons and almost 3,000 Communes, potential losses related for instance to economies of scale, are likely counterweighted by flexibility: The cantons seem to be a real test laboratory for political innovations: "trial and error" approaches are first developed and used differently at the bottom, then compared among the cantons and optimized in a learning process (Linder 2007).

4.2 Denmark as the prototype for governance by flexicurity?

Denmark features in the VoC categorization as "coordinated market economy", yet with at least two specific characteristics: first, a high share of public employment, which means for youth a high capacity of possible job careers; and second the 'flexicurity' triangle: (1) high flexibility through low job protection, easing the access for youth to the labour market, (2) 'passive' security through high social protection, and (3) 'active' security through extensive 'active' labour market policy. Most recently, however, the "snakes in the paradise" (Madsen 2002) of EU's flexicurity poster boy seem to grow or to multiply (Hansen and Leschke 2022), especially for the Danish youth labour market.

Main features of the Danish SWT regime

Like Germany, Austria and Switzerland, Denmark organizes the transition from school to work (SWT) based on the principle of dual training and in a uniform national manner. In contrast to these countries, however, the Danish VET-system is school-centred and tends to a tertiarisation of education and training. In 2020, ca. 20 percent of the students having left primary school (running up to grade 9th) that year, have applied for a vocational training. This falls short of the goal of increasing this figure to 25 percent which had been set with the 2015 comprehensive reform. In contrast to France, which organizes this transition phase of the life course primarily at post-secondary schools or universities, a majority of Danish young people entering the dual education track combine practical company training with theoretical school education after leaving school. However, vocational orientation is already more pronounced at school than in the German speaking countries. Accordingly, vocational education and training (VET) is less specialized than, e.g., in Germany, in around 100 different professions. In addition, the Danish VET-system seems to integrate the so-called transition system for disadvantaged youth which is more separated from the formal VET-system in Germany. Danish VET governance also needs to be seen in the framework of a strong tradition of life-long learning as integral part of the

flexicurity system. The 2018 tripartite agreement on adult and continuing education for example focused on improving access through better information and higher allowances as well as on developing new programmes (Jørgensen 2018).

The Danish governance regime and VET policies

In 2015, a comprehensive reform of the vocational education system took place in response to high drop-out rates, decreasing numbers of participants and a lack of prestige. The reform had four major goals: (1) increasing the direct uptake after grade 9 or 10; (2) increasing the number of students completing vocational training; (3) VET should cater to all students in a way that they can deliver according to their talents; (4) strengthening of trust and well-being at the vocational education institutions. While changing the framing conditions and structure of VET, according to the evaluations carried out by VIVE (The Danish Centre for Social Science Research) has not been reaching the set goal to improve content, teaching and in general render the VET programmes more attractive (Slottved et al. 2020).

All vocational training in a company is preceded by a basic school course of usually one year (*grundforløb*), which is longer for students with low school qualifications. In addition, for those who have not found an apprenticeship, school-based training is provided with varying proportions of practical phases. Special access routes are created for young adults over the age of 25, often combining internships and school-based learning. So, for the age-group 25-29, the transition to the continuing vocational education and training system for adults, which is strong in Denmark, appears to be fluid.

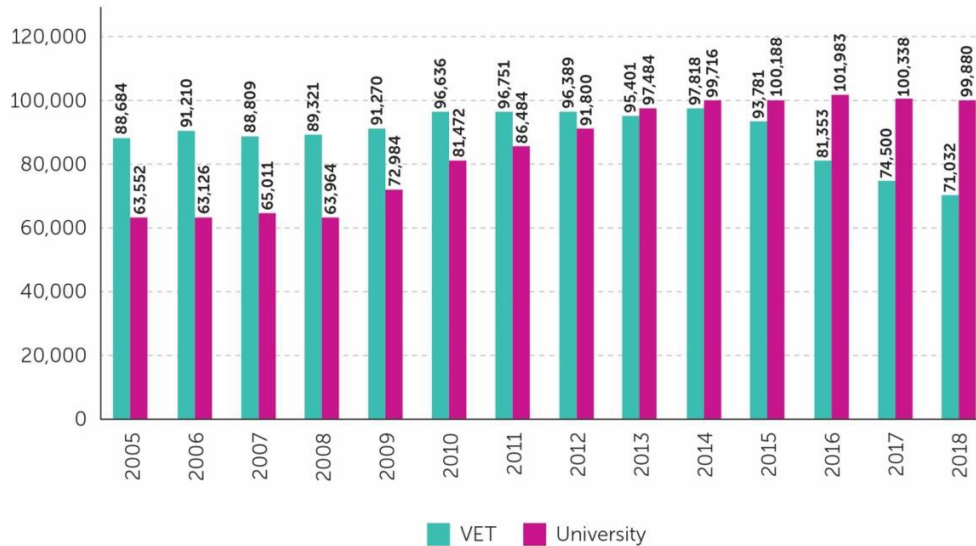
Companies authorized to provide training conclude a training contract with the apprentices, the remuneration of which is determined by a collective agreement. As in Germany, the training allowance increases during the three to four-year training period in line with the increasing proportion of value added through practical work. However, with about 30 to 70 percent of adult wages, the Danish apprentice-allowance guarantees greater financial independence than in Germany. In addition, all trainees over the age of 18 receive a grant of EUR 808.84 per month (2016/17) during the basic school training that is financed from state funds.

Denmark's system of governance relies on close coordination between the social partners and the relevant state authorities both at central and local level; regional levels (like the 'Länder' in Germany or the 'Cantons' in Switzerland) do not exist. For each of the approximately 100 occupational fields, there is a national occupational committee of the social partners, which defines the occupational profiles (content, duration, proportions of practical and theoretical training) and adapts them to the changing needs of the labour market. Moreover, a 20-heads-strong Council for Vocational Education and Training (EUR) negotiates with the ministry responsible for education. EUR consists (proportionally) of eight members from the Employers' Association (DA) and the Trade Union Confederation (LO) respectively; one representative each from teachers, students, communities, and districts complements this council of strategical relevance.

Parallel to the central level, about 100 vocational training committees are also involved at the local level, responsible – among others – for approving companies to vocational training.

Unlike in Germany, however, many larger companies have withdrawn from the dual system and primarily recruit university graduates. The Danish training system is thus increasingly anchored in the area of small and medium-sized companies; correspondingly, the construction industry, hotels and restaurants as well as retail trade have relatively high training quotas. This development led to an erosion of VET's attractiveness, inducing young people to turn to academic tracks (see Figure 5, below). Social partners and the Danish government reacted by establishing vocational academies to stem against this trend. The number of newly admitted students of these institutions increased from 7,232 in 2009 to 12,728 in 2018, constituting a stable share of approximately 15 percent of all newly admitted students in tertiary education. However, these academies are largely disconnected from or even competing with the traditional VET system. Although these programs can involve short firm-sponsored internships, the practical training component is typically very limited (around three months over the entire two years) and does not lead to a secure job at the workplace afterwards. So, while the vocational academies had the potential to become the kind of hybrid institution found in Germany, they have instead become specialized, short-duration tertiary education programs with limited workplace training (Ibsen and Thelen 2020, 24).

Figure 5: Number of Youth Entering into VET and into University Studies in Denmark, 2005-2018



Source: Ibsen and Thelen 2020, p. 22

To finance dual vocational training, companies have been paying a levy to the vocational and educational training fund (AUB) since 1997 that amounts to around 380 Euros for full-time employees in 2022. This mandatory contribution is

adjusted annually based on the average wage development. The AUB is managed by a board of directors composed of an equal number of 16 members from the social partners (eight from DA, eight from LO). In addition, there is a chairman who does not belong to either an employers' association or a trade union. The fund is an independent institution that is not bound by instructions but is institutionally assigned to the fund for additional pensions, which is also financed by a contribution.

The majority of AUB funds go towards reimbursement of training allowances for days spent at vocational school, with the remainder going towards continuous vocational training and education. The AUB also increasingly finances other expenses such as trainees' travel costs to vocational school, boarding costs when staying at vocational schools or additional wage costs when posted abroad.

Like in Germany, the intensity of in-company training is decreasing in Denmark. This prompted the social partners to conclude an agreement (or a covenant, as conceptualized above in section 2.3) with the government to create incentives for additional training places. The "training-place-AUB" defines annual targets for the training quota. The target quota is defined in training points in a rather complicated procedure. The value of the training points varies with the estimated future shortage of skilled labour, which is recalculated annually. For electricians the score is currently 1.09 and for gardeners 1.21, which means that gardeners are currently weighted higher. If companies exceed the target quota, they receive a bonus. If they do not meet the quota, they will have to pay (2022) about 2,000 Euros to the "training-place-AUB" for each training point not met. The companies that meet their quota receive a bonus. The amount of the bonus depends on the payments made by the companies that do not reach their points (Bosch et al., 42).

One challenge of the Danish VET is the substantive number of dropouts particularly among immigrant youth of non-Western origin (see OECD 2010) in spite of incentive structures for institutions (the so-called 'taximeter') to seek to minimise drop-out (Field et al. 2012). A related issue is the transition between the basic school-based course (*grundforløb*) and the practical part (*hovedforløb*). Directly before the 2015 reform one third of students who had finished the school-based course had not (yet) enrolled in the main part of the programme one year later.

Summary and conclusion

To summarize the Danish case of governing SWT, we can use the concise conclusion by Ibsen and Thelen (2020, 2) who compared Denmark with the German case with explicit governance recommendation for the United States: "Germany has pursued a firm-led strategy in which adjustments to VET reflect the needs of the country's largest and most sophisticated firms, emphasizing the economic objectives of training, but at the partial expense of its social inclusion functions. By contrast, Denmark has pursued a more state-led strategy; legislative reforms in the 1990s played an important role in shoring up the VET system's social inclusion functions, but these interventions may have also contributed to deterioration in the public image of VET. An unintended result has been a decline

in participation among the most advanced Danish firms, which in turn has reduced the attractiveness of VET for Danish youth, trends that the government has since struggled to reverse.”

4.3 Germany: from dualism to hybridisation?

Germany’s SWT-system is historically mainly characterized by the dualism – even called “schism” by some experts – between higher education (HE) and vocational education and training (VET). Its VET-system comprises school-based and company-based education and training. The small but increasing sector of school-based VET concentrates on the new service sector (health, care, and education); the large but decreasing company-based VET is common in the decreasing industrial sector (crafts, manufacturing, and construction), known as “dual” learning approach or apprenticeship-system. In earlier times, dual VET was the dominating track for youth to enter the labour market, in recent times school-based VET and HE gain in importance. Although many reforms during the last decades tried to mitigate this divide in skill-formation, the status-gap between VET and HE remains high. Moreover, Germany’s so-called ‘transition area’ (*Übergangsbereich*), thought to serve as a bridge from school to VET, also continues to be problematic.

Main features of the German SWT-governance system

The German dual VET-system combines school and work or – more precisely – theory and practice, learning and working, *and* – often neglected – earning and training. This dual system is firmly established in the German education system with roots dating back to the Middle Ages. Cooperation of mostly private companies and public vocational schools (*Berufsschulen*) and a consensus-oriented cooperation of employers’ and workers’ organisations (social partners) are its essential governance-characteristic. This cooperation is regulated by law, in particular the Vocational Education Act (*Berufsbildungsgesetz, BBiG*, 1969) and the Handicraft Regulations (*Handwerksordnung, HWO*), which define the rules of apprenticeship programmes that hold nationwide. Many adjustments have been made since then, e.g., by introducing new occupational specializations, updating existing training ordinances, and broader occupational profiles particularly in the areas of metal and engineering developed by the Federal Institute for Vocational Education and Training (*Bundesinstitut für Berufsbildung, BIBB*), which also has a corporate governance structure.³² Any revision or new enactment, however, tends to take several years due to long deliberations between these corporate partners, one of the growing concerns in the context of rapidly changing demands of knowledge or skills.³³

³² More precisely: BIBB has a four-party board, consisting of representatives of employers, trade unions, Federal States (Länder) and the Federal Government, and acts as a statutory advisory organ of the Federal Government represented by the Federal Ministry of Education and Research and, related to the regulation of standards, the Federal Ministry for Economic Affairs and Energy.

³³For more details about these complicated processes, including the role of corporate professional committees and the chambers of industry and commerce see Cedefop (2020c, 32 f., 40-43).

A further important governance-characteristic for the German “dual system” is its specific constitutional design, where the federal government is responsible for vocational training in the companies, and the federal states (*Länder*) for education including vocational schools. The 16 *Länder* finance the vocational schools, yet benefit from the dual system through easing the burden on public budgets by participation of the enterprises and by keeping the workforce up to date. The Federal State (*Bund*) contributes to individual support through means-tested scholarships (*so-called Bafög*), to vocational research and – since 1996 – to upward-careers in vocational training (*Aufstiegsförderung*).

This division of responsibilities leads to a specific risk-sharing-structure in the German dual SWT-system: Private companies bear about two-thirds of the total costs spent every year on (initial) vocational training (ca. € 15,000 per trainee) under the assumption that they save on recruitment costs and the cost of new-employee training, or to avoid the risk of hiring the wrong employee for the job; the apprentices also contribute – increasingly during their training time – to the companies’ production or services. In 2020, however, only 10.7 percent of small establishments (1-9 employees) provided apprenticeship-places; for medium-sized establishments (10-49 employees) and (50-249 employees) the figures were 42.5 and 65.8 percent respectively; finally, 81.8 percent of large establishments (> 250 employees) hired apprentices.

The unequal participation of companies in VET has been the subject of contested debates between the social partners since a long time: workers’ representatives tend to ask for a universal system of levies, whereas most employers’ representatives are against a contributory system. It is thereby interesting to see that both parties base their arguments on justice: trade unions argue that it is the obligation of *all* employers to shoulder the costs of VET, and employers’ representatives argue that firms have different capabilities to carry this load, so that it would not be just to burden them equally. There are, however, a few exemptions, for instance the construction sector, where all employers pay contributions to vocational training. Furthermore, inter-company vocational training centres (*überbetriebliche Berufsbildungsstätten*), established by the chambers of industry and commerce, are financed up to 50 percent by employers’ contributions to the chambers and additionally funded from the Ministry of Education and the Federal Ministry of Economic Affairs and Energy.³⁴

When they begin their apprenticeship, the trainees (apprentices) receive a monthly allowance differing currently (2021) between € 753 (craft sector), € 940 (industry sector) and € 1,044 (public services), the average being € 891.³⁵ This starting allowance has – according to a law on minimum allowances in 2020 – to be increased at least by 18 percent in the second year and by 35 percent in the third year (40% in the fourth year); the minimum allowance was set at € 585 in 2022, € 620 in 2023. For vocational training in schools (see below, e.g., health and care

³⁴Some employers’ representatives complain about the violation of the original fund-sharing-agreement (one third the Federal State, one third the Länder, one third employers).

³⁵ To give a reference size: the average monthly gross salary in Germany was 4,100 Euro in 2021.

sector), different rules apply, both across sectors and Länder. The main assumed benefit for trainees is receiving market-relevant training that improves their chances in the labour market while simultaneously improving social skills and developing their personality. Approximately two third (68%) of apprentices remain in the company where they were trained after graduation.

Main features of the German SWT-system

Currently, about 330 officially recognized occupations exist in Germany. Their standards are jointly developed and recognized by the social partners, incorporated in federal-state law, supervised, and enforced by about 80 chambers of industry and commerce, i.e., corporate public statutory bodies with self-administration. For most children, the entry into these vocational tracks is early determined in the age of 10 or 12 when the decision is made to follow the ordinary secondary school (usually until the age of 16) or the upper secondary school (Gymnasium) leading to the *Abitur* as requirement for any tertiary (academic) education. About 50 percent of students in the age bracket 15 to 19 years are in one of the vocational tracks. This does not mean, however, that they remain in this track. There are – apart from completely dropping out (mostly low-school-performers) – some possibilities to move in higher schooling tracks.

Table 7 below represents the overall structure of the German SWT-system:

- First, in terms of yearly entries, VET is with 36.3 percent still the most prominent educational track for young people, yet slowly declining (-8.3% since 2005), especially related to the traditional company-related way of education and training, i.e., apprentices (-15% since 2005). Occupational training in school-based systems (often combined with practical training) gains importance and is, however, still much related to traditional female-oriented jobs in the health, education and social sector (+32.4% since 2005).
- Second, entries into the complex “transition area” (*Übergangsbereich*) make up about 12 percent of all entries, relevant above all for the male youth (62%). This intermediate sector expanded especially in the first decade of this century, reaching a level of 417,649 in 2005, yet almost halved to 228,100 in 2021. It serves mainly as a buffer for school-leavers with no or low formal qualification.³⁶
- Third, a good quarter of yearly entries (26.1%) relates to largely publicly provided (and financed) upper secondary schools leading to the permission of entering academic education or training (*Abitur*).
- Fourth, almost of the same size (25.4%) are entries into so-called tertiary studies (*Universitäten, Fachhochschulen*), also (like upper secondary schools)

³⁶ In 2005, 86 percent of youth with no formal qualification entered this system, in 2020 it was 70 percent; the percentages of youth with only primary school level were 47 percent (2005) and 44 percent in 2020; for the youth with only secondary qualification the respective figures were 15 and 13 percent; for youth with a formal qualification that allows entry into universities or institutions of applied sciences (*Fachhochschulen*), the “transition area” plays with 2 to 3 percent almost no role (see Abb. E1-2 in Autor:innengruppe 2022, p. 168).

with a small majority of women, whereby the more practical oriented “Fachhochschulen” gain in importance.

*Table 7: The German SWT-System: Entries into one of the four main education and training tracks in 2021**

<i>Educational Track</i>	<i>Absolute Figures**</i>	<i>As % of Total</i>
VET-system	677,500***	36.3***
a) Companies (dual VET)	437,800	(23.4)
female	177,600 (36.3%) 188,300****	(10.1)
b) Schools (school VET)	142,700 (75.8%)	
female		
Transition area*****	228,100	12.2
Female	86,700 (38%)	
Upper secondary schools	487,800	26.1
female	299,000 (53.1%)	
Tertiary studies	475,500	25.4
female	248,700 (52.3%)	
Total entries in 2021	1,868,900	100.0

*) Source: based on Bundesministerium für Bildung und Forschung (2022), p. 6 and Table 6 (p. 41); all figures are provisional

***) rounding to 100

****) includes 51,400 in special, often public vocational training centres and related to civic services (police etc.); see footnote 8 in Table 6, Bundesministerium für Bildung und Forschung (2022)

*****) full-time VET in health, education, and social sector

*****) Various preparatory schools to increase formal knowledge, and various programmes to gain basic vocational experiences

In general, access to jobs related to VET-tracks is ‘horizontally’ highly structured by occupational certificates, which tends to limit mobility between occupations. ‘Vertical’ stratification also restricts social mobility, reflected among others in the proportion of students with university entrance qualification which has reached about one-third of dual VET-entries. “These school leavers mainly occupy the upper middle and highest segments of the dual system that are typically linked to well-paid jobs and high-status occupations in industry and commerce (such as technicians, industrial mechanics, bank clerks or IT technicians)” (Haasler 2020, 65). Both – horizontal and vertical stratification – are elements of the German SWT-system widely criticized by academic and political experts for reproducing social inequality across generations. Mixed critic refers to the “transition area” which intends to mitigate this segmentation. Ideally, it should qualify participants to enter dual or school-based vocational training, yet only around 70 percent were able to accomplish this within three years after completing a pre-vocational-programme. The rest continue to move between different pre-vocational measures, unskilled jobs, and unemployment.

Signing an apprenticeship contract or entering a school-based vocational programme, however, does not guarantee successful completion. 24 percent of apprentices and 38 percent of youth in full-time vocational schools terminate the contract, interrupt it for a while, or change the track. Relatively more men drop-out in the vocational school sector than women, in the dual sector it is the other way round. The transitions sequences after terminating an apprenticeship contract are quite complex: almost half of the ‘drop-outs’ come back and eventually complete their apprenticeship; others pass a period in the ‘transition sector’ or take up an interim employment relationship. A recent study based on the National Educational Panel Study (NEPS) shows that in many cases aborts of dual VET-contracts are normal search processes that lead to eventually successful reorientation (Holtmann and Solga 2022). A substantial minority, however, ends in precarious careers, shifting between unemployment, diverse labour market programmes or menial jobs. All in all, studies indicate an occupational segmentation of the risks in the dual system: high contract termination rates can be observed in those occupations in which a disproportionately large number of young people can be found with no more than their first school qualification, in other words: occupational, firm-specific, and individual risk factors accumulate here.³⁷

Furthermore, as only about half of the school-based programmes underlay nationwide federal regulations, curricula between the 16 *Länder* are heterogeneous, not sufficiently standardised and varying therefore in quantity and quality of education and training providers. The most prominent and increasing area that deviates from the original “dual system” is the health sector, in particular caring occupations, which are jointly regulated by the federal state and the *Länder*. Finally, graduates of school-based programmes are less likely to find stable employment in the short term and require often additional further training or continuous education until they eventually settle on the labour market.

Recent developments and problems

Increasing tensions between the shrinking traditional VET-system and the expanding HE-system led to efforts to make both subsystems more permeable or to build institutional bridges. The permeability efforts – often initiated by trade unions or social policy advocates – were mainly directed to open some gates for VET-students into HE-tracks. The bridge-building efforts, in turn, – often initiated by large and export-oriented employers – were mainly thought to attract top students in higher secondary tracks into ‘real’ world of work in the globalizing and competitive economy. The two main permeability gates were opening attendance of upper secondary schooling after completion of a VET program (*Zweiter Bildungsweg*); and the recognition of prior VET learning as an element in HE programs, especially for those having acquired the VET-level of ‘Meister’ (*Dritter Bildungsweg*). The overall impact of opening such gates remained, however, modest.

³⁷ For details, consultation of Autor:innengruppe (2022), pp. 181-183; Brzinsky-Fay (2022a), and Dohmen et al. (2021) is recommended.

The main approach of institutional bridge-building links apprenticeship training with a diploma or bachelor degree, a model also supposed to promote closer links and permeability between vocational and academic programmes. This model originated in the 1970s in Baden-Württemberg initiated by large firms (e.g., multinationals like Bosch and Daimler Benz) and in fact with the ‘subversive’ intention to stem against the increasing academisation, represented especially (in their view) by the expansion of universities of applied sciences (*Fachhochschulen*).³⁸ The model combines work-based learning with theoretical courses in a condensed way (often shifting blocks of three, sometimes six months), offered mainly by vocational academies (*Berufsakademien*) or universities and large firms; at the beginning for various technical areas and industrial economics, but increasingly also for service domains. Upon successful completion, students receive a double certificate: a fully recognised vocational certificate and a bachelor’s degree. In many cases, however, only internships are conducted without receiving a vocational certificate (Ansmann et al. 2020). Such dual study programmes played so far, a minor role in the overall German VET-system, accounting for less than 5 percent of all enrolments in the education system.³⁹

Extending VET-programmes up to three-and-a-half year is another approach to meet the increasing demand for high or combined skills. Such efforts resulted in the merging of different occupational specialisations and new vocational profiles, such as ‘mechatronics’, which combines mechanical and electronic skills and competences. The “greening” economy turns out to become a strong driver in this direction, all the more as such extended training programmes attract in particular school leavers who are eligible to enrol in tertiary education. New skill demands stem above all from the wind power industry, building services, solar photovoltaic or thermal, transmission technology, bio-energy and respective installation and services.

During the last decade, new promising gates were opened to improve the permeability of VET and HE by linking the SWT-system closer to the continuous vocational and training system (CVET). The Qualification Opportunities Act (2019) introduced the right of workers to have access to CVET funding regardless of their qualifications, age or company size, if they are affected by structural changes (such as digital changes) or seek further training to access an occupation which lacks employees. Interested workers can receive grants or indirect support such as educational leave. The funding covers the CVET costs and compensation

³⁸ Private and business-oriented foundations are important drivers of this development.

³⁹ Graf (2013) provides more details (including an historical account) to this – what he calls – “hybridisation” of VET and HE plus comparing this unique German model with other hybrid forms of VET and HE in Austria and Switzerland: in Austria the *berufsbildende höhere Schule* (BHS, higher vocational school with higher education entrance qualification), and the Swiss organizational configuration of *universities of applied sciences* that directly build on dual apprenticeship training and a vocational baccalaureate (FHIVET).

for the salary, which is subject to joint financing by the employer, thereby favouring SME in terms of risk-sharing.⁴⁰

Summary and conclusions

The main problem of the German dual SWT-System lies, first, in its dependence on the employers' willingness to offer apprenticeship jobs which is closely related to their economic situation (Troltsch and Walden 2007). Thus, not unexpected, the number of new apprenticeship contracts declined during the Great Recession 2008/2009 and during the Covid-19 crisis. However, the number of new apprenticeship contracts did not increase after 2009 and only slightly in 2022 (but does not reach the pre-crisis level again) (Gleiser et al. 2022). Furthermore, on the demand side, the number of applicants for apprenticeship training decreased in 2022 compared to the previous year by 1.8 percent, compared to 2020 by 10.1 percent and by 17.7 percent compared to 2019 (Fitzenberger et al. 2022a). Analysing the annual courses of vacancies, applicants and matches registered at the Federal Employment Agency, Fitzenberger et al. (2022b) find in addition increasing matching problems in the German VET-market.

Second, the diffusion of new technologies, in other words the “absorptive capacity” of firms – especially for ‘digital’ and ‘green’ skills and competences – seems to be rather slow compared to the Swiss case. Alexander Dicks (2022) recognizes for Germany large gaps between curricula development and education or training requirements due to digitalisation and automation. The author provides an illuminating example. The VET-curricula for light aircraft builders has not been updated since it was introduced in 1986. It is doubtful, however, that these professions are not affected by digitisation and automation. Modern manufacturing techniques such as 3D printing in aircraft construction, the use of automated inventory systems or sensors in beverage production are real developments that should be addressed in framework curricula and training regulations. However, the responsibility for teaching these new technologies to the trainees lies solely with the individual companies and trainers, thereby not only slowing down structural change but also contributing to inequalities between trainees.

Third, a significant rise in matching problems has been observed as a result of the corona pandemic. The simultaneous occurrence of unplaced prospective trainees and vacant trainee positions increased from 9 to 12 percent between 2019 and 2021. The *occupational matching* problem, thereby, increased significantly (from 33 to 39%), i.e., the job offer rarely matches the trained job of the applicants; *regional disparities* (20%) add up to this matching problem. The most significant problem, however, is *expectation mismatch* which we identified as central problem of risk sharing (see section 2.2): the divergence of expected training requirements of the applicants and expected requirements of companies makes up 41 percent of the total supply/demand-mismatch (Auto:innengruppe 2022, Protsch and Solga 2016).

⁴⁰ See Cedefop (2020c, 55-57), for the history of such programmes and more details.

Fourth, complaints about a severe shortage of skilled labour are articulated from all sides as a result both from the COVID-pandemic and a drastic demographic decline of the young workforce.⁴¹ The Federal Institute for Employment Research (*Institut für Arbeitsmarkt- und Berufsforschung, IAB*) reports record numbers of vacancies (almost two million compared to about one million a decade before) and hints to the increasing reservoir of young adults (20-34), often youth with migration background, without a VET-certificate: 2.16 million in year 2019 compared to 1.88 million in year 2014.

To close this gap will be the main challenge of the German SWT-system in the next decade. In response to the need to promote VET, the government launched the initiative “Alliance for initial and further training” (*Allianz für Aus- und Weiterbildung*) already in 2015, signed by representatives of the Federal Government, Federal Employment Service (Bundesagentur für Arbeit, BA), trade unions, employers’ organisations, and Federal States. So far, however, it seems that fundamental reforms shall not be expected as there is still widespread consensus and even pride of the German dual SWT-system. In addition, Germany’s federalist governance structure with mixed responsibilities (Linder 2007; Scharpf 2006) seems – in contrast to Switzerland – not particularly prone to such reforms. In brief: The future challenges for German SWT-governance lie in stronger endeavours of including low school-performers into the traditional VET-system, extending hybrid forms of VET/HE, and in further strengthening the links of initial VET with continuous vocational education and training for (young) adults.

4.4 Austria: from “secondary” to “tertiary” vocational education or training?

In the two or three “worlds of capitalism”, Austria stands as the prototype for a “conservative-continental” welfare state. Whereas “continental” does not tell anything about governance, the characteristic of “conservative” proves only to some extent as useful heuristic to understand the Austrian system of SWT. More helpful is to consider the case of Austria in historical context and in a political-economy perspective because its VET-system is seen as the most prominent example for the “dual approach” of SWT in the EU: in 2015, about 70 percent of Austria's youth at upper secondary level (16-18) opted for a VET (47% EU), either for work-based training in full-time schools or company-based training (apprenticeships). Within both forms of VET there is a high degree of differentiation. The low rate of youth unemployment and the high quality of work-based training seem to be the backbone of the high international recognition of Austria's VET system. Ongoing reforms during the last decades, such as *standardised competence-based leaving exams* and the initiative “*Lehre mit*

⁴¹ The German Federal Statistical Office predicts that, by 2060, almost one in three Germans (28.4%) will be at least 65 years, while the number of the working-age population (20-65) will decrease by 7.7 percentage points to 57.2%, compared to 64.9% in 2019.

Matura” (completing an apprenticeship in parallel with studying for higher education entrance) have contributed to enhance this image.⁴²

Historical roots of the Austrian SWT-governance-system

The governance structure of Austria is characterised by a strong federalist system: Legislative and executive responsibilities are divided between the national state (represented by the *Nationalrat*) and the nine provinces (*Landtage*). Furthermore, the cooperative partnership between the agents of employers and employees (the ‘social partners’) and government representatives is historically deeply rooted and well developed in almost every area of economic and social policy, in particular in VET. Although work-based VET is governed by standard regulations based on the Vocational Training Act (*Berufsausbildungsgesetz*, introduced - like in Germany - in 1969, revised 2006), social partners, provinces and even communities are strongly involved both in legislation and implementation. At the central level, the Austrian Federal Economic Chamber (*Wirtschaftskammer*), the Austrian Federal Chamber of Labour (*Arbeiterkammer*) and the tripartite Federal Advisory Board on Apprenticeship (*Bundes-Berufsausbildungsbeirat*) are important cooperative drivers of VET.

The enterprise part of Austria’s VET is (like in Germany) under the responsibility of the Ministry of Economic Affairs giving strong influence to the social partners, the compulsory school part of apprentices, however, is under the responsibility of the Ministry of Education, whereas labour market policy is under the responsibility of the Ministry of Social Affairs and Labour. This structure of divided responsibilities can be a source of coordination problems, but also a source of institutional complementarities, for instance labour market policy addressing deficits in the generic VET-system (Lassnigg 2016).

Some further characteristics of Austrian governance must be added:

- First, for historical reasons,⁴³ the Austrian political system was dominated (until at least the turn of this millennium) by two parties, the Social Democrats (ÖSP) and the Conservatives (ÖVP), often in explicit Grand Coalitions, sometimes in changing one-party governments, yet even in this case never in antagonistic relations. Bridging conflicting interests through negotiated solutions (“class-battle at the green table”) is an important creed of this democratic corporatism.
- Second, there was always a strong (often informal) alliance between the two grand political parties and the social partners: the employers’ agents more allied with the Conservatives, the workers’ agents more with the Social Democrats; in the latter case, however, the strong section of Christian trade unions allied more

⁴² This case study is based on Archan and Mayr (2006); Bundesministerium für Bildung, Wissenschaft und Forschung (2021); Cedefop (2020a); Graf (2013); Katzenstein (2015); Lassnigg (2016); Lassnigg (2022a,b); Mayerl (2021); Schlögl et al. (2020); Statistik Austria. We are grateful to Georg Fischer and Martin Mayerl for commenting drafts of this section.

⁴³ For an illuminating overview – with a focus on teacher trade unions – see Lassnigg (2022a).

closely with the Conservatives, in particular in the field of primary, secondary and tertiary education.⁴⁴

- Third, the trade unions have the constitutional monopoly of representation when negotiating collective agreements that apply to the entire represented sector (extension rules), including apprenticeship allowances.
- Fourth, the corporate social partnership, however, is – like in Germany – restricted to procedural rules that pose high hurdles on structural-institutional reforms. The change of the constitution in 1962, when school organization was elevated to constitutional status, ensures strong formal veto points (two-thirds majority in Parliament) to interest groups who otherwise have no formal status in decision on education in general and VET in particular that goes beyond the right to review the law process.
- Fifth, the most important conflicts arise between the central government and regional governments (competences in federalism). Although VET issues are centrally ruled, regions and communities are responsible for implementation, whereby social partners are symbiotically linked and involved at all levels of governance. Their representatives have no interest in changing basic structures, but cannot prevent reforms if political agreement is reached. As there are no formalized veto points in process issues (teaching, exams, financing, etc.), simple majorities are sufficient and commonly used. Austria’s VET-reforms, thus, have been incremental. The local or regional implementation of any innovation, e.g., the intended change from input to output governance, remains hesitant if not obstructing (Lassnigg 2022b).
- Finally, however, this governance structure seems to be on the move since the turn of the millennium through the rise of a new party, the Greens, but also through increasing right-wing populism especially among the Liberals (FPÖ) which targets traditional privileges, elite cooperation, and the dominating influence of the “old” two big parties. The issue of SWT in general, and doubts about the effectiveness of the traditional VET-system (in particular related to the allegedly safeguarding of low youth unemployment)⁴⁵ might be the starting point for structural changes in the Austrian governance of SWT; the *Bildungsreformgesetz* of 2017 already nourishes this expectation.⁴⁶

⁴⁴ Thereby obstructing the wish of the Social Democrats to unify primary and secondary school tracks, and abolishing thereby the ‘elitist’ Gymnasium track.

⁴⁵ See Lassnigg (2016) for one of the prominent critical voices in this respect.

⁴⁶ The *Education Reform Act* (2017) changes to some extent the governance of the Austrian school system. This reform extends the autonomy of all schools in the area of the organisation of lessons, personnel selection, and personnel development. Furthermore, the introduction of regional education areas (*Bildungsregionen*) promotes a stronger adaptation of the education-supplies to regional needs. The recent National Education Report (Bundesministerium 2021, 19) expresses the hope, that the merger of the administration of federal and state teachers, the new regional structure of school supervision and its increased focus on school quality, the introduction of educational monitoring and external school evaluation enable uniform goals and control.

Austria is a small country compared to France and Germany (8.9 million vs. 67.4 and 83.2 million population), comparable to Switzerland (8.6). Austria's population with migration background (23.7%) corresponds, roughly, to France (20%) and Germany (26%), but is low compared to Switzerland (38%). Being a small country (like Denmark and Switzerland) means being economically more vulnerable than large countries. Too dependent on world trade to impose protection, and lacking the resources to transform their domestic industries, these small countries had to find a third solution. Their rapid and flexible response to market opportunity stems from "democratic corporatism," i.e., a mixture of ideological consensus, centralized politics, and complex bargains among politicians, interest groups, and institutional representatives. At the same time, these countries exhibit very different patterns of state structure and action among themselves, exemplified especially by the two Alp-Republics Austria and Switzerland, the first tending (at least before the millennium) to democratic socialism, the latter to liberal capitalism (Katzenstein 2015).

The Austrian VET and HE system

In Austria the decision to enter a VET track happens at the age of 14 years when pupils chose between schools leading directly to the Matura (*Allgemeinbildende Höhere Schule, AHS*) and schools focusing primarily on VET, yet still with an option to enter the Matura track (*Berufsbildende Höhere Schulen, BHS*):⁴⁷ In 2019, at secondary 1 stage, 38 percent of primary school-leavers entered AHS, 61 percent the VET-oriented secondary school (*Neue Mittelschule, NMS*).⁴⁸ At the final stage of mandatory education or training⁴⁹, i.e., at the age of 18, 24 percent are at the second *Oberstufe* of AHS, the rest at VET-institutions (27% BHS, 11% BMS, 37% BS).

In 2019, only about one quarter of the 18 years old Austrian youth opted for a traditional academic track, almost three quarters for some kind of VET. The one-year polytechnic school (PTS) is the (obligatory) preliminary stage to enter apprenticeship (2 to 4 years), whereas full-time vocational oriented BHS (the true Austrian peculiarity) provides an increasingly popular alternative to the traditional higher education track which leads to a vocational Matura opening access to university or schools of applied science. Other vocational schools (BMS) and in-company apprenticeships are about as popular, the way they are organised mostly depends on the type of training: more apprenticeships in craft-work and

⁴⁷ The following figures stem from the National Education Report (Bundesministerium 2021), which labels its report "*National Education Report as Transition Report*" (p. 19).

⁴⁸ 62% of the AHS-students remain in the track and transit to secondary II stage at AHS; (33+2+1)=36% move to BHS+BMS+PTS; (9+35+17+7+26)=94% students of NMS transit to AHS+BHS+BMS+BS+PTS; BMS = Berufsbildende Mittlere Schule; PTS = Polytechnische Schule, BS = Berufsschulen.

⁴⁹ Austria mandates, via the Compulsory Training Act (2016), compulsory training and education for young people who have already completed their compulsory schooling (16) up to the age of 18; a training/education obligation that exists also in Germany. The aim is to enable all young people to obtain qualifications that go beyond compulsory schooling and to counteract the early dropping out of (training) education.

manufacturing (still male-dominated), more school-based learning in human services (especially the female dominated health and care sector). There are relatively many transitions between these vocational training options, for example from the BMS to apprenticeships and vice versa. A problem that persists is however the limited willingness to recognize and credit qualifications and partial achievements between the vocational and university tracks (Frommberger and Schmees 2019, 7).

To sum up the overall SWT governance structure: The Austrian SWT is clearly dominated by some kind of VET institution. About a third of the students admitted to universities completed a BHS, while this proportion is about half at universities of applied sciences. Permeability between the dual apprenticeship-track and the academic track, however, is still limited: only a very small proportion (about 3%) of those admitted to universities have acquired an apprenticeship-certificate (*Berufsreifprüfung*); this proportion is around twice as high at 6 percent to 7 percent at universities of applied sciences (Mayerl 2021). Nevertheless, graduates of AHS no longer make up the majority of all first-year students in Austria, since the paths via school-based vocational training have gained massively in importance. However, 6.5 percent of youth do not continue any training or education in the year after completing compulsory schooling (age 16), a phenomenon that primarily affects boys not speaking German as a mother tongue (13.6%).

Ongoing reforms in the Austrian VET-system

Austria's dual VET-track changed substantially during the last two decades. Experts recognize a trend towards "tertiarisation" and even hybridisation. Overall, in 2018 "only" 37 percent of young people at upper secondary level (16-8) were pursuing an apprenticeship, 39 percent attended a full-time vocational school or college and 24 percent a general secondary school. The occupational profiles are highly specialised and fragmented with currently 211 apprenticeship occupations (as of 01.08.2021). Almost all apprenticeships last between 3 and 4 years.

Importantly, dual apprentices enter an employment relationship with the company and receive a salary (since 2020, formerly a "compensation"). The amount is usually specified in the collective agreement of the respective sector, often varying slightly among the regions. The exact amount of the apprentice's income depends on the occupation and increases annually. There is also a right to special payments such as vacation and Christmas bonuses; moreover, apprentices have accident, health and unemployment insurance, and the apprenticeship period is also counted towards future pensions. The Austrian monthly apprenticeship income varies from 600€ (e.g., haircutting) to 1,000€ in building construction-specialist or civil engineering, ending up in the third/fourth year with 1,020€ and 1,990/2,239 respectively. The average gross monthly income – as a reference point – was 2,490€ in 2021; in other words, the Austrian apprenticeship income is not high but still seems (together with fringe benefits and social security entitlement) to provide a fair incentive to enter this kind of VET, in particular in

specialists' areas and with the realistic expectation of a continuing employment, either directly with the training company or at least within the studied occupation.

Within the apprenticeship track, however, a third hybrid pillar has been developed: the supra-company apprenticeship training (*Überbetriebliche Ausbildung, ÜBA*). The context of this development is a *youth training guarantee* up to the age of 18 that has existed since 2008 and has been extended to 25 years in 2017: Every young person under the age of 25 who registers with the job market service looking for an apprenticeship and having no qualification beyond compulsory schooling is guaranteed an apprenticeship place, either in a company or an ÜBA-agency. ÜBA is an apprenticeship scheme in which practical training is offered by supra-company training providers rather than companies themselves. Practical training is carried out as simulative learning in workshops, comparable to the workshop setting in VET schools (Schlögl et al. 2020). Job experience can be gained either in permanently cooperating companies (ÜBA 1) or through internships at various companies (ÜBA 2). The selection of the professions offered for the ÜBA 2 is carried out through regionalised estimates of training demand and supply based on labour market data and negotiations with social partners and regions. With the ÜBA 1, the offer of a training place depends on the available cooperation companies.

The average costs for the ÜBA measures are €13,000 per person and year. The financing is provided by the Austrian federal employment agency AMS and the federal states, whereby the AMS bears a total of around 90 percent of the costs from unemployment insurance funds. AMS itself is funded by proportional contributions of employers (50%) and employees (50%), so, formally at least, there is a proportional risk-sharing. The share of the nine Austrian provinces varies between 0 and 25 percent depending on the size of additional training demands. Although employers contribute to training into a special fund, this source is not used to finance the youth training guarantee. Instead, their contributions are used to finance the so-called company apprenticeship promotion, through which all company training places are financially supported and this to a substantial extent, i.e., on average with 1,500 Euro per year and place.

The share of young people in the Austrian youth guarantee programme has risen from 5.6 percent (2009) to about 8 percent (13,000 in 2021/22). The bulk of funding (90%) comes from Austria's labour market service (via AMS), i.e., from the UI-system, as an element of "active" labour market policy; the rest is paid by the provinces (Kocher 2022). Whereas the trade unions see ÜBA as a vehicle to improve justice (inclusion) as well as quality of VET, employers' associations were sceptical regarding effectiveness and efficiency. They were (apart from giving up some control over the content of training) complaining especially about the high costs for one ÜBA-place. However, simulations based on a national-accounting-system (including opportunity costs like recruitment cost as well as fiscal/social costs of unemployment) show positive returns of these public investments after some years (Mayerl, 2021). In the meantime, however, most employers see cooperative advantages, especially since complementary

educational resources – social and pedagogical support in ÜBA-centres is a central pillar of the model – can be used.

Table 8: Austria: Labour market status 36 months after training as percentage (graduation years 2008-2013)

	Graduates		Dropouts	
	Company-apprenticeship	ÜBA	Company-apprenticeship	ÜBA
In Training	3	8	13	31
Employed	81	58	39	29
Unemployed	7	22	19	26
Other	9	13	29	14

Source: Schlögl and Mayerl (2020), p. 11.

Table 8 shows that classical company-based apprenticeship training achieves a very high share of labour market integration. In comparison, ÜBA performs considerably less well. We concur, however, with Schlögl and Mayerl (2020), that it is an open question of whether this can be considered a success or failure. In normative terms, at least, table 8 tends to indicate a positive assessment of ÜBA if contrasted with transitional patterns of dropouts in company-based apprenticeships, including opportunity scenarios like young people with no certificate of completion, higher rates of unemployment, lower income, and other vulnerable social situations. Furthermore, more recent results seem to suggest improvements of ÜBA’s performance of labour market integration (Kocher 2022).

Summary and conclusion

To conclude this brief overview of the Austrian VET-system, the following Austrian peculiarities should be emphasised:

- First, the role of classical dual apprenticeship has clearly decreased. Despite its evident contribution to low youth unemployment through high integration rates, two caveats have to be highlighted: Youth from vulnerable social background tend to be excluded for various reasons. The main explanation for Austria’s low youth unemployment, therefore, is the great importance of “active” labour market policy targeted towards youth (see Lassnigg 2016), a contribution which is increasing through the new instrument of a youth training guarantee combined with the institutional innovation of ÜAB.
- Second, Austria’s traditional VET faces a crisis, exemplified by the relationship of supply and demand for apprenticeships which constantly worsened in the last decade: Whereas in July 2015 there were 1.6 applicants for every apprenticeship place, in July 2021 the ratio had turned around to about 0.8. There are, however, tremendous regional differences: Vienna showing constantly surplus-demand (about 7 applicants per apprenticeship place in 2021), most rural provinces have a surplus-supply (Kocher 2022). Austria’s governance system seems, among others, to respond to this crisis with an increasing autonomy of regions and communities in designing and

implementing VET-programmes. Another response starting already two/three decades ago is the increasing role of school-based VET.

- Third, the case of Austria demonstrates also some basic problems (or limits) of the classical dual learning approach. In Austria vocational "learning" frequently takes place at the level of semi-skilled/unskilled work. Schlögl and Mayerl (2022) note that only about three quarters of the competence of an average skilled worker is achieved by the end of the training period, which indicates that further learning is required after the end of training and the change of status to skilled workers. Furthermore, reflective forms of vocational learning are found mainly in non-productive forms of learning and significantly less in work-integrated learning at skilled worker level; in other words, work-integrated learning at skilled worker level is not per se to be equated with reflective vocational learning. The primary goal of Austria's company-based VET is still dominated by short-term labour market integration and not by long-term and investment-oriented vocational learning building up occupational capacity.

4.5 *France: Towards vocational higher education?*

In the tradition of the ubiquitous "varieties of capitalism" (VoC) approach the French SWT-system is classified as "state-regulated bureaucratic model": strongly centralised, regulated, planned, controlled and financed by the state, including VET as being mainly organised in full-time schools and ruled by didactical principles based on science and general academic education with private (i.e., employers') interests playing a subordinate role. Although this two or three-tiered VOC-world seems to serve as inexhaustible heuristic source for PhD-theses, the real world of work is a bit more complex. Nevertheless, as simplicity is a desirable goal, VOC-pundits might be confronted with an even simpler thesis: The changing world of work, which means globalisation in general and Europeanization in particular, leads to a convergence of SWT or – to put the thesis into words of educational experts – "while the traditional typologies that contrast France and Germany have served as useful heuristic devices, they require revision to adequately represent incremental institutional change in these skill formation systems resulting from endogenous reforms and exogenous pressures due to Europeanization" (Powell et al. 2012). In the following we will neither provide a new typology nor an antithesis but restrict ourselves to a simple institutional description in the light of the TLM-concept.⁵⁰

Main features of the French SWT-regime

In France, transitions into, out, within or between firms are still mainly governed by educational level, work experience and positions in the firm ('organisational space' or 'internal labour market'), in contrast to Germany, where workers' mobility still strongly depends on the vocational track ('qualification space' or 'occupational labour market'). Danner et al. (2022) recall that the importance of

⁵⁰ This case study is mainly based on Cedefop (2022b) and Danner et al. (2022).

internal labour markets probably was a positive trait in the 1945-75 period of strong growth: this institution enabled companies to integrate workers at a low-skilled level and then climbing up the ladders inside the firms. During these years the companies could easily absorb unskilled newcomers, for example workers coming from Algeria. However, this system showed important limits since the 1980s, notably because the skills demanded at the entry level went up. The French educational system reacted very slowly to this challenge, especially regarding the apprenticeship system, which remained little developed and little considered. Recent evolutions and reforms contributed to bridge the gap between education and companies in France. But they did so mainly for high-level and selective tracks, e.g., at the *Instituts Universitaires de Technologie (IUT)*, and mature academic students who benefit from a specialized diploma in their last university year, e.g., “Master pro”, “Bac + 5” level.

So, since the beginning of this century, the distinction between VET and higher education (HE) became less clear cut in France because a large part of vocational education takes place in the HE-system, albeit with a growing share of apprentices. The French tertiary or higher education system, however, is highly differentiated if not heterogeneous and shows a clear hierarchy: the *grandes écoles* vs. *university* divide plus a variety of other socially selective HE/VET-providers lead to a strong horizontal and vertical stratification governed by the degree of formal qualification and seniority. Youth without or with low formal qualification, in particular those without employment experiences are severely disadvantaged.

Regarding the overall governance structure, the French central government still plays the leading role in regulating HE and VET. Regions and social partners, however, take over more and more responsibility in VET, in particular after the 2018 reform (“*Loi pour la liberté de choisir son avenir professionnel*”) which reorganised the apprenticeship and the further training systems, fostering individual initiatives, in particular through the personal training account (*Compte Personnel de Formation, CPF*; see below). At State level, initial VET is mainly regulated by the Ministry of National Education, Youth and Sports (upper secondary VET) and the Ministry of Higher Education, Research and Innovation (tertiary VET). In cooperation with other ministries in function of the specific VET track, these two leading ministries develop standards for VET qualifications in consultation with business representatives, define examination regulations, issue and award VET-certificates. They also deliver school-based VET programmes, recruit, train and pay VET teachers; and monitor quality of training, results and resources used.

Regions are responsible for the planning and coherence of vocational training in their territories, except for apprenticeship provision. They define their policies in consultation with the State and the social partners. Since 2019, they provide career guidance and information to vocational schools and higher education institutions on learning, training and career opportunities in their territories. Social partners are (increasingly) involved in VET implementation yet not at an equal level-playing field as, e.g., in Germany. They participate in examination boards; offer

in-company training; and contribute financially. Regions mainly do so through *Transition Pro*, i.e., the network of joint inter-professional regional committees (*commissions paritaires interprofessionnelle regionales, CPIR*) administered by the social partners and approved by the State. In connection with the personal training account financing scheme (CPF, see below), they develop and finance career guidance schemes for professional transition (*projets de transition professionnelle et de reconversion*); analyse skills needs in local economies and inform the public on the activities run by the regional professional development counselling service and promote acquisition of inter-professional certificates related especially to ‘green’ and digital skills.

Employers co-finance apprenticeships through the apprenticeship tax (0.68% of the company payroll) and continuing VET through a vocational training contribution (1% of the payroll, 0.55% for micro-companies with fewer than 11 employees). An additional contribution on apprenticeship (*contribution supplémentaire à l'apprentissage, CSA*) is applicable to companies with more than 250 employees and less than 5 percent of apprentices in their workforce, and a specific contribution to CPF.

In financial terms, risk-sharing of the French SWT-system still reflects a basically centralized governance structure: According to Cedefop (2022), the State is the major funding body of initial education and training (54.9%); followed by the regions (23.1%); the private households (11.3%), the companies (9%) and other public bodies (1.6%). The main funding source of continuing training and apprenticeships, however, reflects a shift to a more decentralized structure: In 2018, the share of company expenditure among all VET financers (through contributions to joint collective bodies and from the apprenticeship tax) was 31.2 percent, marking an increase of 7.7 percent in relation to the previous year. Other contributions come from the regions (16%; a plus of 8.6%), the State and other territorial bodies (15%; a plus of 2.9%), the national public employment service (PES) and other public administrations (9.2%; a minus of 11%) and individual spending (5.5%).

In France, almost all teenagers attend a comprehensive and unified lower secondary school, the *collège*. Already at the end of the ‘*troisième*’ (age 15), they are streamed into three upper-secondary tracks: general, technological or vocational pathways leading to the CAP (*certificat d’aptitude professionnelle*), the BEP (*brevet d’études professionnelles*) or (since 1985) to a vocational baccalaureate (*baccalauréat professionnel*). Those who are oriented towards the ‘general’ and ‘technological’ path follow a one-year partially common programme and are then divided into technological and general (academic) streams which, after two further years, lead to the corresponding baccalaureates. The introduction of vocational baccalaureates made the baccalaureate (bac) the dominant educational goal. Rising numbers of pupils attaining the vocational (from 3% in 1990 to 22.8% of all graduates in 2020) or technological bac (from 3% in 1970 to 18% of all graduates in 2020) contributed to the massive overall expansion of bacs from 20 percent in one generation/cohort (1970) to 80 percent (2020). So, the bac-level of education has become less socially selective. However, although all

bacs officially grant access to HE, the kind of bac obtained matters because selection procedures vary along with grades obtained. The general (academic) bac (46.3% of all graduates in 2020) is the most prestigious, especially the scientific track (mathematics, physics), followed by technological tracks, e.g., master degrees in engineering. Early school leavers' ('dropouts') share declined from 12.6 percent in 2010 to 8 percent in 2020 and is below EU average.

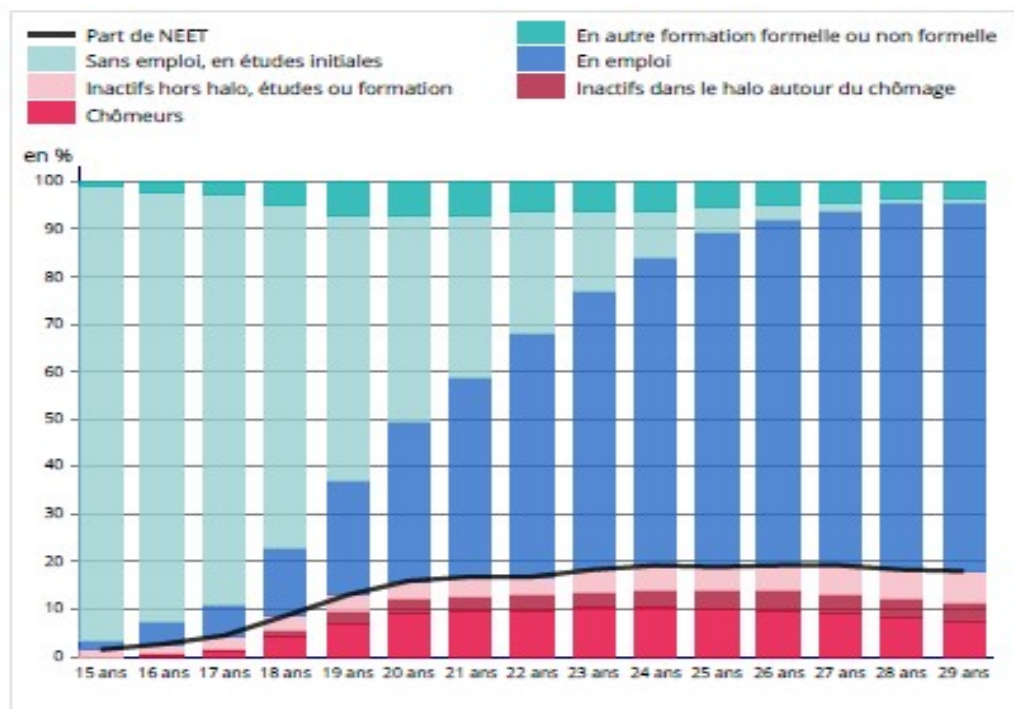
Most vocational tracks involve school-based learning combined with more or less elements of work-based learning (WBL), which means 10, 30, or 50 percent practical learning in companies. The number of apprenticeships (with 67% WBL), however, increases steadily, in particular related to post-secondary and life-long learning programmes. Most apprenticeships consist of alternating periods in an apprenticeship training centre (*centre de formation d'apprentis*, CFA) and a company under an apprenticeship contract (*contrat d'apprentissage*). The contract duration may vary from 6 months to 3 years, depending on the intended qualification. The apprenticeship programme curriculum is organized by the CFA. About one third covers general and vocational theoretical subjects. The other two thirds cover practical training in the company with a tutor (*maître d'apprentissage*) who is responsible for passing on knowledge and expertise and assigning tasks.

Learners have employee status, and their remuneration is calculated in proportion to the minimum wage, the intended diploma (for the total duration of the programme including the time spent in CFA), the age group and the year of contract execution. The salaries may vary between 55 percent and 100 percent of SMIC or 85 percent of standard minimum wage for the occupation or job (Cedefop 2022, Table 7, p. 45). Since the 2018 reform, private companies can also create a CFA to train their apprentices. In 2020, most apprenticeship contracts (66%) were concluded by companies with fewer than 50 employees, 15 percent with large enterprises (1,000 employees and more). Contracts were concluded for all levels of (VET) qualifications, the majority, however, for HE-qualifications.

Some specific characteristic of the French youth labour market

Overall, the French system of SWT is not only a highly differentiated but also a long-drawn-out process until it leads finally to labour market integration. Figure 6 illustrates this fact in a vivid way, showing the average situation of young people by age as a mean of the five years 2015 to 2019. The figure distinguishes between initial education (light green), employment (blue), other training either formal or informal (dark green), unemployment (red), inactivity but wanting to work (dark red) and other inactivity (such as parenthood) (pink). It clearly shows that the transition from school to paid work in France is quite slow: it takes 15 years for a cohort of young people to exit from the initial education system.

Figure 6: Transition from school-to-work in France



Source: Junel 2021, figure 2.a.

The overall share of NEETs is given by the black line above red and pink and is very stable after 20 years. The overall share of unemployed NEETs (in red) becomes meaningful at the age of 18-19. It remains fairly stable between the age of 20 and 26 when it starts to slowly decline. As consequence, one can expect that the NEETs problem is persisting in France for persons older than 29, an expectation which is confirmed in the following table. As the figure above does not distinguish between short-term and long-term unemployed, it is possible to sharpen the situation by looking at the size of the groups in LTU by age.

From Table 9 (below) we can draw the following conclusions: First, the number of NEETs is not decreasing for persons older than 30. This probably reflects the growing importance of the intermediate situation of parents (mainly mothers) between home care and activity. Second, the number of unemployed youths is decreasing with age, but very slowly after 35, this is in line with the persisting unemployment problem in France. Third, the number of LTU seems to be stabilized around 100,000 for each age class after 20. This amounts to 3 percent of the workforce of each age class. Fourth, because the unemployment rate is decreasing with age, the share of LTU in the total unemployment is increasing with age: 19 percent (15-19 years), 27 percent (20-24 years), 31 percent (25-39 years), 38 percent (30-34 years and 35-40 years). Here we have the real bedrock of the French SWT. Although we find this pattern more or less in all of our case studies, the exclusionary tendency of SWT seems to be most distinctive in France.

Table 9: Long-term unemployed youth in France in 2019 by 5-years age groups (in thousands)

Age Groups	NEETs	Of which: unemployed	Of which: long-term unemployed
15 – 19	168	94	18
20 – 24	585	406	111
25 – 29	651	364	112
30 – 34	670	290	109
35 – 39	672	279	107

Source: Data extracted from the 2019 « Enquête Emploi »

Recent initiatives of French youth policy

This feature led to numerous programmes aiming at integrating the vulnerable youth (low skilled, precarious social background) into gainful work. The two main initiatives are summarized below.

(1) First, a temporary but massive and innovative effort benefitting the less favoured workers: the five years Investment in Competencies Plan (*Plan d'investissement dans les Compétences (PIC)*, 2018 - 2022) targeted at the low-skilled-unemployed (1 million) and the NEETs (1 million) with an overall budget of 15 billion. The plan contains numerous and diverse programmes, mainly aiming at reaching low-skilled and excluded youths and providing them access to training and a personal follow-up. One half of PIC is made of national programmes, and the other half has been spent through regions, which either expand existing programmes or organize tenders for new programmes, and then supervise the implementation (Gaudin 2022). Many programmes offer modest earnings to the trainees. Among the numerous programmes, two deserve a special mention as regards difficult STW transitions.

100% inclusion is an experimental programme initially targeting 50,000 strongly disadvantaged youths from depressed urban and rural areas (Dupont 2022). The corona pandemic of 2020, however, limited the recruitment to only 20,000 beneficiaries (between 2018 and 2021) in 168 diversified projects and managed by 65 selected organisations. All of them followed the idea of systematic integration of training actions in a wider process including sourcing, motivating, training, removing obstacles such as housing, family duties and commuting, and getting professional experience. Additional components were the rapid recognition of the competencies once obtained, and a peers' networking. Some projects proposed a short integration route (less than six months) while others were longer (up to 15 months). The programme aimed at building an inclusive 'grey zone' between training and employment.

Another big scale experimental and innovative programme termed „Sourcing and motivating the invisible“ (*Repérage et mobilisation des invisibles*) aimed at locating the young dropouts through internet watching and 'prowling', especially

in social networks and online game platforms. The programme's various schemes reached 79,000 persons from 2018 to 2021. The projects proposed game activities, sport, and cultural activities in order to capture this particular group, and it lead participants to counselling, training and reintegration in the world of regular work. The main solutions were tailored to individual circumstances and relying on intensive use of artificial intelligence (Bureau and Tuchsirer 2022).

The evaluation of the PIC is still ongoing at the end of 2022; only some programmes have been partly evaluated at this date. The third global intermediate report of the scientific committee has been published in November 2022 (Arbelaez Ayala 2022). Mainly dealing with quantitative monitoring assessments, the report showed modest improvement for both target groups in the overall access to training. At the end of 2022, the perspective of prolonging at least partly the PIC budget was discussed among French policymakers.

(2) Since 2015, France experiments with a personal training account scheme (*compte personnel de formation*, CPF; see section 4.2.5 above). Although not exclusively focused on youth, young adults are the prime target group. CPF offers each employed individual to accumulate training credits within ten years which can be used when applying for education or training; in other words, a kind of drawing right that shall enable the workforce to enhance autonomously their employability throughout working life. Following the reform of continuing training, governance and financing in 2019, the scheme has been digitalised and transformed from time credits to monetary credits (OECD 2019; Cedefop 2022). Drawing rights are accumulated at two different rates, depending on the initial level of education of the individual and aimed at favouring disadvantaged youth. Individuals with at least a lower secondary degree accumulate €500 per year, capped at a maximum of €5,000; individuals who do not have a lower secondary qualification are credited €800 per year up to a maximum of €8,000; once used, the rights can be refilled.

CPF allows relatively modest training projects but more ambitious projects can also be financed by complementary funds after agreement of the managing body. CPF has been quite successful in 2020 with 1 million users. It doubled with more than 2.1 million validated training sessions in 2021: 1.4 million salaried users and 0.7 million unemployed users (Jaumont 2021). The mean duration of the sessions is short (67 hours as a mean in 2020) and the mean cost remains modest (1,400 Euros). Young people have been especially active: the size of the group aged less than 30 more than doubled between 2019 and 2020 (Bismuth and Valero 2021) and doubled again in 2021 (Jaumont 2021). According to Cedefop (2022), individuals using their CPF aimed mainly for the acquisition of a recognised professional certificate (around three quarters of all training actions); the remaining targets concern driving licence certificate (15%), entrepreneurship training (8%), language skills (mostly English) and others.

The CPF for career transition is a specific mechanism that enables employees to access long duration retraining actions for career change or transition and benefit from special leave, if such training is carried out, in whole or in part, during

working time. Applicants, selected by a joint inter-professional regional committee enrol in a training action using their CPF credits, complemented by funding from Transition Pro. While the employment contract is suspended during the training period, the time spent in training is assimilated to actual working time for the calculation of paid leave and seniority. Remuneration of the beneficiary during the training period is maintained (fully or partly, depending on the contract) and paid either by the employer who is then reimbursed by the respective Transition Pro (companies with at least 50 employees) or paid directly by the regional joint body (companies with fewer than 50 employees). Training accounts can be accessed through a mobile app and an online platform (*mon compte formation*) which inform on the available credits and training programmes. More than 18 million profiles have already been activated among the accounts created.

Summary and conclusion

Summing up and adding some further insights from recent transition studies, the following features of French SWT-governance should be emphasised:

- First, HE and VET are still separated worlds of education and training, albeit VET gains more and more importance especially for higher educated youth. Vocational tracks are a 'default' choice for many secondary school leavers. Both worlds are by themselves highly differentiated, and permeability between these numerous segments is limited.
- Second, VET and HE are mainly regulated at the central level, but within VET, regions, social partners, and employers gain importance in implementation. Although all employers are obliged to participate in funding, HE remains the responsibility of the central state, whereas VET and especially further training and education show a more balanced risk sharing.
- Third, the logic of internal labour markets still dominates the logic of occupational labour markets. Vocationally specific qualifications still do not clearly signal sustainable employability. Employers do not know much about the potential occupational skills of new entrants, and new entrants do not know much about the employers, putting both sides in a situation of high potential risk. On the employers' side, the reaction may be to select new entrants based on socio-economic status, formal credentials or social networks, on the individual side the reaction to this risk may be to drop-out completely.
- Fourth, France's governance of SWT is characterized by numerous policy interventions for youth employment, especially by subsidizing jobs (work-first principle); for the past 20 years, between one quarter and one third of jobs held by those under 26 years old have benefitted from state aid (Danner et al. 2022).
- Fifth, regarding the interface of HE/VET policies and social policies, the French governance system provides relatively generous cash transfers for families independent of the employment status. These benefits, however, enable a large number of mothers, and most often those with few or no qualifications, to exit the workforce or reduce their working hours, perhaps permanently, after

the birth of a child. Experts describe these transfer options as a 'poisoned chalice' that perpetrates gender inequalities in the workforce because it may result in a depreciation of skills and a loss of work experience that are disadvantageous to young women when they return to work (Danner et al. 2022).

- Sixth, France began to explore a model for enhancing individual autonomy in navigating from school to work. Although this personal training account scheme (CPF) has been used to an increasing extent, most individual initiatives are taken up by the most skilled workers. As these initiatives often are of short duration, they do not really open the doors to sustainable employability for young people who are vulnerable for various reasons. The most recent reforms, however, raise hopes the CPF develops to a fundamental pillar of the French SWT and life-long-learning system through further drawing lessons from experiences.
- Seventh, although the proportion of early school-leavers among the population between 18 and 24 years is slightly below the EU average, opportunities of returning to education and, more particularly, the chances of finding a job are lower in France than in many other EU countries. This early exclusion from the labour market accumulates during the SWT-process, reflected in an increasing share of long-term-unemployed with increasing age.

4.6 *Summary of country case studies*

Our statistical exercise as well as the five country-case studies confirmed the value of dual learning systems for successful SWT. Youth unemployment is lowest in European countries that connect their education system closely to the labour market through theoretical vocational education and practical training in firms or special training centres. According to earlier studies, Austria, Denmark, Germany, Netherlands, and Switzerland (Ebner 2012; Eichhorst et al. 2012; Lukas 2013; Pastore 2018) were best performers, yet with remarkable variations in the “dual-approach”. These countries also had a low incidence of youths ‘Not in Education, Employment or Training’ (NEET), which was the focus of our empirical research. Another early study found for instance that – on average – increasing the share of upper secondary students that attend dual learning systems by one percentage point decreases NEET rates by about 0.04 to 0.09 percentage points (Eurofound 2012).

The case studies, however, also clearly demonstrated flaws in the company-based dual systems, exemplified in the decline of companies’ willingness or ability to provide apprenticeship places and in the falling attractiveness of apprenticeships for new generations. Furthermore, we observed tendencies towards hybridisation, i.e., an academisation of dual systems (especially in Switzerland and Germany), an extension of school-based vocational training (especially in Austria and Denmark), and – generally – an increasing importance of tertiary education (universities, technical colleges, universities of applied sciences). Moreover, in order to have a contrast to SWT-regimes with still strong apprenticeship-features,

we skipped the Netherlands⁵¹ and included France with a still strong and academic-oriented school-system, representing to some extent other EU member-states like Spain, Portugal, and Greece with low performance regarding NEET. One of the dominant features regarding the youth labour market in France is the persistent high long-term unemployment rate. We related this observation to the still dominant internal labour market feature of France which favours the interest of insiders and – regarding new recruitments – the adaptability-capacity of the young academically trained newcomers to the disadvantage of young VET-graduates, even more to the detriment of youth without any formal qualification.

In brief, the review of our five selected countries has shown some remarkable commonalities in the development of school-to-work transition (SWT): Independent on whether vocational education and training (VET) is school-based or apprenticeship-based, we observed an increasing ‘tertiarisation’, which means the provision or upgrading of VET in academic institutions. We also noticed an increasing hybridisation of school-track and dual-track based education and training. Furthermore, we observed an overall extension of the period to eventually transit into the labour market, may be even the definite end of a clear-cut separation of work and education. Although we would not go so far as the OECD, insinuating that “we used to learn to work, now learning is the work” (Schleicher 2022), we can only highlight again that all our country portraits substantiate the slogan of life-long-learning, a slogan however, which should not only be addressed to adults but also to young people as an essential element to successfully transit into the labour market.

In the following, we start with an overview of the current European policies of governing SWT-transitions, briefly assess (on the background of our findings) to what extent these policies influenced or supported member-states’ SWT-policies, and end with recommendations that might strengthen the role of the EU in promoting just youth transitions.

⁵¹ For the Dutch case we strongly recommend the empirical and theoretical rich study by Dicks and Levels (2022).

5 European policies for governing just youth transitions

At the European level, three remarkable policy tracks related to SWT deserve closer attention: the European Qualifications Framework; the European Alliance for Apprenticeship, and the European Youth Guarantee. The European Qualifications Framework (EQF) resulted from the *Bologna Process* (starting 1999), in which European governments engaged in discussions regarding higher education policy reforms striving to overcome obstacles to create a European Higher Education Area, followed by the *Copenhagen Process* initiated in November 2002 to enhance European cooperation for vocational education and training (VET). Both initiatives and the corresponding conclusions or resolutions went beyond the EU-borders (including, among others, Switzerland). The Copenhagen process was seen as an integrated part of the *Lisbon Strategy* (March 2000) in which VET should be developed to play a key role in making Europe “one of the most competitive and dynamic knowledge-based economies and societies in the world” and developing a true European labour market as an essential complement to the single market for goods and services.

Further initiatives were induced by the Great Recession 2008/09 that severely hit young people all around Europe. Against this backdrop, the European Union launched two initiatives in 2013: the “*European Alliance for Apprenticeships* (EaFA)” and the *European Youth Guarantee* (EYG), which the European Commission reinforced – as a reaction to the COVID-19 pandemic – by a Youth Guarantee Recommendation, which the Council of Labor and Social Affairs Ministers adopted on 30 October, 2020. The following provides a brief overview of these initiatives and a critical assessment (5.1); suggestions for enhancing the European involvement in SWT are presented in the next section 5.2.

5.1 *The European Qualification Framework*

In 2008, the European Commission set up the European Qualifications Framework for lifelong learning (EQF). Its aim was to improve the transparency, comparability, and portability of people’s qualifications. Its wider objectives were “to contribute to modernising education and training systems and to increase the employability, mobility and social integration of workers and learners” and “at better linking formal, non-formal and informal learning and supporting the validation of learning outcomes acquired in different settings” (Council of the European Union, 2017, Recommendation 4, p. 3). The novelty of this framework was its outcome-orientation: independent of the SWT-governing systems, qualifications reached during initial education and training and during the life-course (including informal learning) should be made comparable expressed as learning outcomes at increasing levels of proficiency. Traditionally, levels of qualification were measured by the duration of learning and by the certification of the institution or location where the learning had taken place. Information on what to expect from the holder of the certificate in terms of knowledge, skills, and competences, was often unclear, at least not comparable across borders. Member states were therefore requested to develop their own national frameworks (NFQ) and to ‘translate’ their qualification standards into the EQF in order to create “zones of

trust” which should guarantee that nationally produced qualifications could be used internationally.

The EQF-initiative was successful; within a decade 34 countries (26 EU Member States and eight non-Member States) have referenced their NQFs or systems to the EQF, thereby establishing a clear link between national and European levels. The *European Centre for the Development of Vocational Training (Cedefop)* was highly instrumental in this process, and the reader is invited to visit its website, especially the overview of national qualifications framework development in Europe providing detailed information on the state of the art, which also hints to the NQF/EQF website Qualifications register/database (Cedefop 2020).

The EQF Recommendation was revised in 2017 in order to adapt it to the changing reality and to improve the mutual assurance procedures. Moreover, celebrating the EQF’s 10th anniversary, the Commission hinted to the European Pillar of Social Rights, in which the very first of the Pillar’s 20 principles is that “everyone has the right to quality and inclusive education, training and lifelong learning in order to maintain and acquire skills that enable them to participate fully in society and successfully manage transitions in the labour market” (European Commission 2018, 6). The Commission also summarised in this publication the main tools and supportive measures, such as the Europass, the credit systems for higher education (ECTS) and VET (ECVET), and various initiatives enhancing the work of national authorities and institutions, especially in career guidance and validation of learning outcomes. The countries can also share the information on their national qualifications databases or registers by linking them to the Learning Opportunities and Qualifications portal or publish their qualifications on the European Skills, Competences, Qualifications and Occupations (ESCO) portal.

The EQF defines eight levels of proficiency in three dimensions of qualification as shown in the simplified matrix of Table 10 (below). Only levels five and six are exemplified in order to give an impression of the qualifications-vocabulary and to hint to the most contested watersheds between VET and HE, in other words, the hottest battlefield of stakeholders in implementing the NQFs references to the EQF. *Knowledge* is described as theoretical or factual; *skills* are described as cognitive (involving the use of logical, intuitive, and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments); *responsibility and autonomy* is described as the ability of the learner to apply knowledge and skills autonomously and with responsibility. The latter definition is somehow tautological and does not fully meet the critic to the formulation of this qualification dimension, expressed especially from the side of EU-Member states with strong dual VET systems.

While for instance in Germany the representatives of the ministries, the Conference of Ministers of Education (KMK) and the university side favoured a close alignment with the EQF (three pillar structure), the German social partners, especially the trade unions, eventually pushed through a four-pillar structure to give social competence and voice in the qualification-formation process a higher

weight. Professional competence (knowledge and skills) and personal competence (social competence and autonomy) in the German NQF shall enable the workers to cope with different levels of complexity. Participation input is considered as inseparable element of outcome. Based on knowledge and experience, people should be able to evaluate the solutions found, to further develop their own ability to act, and to adjust to changing situations. Such comprehensive competence to act is indispensable prerequisite for professionalism and sustainable employability (see Box I “Employability”). Ideally, in dual VET-systems the focus is on developing occupational capacity, in other words ‘labour power’, in contrast to a pure outcome-oriented approach which concentrates only on the ability to produce predefined outputs.⁵² The value added in an occupation (*Beruf*) compared to a trade (*Handwerk*) is that the worker is expected to not just produce a given output, but to adapt to the changing needs of the sector and to work independently and without supervision through planning, controlling, co-ordinating and evaluating what is involved, a difference that has been persuasively demonstrated in a comparative study on trade-based skills (England) versus occupational capacity (Germany) in the bricklaying sector (Clark et al. 2013).

Table 10: The formal model of the European Qualifications Framework (EQF)

Level of proficiency	Knowledge	Skills	Autonomy and responsibility*
1			
2			
3			
4			
5	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study, and an awareness of the boundaries of that knowledge.	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.	Exercise management and supervision in contexts of work or study activities where there is unpredictable change. Review and develop performance of self and others.
6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts. Take responsibility for managing professional development of individuals and groups
7			
8			

*) Formerly “competence”, then changed (in the 2017-revision) due to criticisms that “competence” neglects social skills and the identity building feature of “qualification”.

The three-dimensional structure of the EQF, so the reservations of the German social partners, excludes VET graduates practically from levels 6, 7, and 8, which would remain the prerogative of university graduates (bachelor, master, and

⁵² The historical background of this one-sided outcome approach (from Plato, Adam Smith up to Frederick Winslow Taylor) is well elaborated in Clarke and Winch (2015).

doctorate). This contradicts the concern of the EQF to promote permeability of educational tracks and to VET at all levels. The intensive German debate in implementing the NQF with reference to the EQF was not without consequences. It resulted, for instance, in the assignment of master craftsmen (*Meister*) and business administrators (*Fachwirt*) to level 6, a level that is usually reserved in other Member States to graduates of higher education (HE). German VET-graduates are thus in the German NQF logic on an equal footing with those with university qualifications. German trade unions consider this as a social and educational breakthrough because it improves the social standing and the attractiveness of vocational training. Significantly, it had already an impact on wages and salaries: Collective agreements of the public service assigned the technician to level 6 and ranked – with reference to this level – this occupation one to two salary levels higher and has thus been given the same status as a bachelor (Nehls 2014).

Summing up, the EQF so far seems to have been pragmatically successful (Lester 2015), not least due to setting in motion national debates on their VET and HE systems by referencing their qualification outcomes to such a ‘mega-framework’. Such reflexivity is a value in itself because it enhances learning and adaptability to structural change. The value-added for youth transitions, however, seems to be limited, as the use of the EQF as a tool for allocating levels to individual qualifications (e.g., Europass; transparent and mutually recognized allocation of credit points) and European support to national or sectoral qualification development is still very limited. Our own assessment, albeit also very limited, pointed to at least one serious flaw in the concept of the framework itself by neglecting personal and professional competence in the sense of ‘occupation capacity’ or ‘sustainable employability’.

5.2 *European Alliance for Apprenticeship and Erasmus+*

The concept of apprenticeship has drawn world-wide attention already for a long time, inspiring for instance publications like “the roadmap to vocational education and training systems around the world” (Eichhorst et al. 2012). Although attempts to imitate ‘models’ like Switzerland, Austria or Germany regularly led to disappointments, and despite warnings to do so (including our own study) in view of the complexity and based on serious problems connected with this concept, it seems nevertheless that ‘apprenticeship’ still works like the “attractor” in theories on complexity, chaos or anti-chaos.⁵³ The international consultancy-offer by the German *Berufsbildungsinstitut* (BiBB) in the spirit of the “dual approach” is one practical implication (Schwarz et al. 2016). The European Commission, obviously, took inspiration from this concept when launching the “*European Alliance for Apprenticeships* (EAFa)” in 2013.

⁵³ See, for instance, Cohen and Stewart 1994: An attractor determines, according to a standard definition of complexity theory, the end state of a dynamic system during an evolutionary process.

EaFA is – according to its internet presentation – a “platform which brings together governments and key stakeholders, like chambers, vocational education, and training (VET) providers, regions, youth representatives, think tanks and social partners. The common goal is to strengthen the quality, supply, and image of apprenticeship in Europe. [...] More than 34 countries have made commitments on reforms and actions to strengthen apprenticeships and 208 pledges have been made by apprenticeship stakeholders across Europe, mobilising some 500 000 youth opportunities [...] while also promoting the mobility of apprentices.” In July 2020, the European Commission launched the renewed EaFA as part of the Youth Employment Support Package. The reinforced alliance calls for new commitments on digital and green apprenticeships, focusing on the economic sectors that will be at the front line of the transition to a climate-neutral Europe (European Commission 2022a).

Furthermore, EaFA got support by the European Apprentices Network (EAN), established in 2017 by the European Youth Forum and the Organising Bureau of European School Student Unions (OBESSU), with the support of the European Commission. EAN brings together apprentices and young people working for organisations representing the interests of apprentices. The founding members come from twelve European countries (eleven EU Member States and one EU candidate country), and aim to give apprentices a voice on the European level by formulating seven key priorities as benchmarks for EU-member states: quality education and quality assurance; rights, responsibilities, and protection; legally binding agreements; representation; promoting apprenticeships; accessible information; and anti-discrimination. The focus of these benchmarks is on quality through a learner-centred approach and on “just green transitions”, especially through the right to decent remuneration not below the EU poverty line of 60 percent median income or national minimum wage (European Apprentices Network, 2019).

On 15 March 2018, EU Member States agreed on a Council Recommendation on a European Framework for Quality and Effective Apprenticeships (EFQEA) “with the aim to ensure that apprenticeships respond to the needs of both apprentices and employers throughout the European Union”. The 14 criteria for Quality and Effective Apprenticeships are represented in Table 11 (below). The European Commission (2021) reports in its Staff Working Document to what extent its EFQEA criteria are put into practice (state September 2020), observing already considerable overall improvement, however with remarkable differences related to the 14 criteria and among its member states.⁵⁴ Overall, ‘written agreements’ as well as ‘pay and compensation’ seem almost completely fulfilled, whereas ‘transparency’ and ‘quality assurance and tracking’ show still great deficits. In response to the question on which three EFQEA criteria Member States have made most progress, the report notes that most changes took place in relation to criterion 1 (written contract), criterion 2 (learning outcomes), and criterion 12 (career guidance). The greatest implementation challenges were reported in

⁵⁴ A corresponding stakeholder survey, however, was less positive.

relation to criterion 14 (quality assurance and graduate tracking), criterion 12 (career guidance), criterion 11 (flexible pathways and mobility), and criterion 3 (pedagogical support).

Table 11: EU-Criteria for Quality and Effective Apprenticeship

Criteria for learning and working conditions	Criteria for framework conditions
1. Written agreement 2. Learning outcomes 3. Pedagogical support 4. Workplace component 5. Pay or compensation 6. Social protection 7. Work, health and safety condition	8. Regulatory framework 9. Involvement of social partners 10. Support for companies 11. Flexible pathways and mobility 12. Career guidance and awareness raising 13. Transparency 14. Quality assurance and graduate tracking

Country profiles in the appendix of the Commission’s Staff Working Document confirm that our selected countries show an overall better performance than other member states.⁵⁵ Austria shows some deficits only at criterion 11 (flexible pathways and mobility); Denmark at criterion 12 (career guidance and awareness raising); Germany at criterion 10 (specified as ‘company cost-sharing’) and criterion 11 (flexible pathways and mobility); whereas France comes out with challenges on criteria 3 (pedagogical support), 8 (regulatory framework), 11 (flexible pathways and mobility), and 13 (transparency).

Member States have allocated seven billion Euros from their ESF resources 2014-2020 for strengthening vocational education and training systems, including dual learning systems and apprenticeship schemes. A number of countries have used the ESF for promoting dual VET and developing pilot projects (e.g., to provide apprenticeships, to improve material conditions of training, raise awareness, support companies, broaden partnership between VET institutions and companies, or implement specific EFQEA criteria. The European Social Fund Plus (ESF+) with a budget of 99.3 billion Euros will continue to support apprenticeships in the 2021-2027 period. It is expected that approximately one third of the available resources will be invested in education and skills, including apprenticeships. As the Erasmus+ programme is the central pillar of the EU’s education and training activities, it deserves a brief historical review, all the more as its 35th anniversary celebration induced the declaration of the “European Year of Youth”.

When it was launched in 1987, the *Erasmus* programme covered only 11 countries and was aimed exclusively at students and lecturers at universities. In 1995, the programme *Leonardo da Vinci* (for vocational training) was established followed 2000 by *Comenius* (for school education) and 2009 by *Grundtvig* for cooperation and European exchanges in adult education and lifelong learning. In 2009, two million European students from 31 countries took part in the Erasmus

⁵⁵ Switzerland, being not an EU-member state, is not included.

programme. In 2014, Erasmus+ was introduced, merging the various European programmes in the fields of education, training, youth and sport.

The Erasmus+ budget for the period 2014-2020 was 16 billion Euros; in 2017, and the number of beneficiaries within the 30-year existence of the European program reached 9 million (European Commission 2021b). In 2021, the mid-term budget for Erasmus+ (2021-2027) reached the size of about €28 billion, an increase of plus 80 percent compared to the 2014-2020 period.⁵⁶ The share allocated to the overall education and training sector is 83 percent (€23.24 billion); the share allocated to VET (formerly Leonardo), however, is only roughly one fifth of the education and training budget (21.5%) compared to about one third (34.6%) for higher education (European Commission 2022b, 106). In other words, the budget draft for 2022 sets only about €714 million for vocational education and training (VET) compared to about €1.15 billion for higher education (HE) in 2022.⁵⁷ Also, the conditions for mobility scholarships (maximum 6 months), for instance, are less favourable for VET than for HE (maximum one year).

Thus, the bulk of the Erasmus programme went so far to HE-students not reaching substantially the ‘ordinary’ students in the school-based or dual-based VET-system. The assessment for participants in HE, however, is quite positive: Between 2014 and 2018, two million students and staff in higher education undertook a learning, training, or teaching period abroad with the new Erasmus+ programme. The impact study found, among others, “that students who complete Erasmus+ mobility for studying or training boost their employability skills, with a large majority (72%) saying it had been beneficial or highly beneficial in finding their first job. Their mobilities increased their technical, inter-personal and inter-cultural skills and competences, as well as their self-confidence, ability to achieve goals, and social and cultural openness”. Last but not least, the programme also contributes to the creation of a European identity (European Commission, 2019).⁵⁸

The European Commission, being aware of the remaining challenges, regrets that apprenticeships are usually conceived only as a learning opportunity for young people, generally in the context of initial education and training (IVET), and are therefore often underdeveloped as a learning opportunity for adult learners. The challenge, the Commission however emphasizes, is not only to make apprenticeships accessible to all people at different stages of life, but also taking into account the specific needs and contexts, especially for third-country nationals

⁵⁶ As a result of Brexit the United Kingdom withdrew from the Erasmus+ programme.

⁵⁷ Own calculation: The overall Erasmus+ budget is about €28 billion for the period 2021-2027, i.e., yearly about 28/7=€4 billion; 83 percent of this €4 billion are allocated to education and training (=€3.32 billion); 21.5% of €3.32 billion=€714 million.

⁵⁸ Recent evaluations for EU’s activities directly addressed to VET seem not to be available. Former studies of Leonardo programmes were less encouraging. Although they identified comparable positive features of HE-oriented Erasmus projects (e.g., the creation of informal networks, initiation of learning about partnership operation), critical concerns hinted especially to burdensome bureaucracy in implementation and the lack of institutional spill-over due to – among others – the poor involvement of social partners; see https://www.academia.edu/1467945/Leonardo_da_Vinci_programme_evaluation_report_en

who are legally residing and working in EU countries without a proper accreditation of their previous qualifications.

Also a Swiss report on the validation of non-formal and informal learning acknowledged great implementation deficits related to vulnerable youth, young adults and migrants (Salini et al. 2019). On the other hand, the same study also hints to estimations how much could be saved if an ‘un-trained’ person was to obtain a vocational degree *a posteriori*, concluding that active persons without an IVET diploma earned, on average, nearly €13,286 less a year than holders of a vocational degree. The Swiss Federal Council estimated in 2000 that the costs were even higher than these figures: the systematic integration of vulnerable groups in the world of work" – including people who have not completed initial vocational training – has enabled, in terms of social benefits alone, savings of €15,335 per person per year. These studies also emphasise the benefits of promoting vocational training for adults for whom validation of nonformal and informal learning (see chapter 5.1) would be one of the entry routes to obtain a VET-certificate (Salini et al., 36). Finally, the European Commission also stresses the need of professional development for teachers and trainers and increasing their cooperation on a European level, as well the importance of soft skills that cut across jobs and sectors enabling workers to change jobs more often than today.

To sum up this section: Key-actors related to SWT at the European level are well aware what is at stake. Reading official documents, one cannot complain about their well intentions. The latest documents for Erasmus+ programmes, for instance, formulates – among others – the objectives of “just” and “green” transitions in a comprehensive way: “VET shall drive innovation and growth and prepare for the digital and green transitions. „This includes a) integration of VET into economic, industrial and innovation strategies, including those linked to green and digital transitions; b) expansion of the training offer fostering the acquisition of entrepreneurial, digital and green skills; c) establishment of Centres of Vocational Excellence, which act as catalysts for local business investment, supporting green and digital transitions, European and regional innovation and smart specialisation strategies, development of vocational education and training, including at higher qualification levels (European Qualifications Framework for lifelong learning EQF levels 5-8), in line with national context and provide innovative services such as clusters and business incubators for start-ups and technology innovation for SMEs, as well as innovative reskilling solutions for workers at risk of redundancy; and d) access to state-of-the-art infrastructure, digitalisation strategies in line with national context and environmental and social sustainability in VET programmes and organisational management, thus contributing to the implementation of the UN Sustainable Development Goals“ (European Commission 2022b, 21).

So, there is no lack of good intentions but the lack of implementation capacities, both at the European as well the national level. Reading the official EU-documents, one can even ironically come to the conclusion that in terms of wording Europe reached already the Lisbon goal of being “one of the most competitive and dynamic knowledge-based economies and societies in the world”.

Such a huge gap between intentions and capabilities to act, however, is dangerous because it undermines not only the trust in European institutions but also the ambitions to further invest into the political integration of the European Union. This dangerous mix of well intentions and weak achievement capacities can also be observed at the next European policy initiative which will be the subject of the next section.

5.3 *The European Youth Guarantee*

The European Youth Guarantee of 2013 recommends Member States to “ensure that all young people under the age of 25 years receive a good-quality offer of employment, continued education, an apprenticeship or a traineeship within a period of four months of becoming unemployed or leaving formal education” (Council 2013). Although the Youth Guarantee does not attempt to eliminate youth unemployment or give all young people a job, it nevertheless must be assessed as an ambitious employment policy programme for it aims at least to shorten spells of unemployment and to ensure that as few people as possible are neither in employment, education, or training (Andor and Vesely 2018).

The first encompassing evaluation of this scheme comes to three main conclusions (Caliendo et al. 2018): First, the EU initiative had clearly a lasting positive impact on policy reforms of member states targeted to improving school-to-work transitions. Second, job-specific skills provided by dual education and training systems were the most important determinant to successful transitions. Third – and since the NEET population is quite heterogenous – even ‘model’ countries (like Austria, Denmark, or Germany) so far insufficiently addressed the needs of young adults with family care responsibilities and youth with illnesses or disabilities. NEET for mature-aged youth (25-29) is mainly driven by labour market “inactivity” and not by the inability of finding a job (i.e., unemployment), especially for women (section 3.1). A European Quality of Life Survey also shows that 11 percent of young fathers and 35 percent of young mothers are inactive, even though most of them would like to work under flexible work conditions and with adequate care arrangements (Eurofound 2017).

As a reaction to the COVID-19 pandemic, the European Commission announced a reinforced Youth Guarantee Recommendation, which the Council of Labour and Social Affairs Ministers adopted on 30 October, 2020 (Council 2020). The new scheme reaffirms the commitment of the EU member states to set up national schemes through which young people can receive an offer of employment, education, traineeship, or apprenticeship within a period of four months of becoming unemployed or leaving formal education. Most important and corresponding to our findings, the recommendation extends the age limit for targeted young people from 25 to up to 29 years. The Commission was not only alerted by various academic critics based on earlier evaluations (e.g., Eichhorst and Rinne 2017; Mascherini 2019), but also by the fact that this cohort, especially young women with family obligations, faced serious difficulties already in the aftermath of the Great Recession. Member States shall therefore commit to better inclusion of persons from vulnerable groups, to complement the actual offer of a

job, education, or training with supportive measures and to use a pathway approach rather than to limit the guarantee to a one-time offer.

A full implementation of the reinforced Youth Guarantee will require member countries to use substantial funding. The EU-Recommendation argues that there is substantial financial support through EU funds, such as the European Social Fund Plus (ESF+), the new Recovery and Resilience Facility, and REACT-EU. Although the EU-Commission did not devote a specific amount to the Youth Guarantee as in the previous funding period, it demanded from member states that they should spend at least €22 billion with EU funds on youth-employment support (European Commission 2020).

Our findings suggest, however, that it is not only resources (that might still be insufficient) but also the political will as well as the administrative capacity to implement the objective of giving eventually all young people a good and fair chance to a decent job. Despite the really laudable European initiatives so far, it seems to us that European employment and social policy has not yet got ‘what it takes’, which will be a subject of debate for the next chapter.

6 Lessons for EU's transition policies

The review of our five selected countries has shown some remarkable commonalities in the development of SWT (see section 4.3). Nevertheless, despite these signs towards a convergence of SWT systems, the remaining variety in some basic features of SWT-governance is striking. As these institutional differences might provide some hints to explain the differences in transition-performance, we try to draw some lessons in reviewing the five case studies. The question, thus, is: Can we substantiate the general principles we already developed and specified for SWT through the country experiences?

The TLM approach suggests two overriding principles: power-sharing and risk-sharing. Related to *power-sharing* it makes, first, a difference whether there are strong institutional veto points that might block any necessary reforms or even piecemeal adjustments to changing environments and respective challenges; second, the multilevel characteristic of governance in all our selected countries makes the outcomes of regulations dependent on the quality of both horizontal (e.g., between ministries) and vertical coordination or cooperation (e.g., between local, regional or industrial, and central decision makers); and third, as qualification and skill formation are decisive not only for the functioning of labour markets but also for workers' power through occupational capacity, the input of industrial relations, i.e., participation through voice, exit and loyalty of social partners, companies, and individuals make a difference in outcomes.⁵⁹ Related to *risk-sharing*, it makes, first, a difference how actors perceive the risks and value the fairness or justice of outcomes for taking risks; second, whether there is an institutional congruence in costs and benefits (fiscal incidence); and third whether appropriate economic and social incentives exist to take risks, 'economically' in terms of wages, income, and returns of investment; 'socially' in terms of recognition, identity, and respect.

Below, we will select the most interesting features of those countries that promise to lead to general principles of good governance. The Swiss case, first, seems to provide evidence for the principle of cooperative federalism. In functional terms, this principle can be formulated as an ideal arrangement of combining institutional capacities at various levels, with the ingredients of containing veto power, equalising fiscal capacities (e.g., by block grants), governing by covenants and high quality standards (1); the Danish case is characteristic for the principle of moral assurance, i.e., ensuring security (and solidarity) for actors in situations of taking risks ('flexicurity'), especially for youth in transitions (2); the German and the Swiss case seem to provide particular interesting models for hybridisation, i.e., combining advantages of dual-tracks with higher education (3); the Austrian case represents good governance by flexible implementation of legal commitments, here the youth guarantee for VET with operational adjustments to individual as well as local or regional circumstances (4); the French case represents the

⁵⁹ This triad "exit, voice, and loyalty" refers to the 'classic' of Albert Hirschmann (1970).

principle of learning through innovative experimentation, exemplified here in establishing individual drawing rights to continuous education and training (5).

All these principles could serve to develop suggestions for improving SWT policies of individual EU-member states; in the following, we try to adapt them to the transnational level of the EU, also with reference to some critical features of current EU-policies discussed above.

6.1 *The principle of cooperative federalism*

Our study found substantial evidence that the Swiss governance system seems to perform best among our selected case studies with one important reason for this good performance being the specific structure of Swiss federalism. We believe that the Swiss kind of cooperative federalism provides some plausible suggestions how the intergovernmental relationships of EU's member states could be improved to make youth transitions policies more equitable and efficient.

As first observation, it must be emphasised that the Swiss cantons – in contrast to the German federal states (*Länder*) – do not represent their institutional interests in the Council of States (*Bundesrat*) but rather the same group interests as the representatives of the federal parliament. The real influence of the cantons takes place in the pre-parliamentary negotiation system, where the cantons are consulted like the other interest groups. Furthermore, the cantons exercise their “voice” through their implementation capacities on which the Confederation is dependent. In contrast especially to Germany (to some extent also Austria), where the *Länder* exercise considerable veto power leading to reform blockages induced by ‘joint decision traps’ (Scharpf 2006), only direct democracy has proven to be the actual veto position in the Swiss Republic; only in this case, the population of the small cantons has disproportionate weight in double-majority votes concerning amendments to the constitution and popular initiatives (Linder 2007; Linder and Mueller 2021).

Second and – it seems to us – even more important, political autonomy without tax sovereignty is unthinkable in Switzerland: communes, cantons, and the federal government each have their own income taxes and have additional tax powers. Moreover, tax competition prevails among cantons and communes alike. Unequal burdens and unequal tax power are mitigated by vertical and horizontal financial equalization. In other words, Swiss federalism tolerates to some extent inequality and uncertainty of the implementation of central policies as a price for the political autonomy of the cantons; in contrast, ‘equality of living conditions’ among the regions is a constitutional goal in Germany and to some extent also a policy objective of EU's social coherence policy.⁶⁰ Concerning redistribution, the

⁶⁰ If we look at the origin of total public funding for education (including VET) by governance level, the degree of Swiss fiscal decentralisation is the highest among our selected cases, whereas France is the most centralised country. According to OECD (2022a, Table C4.2), 95% of public education funding comes from the cantons (67%) or communities (28%), whereas in France, the funding share of regions accounts only to 14%, and that of communities only to 10%. In small Denmark, the middle (regional) level plays – in contrast to Austria and Germany – no role, but the

Swiss central state governs more and more by block grants, replacing thereby earmarked subsidies, and through framework legislation giving the Cantons much leeway in implementation, however, demanding and monitoring high quality standards in outcomes. Switzerland also governs the increasing economic and social interdependencies within and between local and regional levels by numerous conferences across the borders, professional networks, joint ventures, and especially by so-called concordats (agreements between the cantons), labelled ‘covenants’ in our theoretical section on governance.

If we translate these insights to the EU-level, we come to two tentative suggestions: containing veto power and fiscal capacity building (1); fiscal equalisation, especially through institutional capacity building, governing by covenants and standard regulation (2).

(1) EU’s youth policies are still restricted by the principle of unanimous decisions at the central level. The European Council (heads of state or government) must vote unanimously on several policy areas which the Member States consider to be sensitive, especially in the areas of foreign policy, taxation, social security, and social protection. Despite increasing voices for a qualified majority vote, changes were slow in this direction during the various reforms of the treaties in which these sensitive areas are enlisted.⁶¹ Although vocational and higher education do not belong to this list and even got upgraded in the Treaty of Lisbon by adding a provision (a so-called horizontal ‘social clause’) in Article 9 of TFEU⁶², any youth policy reform that would imply a substantive increase in the EU budget, will be handicapped by the unanimity rule. During the last decade, however, we observe a widening gap, if not contradiction, between the increasing ambitions of the EU and its fiscal capacities.⁶³ This gap, however, can “backfire” (and already did) by undermining trust in European policies and institutions.

The former EU-commissioner for Employment and Social Affairs considers the current constitutional limit of fiscal capacity (1% of GNI) even a ‘fetish’ (Andor 2018), especially in view of the fact that various proposals of increasing EU’s fiscal capacities through EU taxes (e.g., emissions-trading or a digital tax; a single-market tax for large corporations to compensate for the advantages of the common market) have not yet been (or will never be) implemented or bring little

communities are in terms of funding highly involved in education. So, the Danish good performance in SWT (second in our preliminary ranking) seems to come at least to some extent from the strong political autonomy of the Danish communities.

⁶¹ A “qualified majority” requires at least 55% of countries representing at least 65% of the EU population.

⁶² TFEU = Treaty on the Functioning of the European Union: “In defining and implementing its policies and activities, the Union shall take into account requirements linked to the promotion of a high level of employment, the guarantee of adequate social protection, the fight against social exclusion, and a high level of education, training and protection of human health”

⁶³ Just to enumerate a few of these ambitions: European Green Deal, European Child Guarantee, Just Transition Fund, European Unemployment Reinsurance Scheme, and European Youth Guarantee. See also Loukas Tsoukalis (2022) arguing for “a more federal-like political entity in Europe unshackled from the unanimity straitjacket” that “should also be better able to address the democratic deficit”.

relieve to the EU-budget (e.g., the so-called plastic tax). This plea for raising the EU-fiscal capacity has recently been seconded by a comprehensive IMF-study (2022). The current debate on a European wide policy of compensating low- and medium-income people for high energy prices, the need of repayments of loans for SURE⁶⁴ and RRF⁶⁵ in the future, and the increasing difficulty of the EU to placing EU-bonds on the capital market due to rising interest rates aggravate the problem of EU's lack of fiscal capacity. Even if one agrees that currently the main problem lies not in required additional funding but in institutional capacities for implementing the funded policies (Schmid 2020, 472-476), the veto power of any single member state severely limits the agility and flexibility of European youth policy. Further treaty reforms towards qualified majority decisions in youth transition policies would be helpful.

(2) The European cohesion policy so far had limited success. Although increases in mean income (income convergence) contributed to the decline in EU-28 inequality, especially in favour of Eastern EU member states, within country inequality worked in the opposite direction, among others in Germany (e.g., EEAG 2018, Chapter 4). Further deepening the single market and faster adoption of digital technologies might create new jobs but put other jobs at risk, especially in poor regions. Many studies on the EU structural and cohesion policy, however, observe a slow and burdensome implementation, often even non-utilisation of existing funds, especially to the detriment of workers with low levels of education.⁶⁶ A bolder move towards a simplified cohesion policy would make European policy support more effective, in particular for youth. A promising way to reach this goal would be to switch from earmarked subsidies to block grants and to replace detailed implementation rules by framework legislation in form of directives setting high quality standards. This would give European regions more leeway in implementation, however controlled by stricter monitoring processes and making the size of the block grants depending on the outcomes meeting the standards.

Policy coordination could be improved by supporting capacity building in form of professional information exchange through standing conferences, social dialogue and covenants across European regions or sectors. Although the Union shall, according to Article 174 of the TFEU,⁶⁷ aim at reducing disparities between the levels of development of the various regions (especially lifting 'backward regions'), diversity is at the same time valuable in promoting learning processes, and policies need to be targeted to country specific circumstances. The current emphasis on outcome convergence should therefore switch to input convergence (as in the case of Switzerland), which incidentally seems to be already indicated in

⁶⁴ SURE = Temporary Support to Mitigate Unemployment Risks in an Emergency (EURO 100 billion)

⁶⁵ RRF = Recovering and Resilience Facility (EURO 250 billion in loans in addition to EURO 310 billion grants).

⁶⁶ By the way, low-skilled workers are less supportive of the European Union than high-skilled workers (e.g., Caldera Sanchez 2018).

⁶⁷ TFEU = Treaty on the Functioning of the European Union.

the European Pillar of Social Rights by emphasising, for example, the individual right to high quality education and sustainable career development.

6.2 *The principle of moral assurance*

In the case of Denmark, we found a persuasive realisation of the principle of moral assurance, i.e., ensuring security (and solidarity) for actors in situations of taking risks ('flexicurity').⁶⁸ We noticed one peculiar feature of the Danish SWT-system: a large proportion (26.4%) in the age-group 25-29 is still in the education system before most of them switch – as in the other countries – successfully into the labour market at the age of 30-34 (see tables 4 and A2). These young people are in a kind of protected transition system that allows them to test their abilities in a trial-and-error process before they eventually decide about their labour market career. In this risky life-phase of "compressed decision making" (see Box on employability) it is important to have a solid financial background in order to not decide too early a life-long career that might end in the low-skilled labour market or even in precarious work.

Denmark is the only country in our sample that seems to provide this security for youth without means testing that often leads to discrimination or discouraging bureaucracy. All trainees over the age of 18 receive a grant of EUR 808.84 per month (2016/17) during the basic school training that is financed from state funds. In addition, for those who have not found an apprenticeship, there is a guarantee of (state funded) school-based training with varying proportions of practical phases. Special access routes have been created for mature-aged youth over the age of 25. Their training time is shortened for those who have already gained professional experience in the field of the selected training. Even in the case of unemployment, Danish youth are comparatively well protected compared to the other countries selected in this study (Leschke and Finn 2019).

The Danish experience could stimulate the EU to relaunch part of its youth initiatives in two directions: (1) First, by setting standards of unemployment insurance addressed in particular to youth; (2) second, by realising not only the promise of a European Unemployment Benefit Reinsurance Scheme (EUBRIS), but also by extending the European Social Fund (ESF) to a European Employment and Social Fund (EESF) with elements of work-life insurance that support Member States, among others, to implement a kind of job guarantee for youth. As the details of these suggestions have been developed already elsewhere (Schmid 2015, 2018, and 2020), a summary in brief form must suffice here.

(1) Various publications have suggested that the EU should set minimum standards for national UI-systems (among others Luigjes et al., 2019); in fact, such standards would be a precondition to realize the European Unemployment Benefit Reinsurance Scheme which the President of the European Commission set on her policy agenda at the beginning of her tenure (von der Leyen 2019). These

⁶⁸ The concept of moral assurance – in explicit contrast to the concept of moral hazard – has been developed in condensed form in Schmid (2020, 468-471).

standards should ensure an appropriate coverage, a decent and not means-tested level of income security for involuntary unemployed, and effective placement services. The main reason for the current stalemate in the establishment of EUBRIS is the enormous diversity of national UI-systems and the fact that many Member States have only weakly developed UI-regimes (e.g., Clasen and Clegg, 2011; Leschke and Finn, 2019). Many EU member states cover a rather limited range of workers with unemployment insurance benefits, especially youth are often excluded. Moreover, many member states have not only poor capacities for employment promotion but also scarce resources for wage replacement. For youth with not yet fully developed earnings capacity, the latter dimension of UI is of special importance. Having often not yet gained full UI-compensation, an integrated approach to ensure decent income security with ongoing measures of developing employability capacity is necessary. One way to increase the coverage for youth would be a targeted job guarantee,⁶⁹ which would support gaining access to UB through wage related contributions, another way would be easing requirements to benefit entitlements, e.g., by defining apprenticeship contracts or formalised training periods as regular employment relationships and subsidising the related obligation to UI-contributions to a level that guarantees a decent income security in case of unemployment. As unemployment benefits link jobless people to employment services and measures of employment promotion, the absence of accessible unemployment benefits makes it difficult to reach out to those facing multiple barriers to employment, as impact studies of the current EU youth guarantee demonstrated. Finally, even a time-limited basic income for youth (a kind of personal development account) could be considered once they complete their education, fading out over a given time-frame and made conditional on job search or further training.⁷⁰

(2) The ESF+ already enhanced the employment promotion functions but it does not yet address the core of the youth unemployment problem: in economic downturns (recessions) firms' demand for new workers stops and recovers – if any – only after a great time lag. This pro-cyclical reaction is especially pronounced in depressed areas and hits especially youth, including apprenticeships. If the current stalemate of EUBRIS cannot be overcome for constitutional reasons (i.e., change of the treaties), the explicit extension of the constitutionally already established ESF towards a European Employment and Social Fund (EESF) might be a solution. Such a conceptual change would allow

⁶⁹ We draw attention to the study by Tcherneva (2020), yet with some caveats: first, any wasteful and often discouraging “make-work pay” should be avoided; second, job-guarantee-policy can also be addressed to ‘regular’ jobs in the private sector, e.g., through wage subsidies (see below). For a methodologically sound study on Austria, we recommend Haim (2021). Finally, of special interest is the (still ongoing) repetition of the most famous study in Marienthal on the devastating impact of unemployment (beyond its material consequences on income) in the form of psychological outlook, attitudes to the future, time structure, social cohesion, etc.. The preliminary results – based on sound and innovative methodology – suggest indeed the strongest impact of a job-guarantee on the psychological well-being of beneficiaries (see Kasy and Lehner 2022).

⁷⁰ We follow here a proposal by the authors who evaluated the EYG yet with the difference that we make such a basic income conditional (see Caliendo et al. 2018, part 2).

to also address the demand side of the youth transition problem, for instance through subsidising firms wage costs in depressed areas. Wage subsidies targeted to hiring young people in severely depressed areas, including apprenticeships, and (maybe) further targeted to small and medium sized firms, and combined with inexpensive investment loans from the EU's investment and structural funds could cope with or at least mitigate the risks on the demand side of labour.

It was Nicolas Kaldor (1936) who hinted early at this option: If employment cannot be boosted by devaluing currencies (the case at least for member states of the Eurozone), wage subsidies would be a functional equivalent. From the 1980s the positive role of wage subsidies has been aggressively defended by Gösta Rehn (1984) and – among others – by John Bishop and Bob Haveman (1981). Recently, Olivier Blanchard et al. (2020) also hinted to wage-subsidies as a valuable measure to overcome the COVID-19 pandemic. Exceptionally high levels of workers who are laid off, they argue, are likely to have a hard time finding another job and thus could remain unemployed for a long time. Here we can add that youth having not yet gotten a job or an apprenticeship contract are likely to extend formal schooling (without necessarily gaining better qualification) or to drop out of the labour market, thereby increasing the public expenditure for (possibly unproductive) continued schooling or social assistance. Furthermore, all these authors stressed the argument that the expectation of and the reliance on wage-cost-support in recessions could give existing companies incentives to form new markets or encourage new firms to enter the market, an argument that comes close to our concept of moral assurance, applied – in this case – to established firms or start-ups.⁷¹ This demand-side orientation of moral assurance also corresponds to the strategy of subsidising private innovation activities as a risk-sharing device (see section 2.2): As the risk-sharing effect of government subsidies is influenced by a firm's absorptive capacity and the asset specificity of the project, public-subsidy theory suggests to concentrate funding on highly re-deployable assets, such as general equipment and basic knowledge training (Lu et al. 2022). It goes without saying that wage subsidies can lead to moral hazard which, however, could be controlled by careful targeting and effective administrative capacities, which brings us back to the already emphasised importance of implementation capacities of labour market policy which in many EU member states are underdeveloped.⁷²

⁷¹ In the language of economics: “Put more formally, the shadow price of labour is [*in the situation of high unemployment, Schmid et al.*] very low. From a social efficiency point of view, firms should make decisions based on a comparison between the marginal product of a worker and this shadow price rather than on the comparison between the marginal product and the wage. If the wage cannot be cut, or at least cut substantially [...], *wage subsidies are needed to lead firms to take the socially efficient decision*” (Blanchard et al. 2020, p. 4; emphasis added).

⁷² The shift from wages subsidies addressed mainly to workers via short-time-work allowances or furlough schemes to wage-cost-subsidies to firms in the wake of upswing or economic recovering is the logical counterpart of this argument, which could be enhanced by stronger conditions on training or retraining of workers as in the case of short-time work (Fischer and Schmid 2021). Employment subsidies for unemployed have proven to be one the most efficient ‘active’ labour market policy instruments (Card et al. 2010; Escudero 2018).

An alternative and/or complement to subsidising firms' or would-be-firms' wage-costs is the extension of regular public employment in areas where there is a chronic lack of employment and corresponding service or production, especially (and closely linked to youth transitions) in the field of professional vocational education and training. Apart from too few teachers in this area in many member states, the professionalism of VET-teaching is relatively low and/or VET-teachers are in precarious employment relationships (part-time contracts, fixed-term contracts, or even only casual contracting). Finally, with respect to overall public employment as an important pathway to decent jobs for youth, Denmark again seems to serve as a model country.

6.3 *The principle of hybridisation or institutional layering*

Our case studies have shown that the institutional divide between vocational education and training (VET) and higher education (HE) is in apprenticeship-based Germany, Austria, and Switzerland stronger than in the school-based education and training systems in Denmark and France. Yet all three countries developed some hybrid forms that combine both worlds of employability formation in one way or the other, a process known in the literature as “strategic layering” or “institutional layering” (Mahoney and Thelen 2010, 166-17; Graf 2013, 48). We also identified as main drivers for hybridisation not only the exposure to external structural change (globalisation, digitisation, competitive supply chains), especially for small countries like Austria and Switzerland, requiring the upgrading of skills, but also the pressure from internal social change (ageing, feminisation, inequality) leading to increasing aspirations in education. Lukas Graf (2013) distinguishes in his seminal study three forms of hybridisation due to specific factors in the respective national institutional contexts: the *dual study programmes* in Germany; the *Berufsbildende höhere Schule* (BHS, higher vocational school with higher education entrance qualification) in Austria; and the Swiss organizational configuration of *universities of applied sciences* (*Fachhochschulen*, FH) that directly build on dual apprenticeship training leading to a vocational baccalaureate.

All the three hybrids have not only the potential of meeting the challenges of structural change but also the potential to increase social mobility for a group of young people who would be unlikely to choose the standard routes in HE. On the other hand, all three models include the high risk of damaging traditionally successful modes of multilevel governance (excluding especially stakeholders at local and regional levels) and social partnership (excluding especially workers representatives). Moreover, the laudable increase of permeability for youth most from a social middle-class background (who, in former times, chose traditional dual VET-tracks) might further increase the disadvantages of vulnerable young people from poor social, economic, and education background. One way to respond to the latter risk is to enhance labour market policy programmes targeted to vulnerable youth for which we identified especially Austria as prominent example (see next section). Another way is to strengthen “hybridisation”, either based on the enterprise-centred German model complemented with measures to

assist disadvantaged youth (1), or based on the Swiss model of Universities of Applied Science with strong dual VET elements (2).

(1) The German multinational giant Siemens seems to be a pioneer and setting standards for other large companies, especially related to “greening” skill formation in apprenticeships, which we will briefly sketch in the following.⁷³ Siemens is one of the largest companies offering apprenticeship in Germany in the technical field, with 3,682 apprentices enrolled (all numbers as of 30 September 2021) and another 1,029 apprentices that are trained by Siemens Professional Education for third party companies. In addition, the company manages international dual VET activities for approximately 2,000 apprentices enrolled in other countries. The higher dual VET at Siemens provides apprenticeship education combined with academic studies at university level. In many such cases, higher dual VET graduates obtain an academic diploma in addition to the certificate issued by the Chamber of Commerce and Industry. When considering the pipeline of young talents (25 years or younger) hired each year by Siemens in Germany, up to 80 percent are apprenticeship graduates from the Siemens Professional Education pool. As multinational player, Siemens has also a global impact when designing new common training modules suitable for all occupations and skill levels, because these modules are then offered to partners in other countries.

A specialised VET team at Siemens screens regularly innovation trends, including those that are relevant for sustainability and evaluates their relevance for VET content via a trend-radar. Once a trend has been proven to be relevant, it is evaluated as to its strategic scope, and then further explored by the VET innovation management team according to several process steps. A core team composed by internal (Siemens technology experts, Siemens trainers) and external stakeholders (members from academia or employers’ associations)⁷⁴ develop correspondent skill requirements of all occupations in which ‘Siemens Professional Education’ trains apprentices or higher-level dual students. One interesting tool is the ‘learning pyramid to apprenticeship’ starting with common competences every apprentice should be educated in, regardless of their specific role and business unit. Another important tool is project guided learning, in which skills for the green transition and sustainability are addressed via suitable project topics and practical examples, rather than producing theoretical learning nuggets around this topic. Furthermore, all Siemens employees can use ‘My learning world’, the corporate digital learning platform (DLP), for their individualised learning.

The role of the EU with respect to this model could be to provide incentives to multinationals like Siemens to include disadvantaged youth in their education and training programmes in reminding the “Corporate Responsibility” and their capacities to pilot social innovations.

⁷³ This sketch is based on Szuppa et al. (2022), who report in detail on new skills for apprentices and students to master green transformation at Siemens.

⁷⁴ Interestingly, however, trade unions are not mentioned.

(2) The unique feature of the Swiss SWT-system, we noticed, is the tertiarisation of VET in a way that maintains the dual apprenticeship principle as an integral part of education and training (Graf 2013, 161-168). Although used still to a limited extent, the Swiss vocational baccalaureate in combination with the *Passerellen*⁷⁵ represents structural elements that legally define the Swiss universities of applied sciences as rooted in the organizational field of VET. Thus, the vocational baccalaureate is (still) the ideal path into universities of applied sciences and the universities of applied sciences are firmly based on the dual apprenticeship system, both normatively and in terms of actual participation rates.

Furthermore, the corresponding Swiss curricula development is highly professional with the consequence that the quality requirements of VET-teachers in Switzerland are also demanding. Moreover, we noticed that Switzerland excels especially in terms of timely adjustments of VET curricula, which – among others – enhances substantially the absorptive capacity of mainstream enterprises, in other words, the diffusion of new technologies and quality standards related to a green economy. Finally, there are signs that this professionalism is further enhanced through a consequent tertiarisation of education and training of VET-teaching staff. The Swiss Federal Institute for Vocational Education and Training was legally upgraded in 2021 to the Swiss Federal University for Vocational Education and Training (SFUVET).⁷⁶ Since then, SFUVET is Switzerland’s expert organisation for vocational education and training, offering basic and continuing training to VET professionals, conducting VET research, contributing to the development of occupations, and supporting international cooperation. SFUVET is a public-law entity with its own legal personality and legal basis and acts as an interface between trade associations, “professional organizations from the world of work” (known as OdA), and the 26 cantons. SFUVET applies, according to its motto, the principle of “building better practices through practice”, whereby professional practices are constantly enriched by constant feedback between researchers and VET/PET professionals in the field.

We could imagine that the EU starts an initiative to establish something comparable at the EU-level, so to speak a VET-complement to the European University Institute (EUI) in Firenze, founded already in 1972 to play a leading and coordinating role in European higher education, learning, and research. Such an institution could play a leading role in speeding up the VET-curricula of its member states.

⁷⁵ According to Graf (2013, 166) there are two types of *Passerellen*: (A) the *Passerelle* “vocational baccalaureate – university” requires that students who hold a vocational baccalaureate and want to enter a university or federal institute of technology pass an extra examination (for which there are specific preparatory courses of various lengths); (B) the *Passerelle* “academic baccalaureate – university of applied sciences” entails that students with an academic baccalaureate who want to attend a university of applied sciences are being required to have one year of practical experience in the desired field of study (to which end some universities of applied sciences offer structured internship programs). So, these transitions require substantial motivation and engagement of students, one reason, why the use of these permeability options is still limited.

⁷⁶ See the homepage <https://www.sfuvet.swiss/sfuvet/about-sfuvet>

6.4 *The principle of flexible implementation*

We noticed that the trends of ‘tertiarisation’ and ‘hybridisation’ imply an increasing risk of social exclusion for youth who are vulnerable or disadvantaged for various reasons. Even traditional apprenticeships became demanding in a way that youth without formal secondary school degrees have little chances to enter this track. The strategic solution to this problem is to implement a committed yet flexible policy aim. In this regard, one of the most promising strategies seems to be the commitment of governments to guarantee an education or training place up to a specific age and to adjust training and education measures to the specifics of individual circumstances and contextual capacities at local or regional level.

Austria provides a concrete and proven example.⁷⁷ Although its commitment does neither guarantee an occupational degree nor an employment, it considerably improves chances through opening new gates to combine practical learning, its theoretical foundation and gaining individual sovereignty through experiences, and this commitment goes to all youth at least up to the age of 25 who – despite applications – were unsuccessful when looking for a traditional training position or who have dropped out of their training. As already mentioned in the case study, this youth guarantee is flexibly implemented in two main forms: supra-company apprenticeship training (ÜBA) with internships in various companies, or the supra-company education and training in permanent cooperation with a company. The characteristic new element, first, is a change in power sharing with the regions having more influence taking initiatives and implementing, especially in the selection of the professions through regionalised estimates of training demand and supply based on labour market data, complemented by negotiations with social partners and companies. The second important change is a new balance of risk-sharing in which the centralised collective fund for unemployment insurance and ‘active’ labour market policy (represented by AMS, the Austrian federal employment agency) takes over more responsibility.

As the Austrian training guarantee was designed together with business and social partners, and as the latter are still involved at all levels of design and implementation, the programme received wide acceptance, especially on the part of business. Due to a sophisticated set of incentives and control mechanisms, e.g., strict proof of unsuccessful applications, support of placement by the AMS, placement bonuses for providers, lower remuneration for trainees in the supra-company-workshops compared to conventional training places, there has been no displacement of ordinary apprenticeships. On the contrary: The programme helps to overcome employers’ risk-aversion resulting from information asymmetries: Companies that take on ÜBA trainees during the training period receive pre-qualified young people who have already passed the sometimes-difficult initial phase. In this way, the training guarantee can also act as a link between vacancies

⁷⁷ Apart from the literature quoted in the Austrian case study, we used here also insights from the study of Bosch et al. (2022), which we recommend for the overall discussion on education and training funds.

of training positions on the one hand and applicants who are not yet placed on the other hand.

Our suggestion is that the EU, in its further development of the European Youth Guarantee, translates these positive experiences in one way or the other into its regulations. One way could be to provide distressed European regions through block grants with more leeway in implementing EU-supported youth guarantee programmes, another way could be to relief national UI-schemes through a reinsurance mechanism.

6.5 *The principle of learning from social experiments*

Uncertainty is an essential characteristic in the field of SWT, first due to undetermined structural changes on the labour market (both at the supply and demand side), second due to the sheer complexity of this transition phase in the life-course, and finally due to either unclear, vague, or discretionary priorities of individual choices in education, training, and occupations. It is known that firms do not well know the future skills or competences they need and that many young people struggle to choose a specific education or occupation track. The first step to deal with this problem, of course, is trying to forecast skill-needs and future skill-capacities, but even the best forecasting systems can only mitigate the risks being completely wrong in the prognosis. Reviewing the current skill forecasts for a “greening” economy and society, our assessment is that much information provided meets not the often-overambitious goals (“digital, greener and more resilient”), and that the “megatrends”, “baselines” and “scenarios” of even the best forecasts provide scarcely clear advices for SWT-policies.⁷⁸ Indeed, “it is hard to predict, especially the future” (Nils Bohr), and the best advice seems still Antoine de Saint-Exupéry’s: “As for the future, your task is not to foresee it, but to enable it.”

From the stance of normative values, here especially freedom to act, as well as from the stance of complexity theory, one of the best strategies to cope with uncertainty is to enhance individual autonomy. In all case studies we observed that many if not the majority of youth struggle with funding their study and/or a decent living at the same time when they must make their decision of live. Apart from social policy guided by the principle of moral assurance (see principle 2), we argue that rigorous social experimentation might be a good strategy to cope with this problem of uncertainty, also at the level of society, especially if directed to the aim of enhancing the space of individual capabilities with emphasis on their financial capacities. We think that the initiatives of French governments in the last

⁷⁸ See, e.g., Cedefop (2021) ascertaining slogans or truisms like “the leitmotiv of this decade is transition”; “difficulties in finding professionals with essential talent could rise”; OECD 2020; Schleicher 2022. As a result of its second European skills and jobs survey, Cedefop’s conclusion corroborates our stance: “Rather than speculating about jobs that may or will vanish, policy-makers, social partners and other stakeholders should be concerned with a much more fundamental question: how should work be (re)designed after implementing new digital technology, to capitalise on human-machine complementarities” (Cedefop 2202c, 98).

decade (for details see section 4.5) related to individual education and training accounts (1), and to the Investment in Competences Plan (2) provide some lessons for other countries and the EU as well.

(1) Important for the improvement of the French individual training account (CPF) was the enhancement of implementation through various and tailored counseling services of diverse public or semi-public organisations such as Pôle emploi (the French public employment service), and the ‘Missions locales’ (decentralized bodies contacting and helping Neets) offered at three levels: ‘intake’ (short contact), ‘in-depth’, up to two hours of dialogue, and ‘follow up’, up to four hours during six months after the intake. In 2020, 100,000 persons have been counselled, and in 2021 the balance given by France Compétences (the supervising public body) indicates 140,000 users. What is striking is the rapid expansion of the individual initiatives ‘activating’ their training rights and making their own choice. Although CPF is still mainly used by skilled workers, it recently has increased focus on intermediate or low-skilled workers.

(2) Comparable implementation reforms are related to the Investment in Competences Plan (PIC). The French recent efforts aim at strengthening capacity building through increased autonomy of participants in education and training decisions complemented by a mix of counselling services offering, e.g., reflexive ‘training to be trained’ (Farvaque 2022), and various work experiences. The buoyant demand for training, stimulated and revealed by the CPF, offers a strong contrast with the tradition of scepticism and passivity regarding further training in France (Bureau and Tuchsirer 2022).

These policy developments trace routes out of the classical STW ways, as regards the modalities of the public interventions (universal rights, free choice, counselling and follow-up) as well as the transversal logics developed in the coordination of different actors at multiple levels, often taking place in the ‘grey zones’ between employment and training, observed also in other countries, for instance the so-called ‘*Übergangssystem*’ in Germany. It is too early to assess and evaluate the final outcomes. But it is likely that the outcomes will be limited given the weaknesses and scar-effects of the initial education system in France, along with the persisting relatively high level of unemployment, and the low quality of available jobs for low-skilled workers (Gazier 2022c). However these efforts open some avenues in the renovation of the STW governance in a context of hybridisation and tertiarisation, especially for countries without a strong apprenticeship system.

The French learning process through experimentation resulted especially in two features substantially different from the original (and neoliberal) idea of individual learning accounts (ILA): The ILAs of the 1990s were introduced with the objective to boost individual choice and responsibility. Individual funds were thought to enable workers to “shop” around for training in a “market” with many competing providers, thereby not only improving individual skills but also the efficiency of providers through competition. Another feature of ILA was the intention to increase job-to-job mobility through individual rights “portable” from

one job or employment status to another. Although the portability of training rights is still an attractive feature, it misses the fact that mobility capacities are individually very different and mostly a privilege of well-settled and high-skilled workers. The French CPFs are not any more based on the presumption of competitive markets in the education or training delivery sector, or on the assumption that every individual is the architect of his or her own fortune. CPFs design and organisation of implementation consider already that most individuals need assistance from local or regional networks to utilize effectively their drawing rights, and they also include already an element of equalising the individual capacities of mobility.

So, the French (and maybe other countries') experiences of individual entitlements to life-long learning have clearly demonstrated the cliffs to be circumvented in transforming danger into trust. This recent development should encourage the European Union to adopt this concept into its youth policy programme. The theory of TLM and the results of our study, so far, suggest for example to enhance the VET-part of Erasmus+ (may be also the Youth Guarantee) with an element of European drawing rights to qualified apprenticeships for NEETs targeted to the low-skilled or low-income people in the age group of 25-34. International evidence and experiences, thereby, point to the importance of proper programme design and required implementation capacities, especially regarding personal assistance services and training quality (OECD 2019).

7 Summary and conclusion

„Young people must be able to shape Europe’s future [...] that is greener, more digital, and more inclusive“ declared Ursula von der Leyen when she suggested the European Year of Youth 2022. Her proposal was adopted on December 22 (2021) by the European Parliament and The Council. The resulting document enumerates, among others, the following main objectives:

- to boost the implementation of Principle 1 of the European Pillar of Social Rights (“everyone has the right to quality and inclusive education, training and life-long learning”);
- to strengthen Europe’s efforts for just transitions (e.g., condemning the practice of unpaid internships when not related to the acquisition of educational qualifications);
- to provide further impetus for the creation of quality youth employment opportunities (e.g., by reinforcing the Youth Guarantee especially for disadvantaged youth not in employment, education, or training);
- to fight youth unemployment and poverty that had risen steadily since the COVID-19 pandemic.

With the Russian war in Ukraine, the attention of European politics since then has been drawn to other issues. A new European youth policy is not in sight. But even if young people had been at the forefront of European politics in 2022, a paradigm shift was hardly to be expected. The increasing complexity of the transition from school to work is still poorly understood politically and has not yet been adequately researched scientifically. Meticulously descriptive analyses of youth unemployment often end in mere demands to finally implement the youth guarantee or in the call to follow EU member states with apprenticeship systems due to their allegedly low youth unemployment. We have therefore taken this gap between the ambitious, if not outright presumptuous objectives of European youth policy and the hitherto mostly quite modest successes of the specific programmes as an opportunity to analyze the complexity of the transitions of young people into their working life. We also developed proposals based on the experiences of selected countries how European youth policy could be improved and made more effective.

The starting point is the theory of transitional labour markets, which redesigns the labour market as a system of transitional processes over the life course. Analytically, the labour market must be viewed as a structured sequence of individual transitions that are associated with specific risks. The recording of the labour market situation, however, is often still fixed statically on stocks (number of unemployed, vacancies or employees) or on the corresponding quotas (unemployment or vacancies or employment rates). Those statistics rarely reflect the dynamics and do not allow any conclusions to be drawn about longer-term employment histories or mobility patterns. Firms' personnel policies are also often focused on short-term hiring or dismissals rather than long-term personnel development, including training and further education. One result, among others,

and currently highly topical is the shortage of skilled workers leading to questionable hopes of recruiting qualified skilled workers from other countries.

Transitions, however, come with risks that people are reluctant to deal with; for this reason alone, the concept of transitional labour markets has difficulty gaining a foothold in the political discourse. Risky transitions occur at various stages in the life course and comprise school to work transitions, transitions between jobs, transitions from employment to unemployment or (often) unpaid care work, and the transition from employment to (temporary) disability or pension. A consistent risk perspective, however, considers transitions not only from the perspective of danger, but also from the perspective of opportunity. When weighing up both aspects, asymmetric individual perceptions play a major role in decision making. For example, small, imminent dangers (losses) are overestimated compared to large dangers in the 'far' distance. We quickly insure ourselves against loss of travel expenses, but not against vocational disability. Correspondingly, the choice of career is often short-sighted and risk-averse. Many factors determine the individual assessment of advantages and disadvantages: tradition (parents and social environment), peer groups (school), wages (material stimulus), social position (status), cognitive abilities or talent. Furthermore, the interfaces between education, training and the labour market determine the type and level of occupational risk, e.g., deciding too early on a specific education track and this is further manifested by a lack of permeability between 'vocational' education and 'higher' education and specific occupations.

In addition to historical path dependency (e.g., apprenticeship versus school-based training systems), the design of these interfaces depends on the governance structures, i.e., on the interaction and coordination of the central actors. These features determine the division of power and thus also the type and the degree of risks. Are these structures more centralized or decentralized, more cooperative or competitive, more legalized and bureaucratic, or determined by free and flexible agreements between actors on an equal level playing field? The theory of transitional labour markets suggests relying more on decentralized and cooperative negotiation structures on the one hand (covenants), and on central control through high quality standards, monitoring of success and strengthening of subsidiarity through equalization of fiscal capacities. Modern theories of justice point out that these governance structures must be supplemented by a clear normative contextualization, i.e., by the idea of working-citizenship. For young people, this primarily means not just educating or training them for the short-term needs of the labour market, but also ensuring sustainable employability over the life-course. Above all, it is professional sovereignty that allows individuals to not only earn a decent living for themselves, but also to shoulder a good part of the social burden of digital and green structural change.

A large proportion of young people in Europe are denied this right to professional sovereignty. In 2021, 13.1 percent of young people aged 15 to 29 in the European Union (EU-27) were not in education, employment, or training (so-called NEETs); young women (14.5%) are more affected than young men (11.8%); above all, the low-skilled (15.5%) are neglected by the European training systems.

The country differences are considerable; over a quarter of even the highly qualified young people, for example in Italy or Greece, are "NEETs". By 2030, the EU wants to reduce the NEET rate to no more than 9 percent on average.

What could be the role of European youth labour market policy in realizing this objective? We looked at country differences, also beyond the EU. In a comparison of Austria, Denmark, France, Germany and Switzerland, the Swiss education and training system turned out as the most successful, measured by several indicators such as NEET, level and duration of unemployment, in-work poverty, percentage of low-skilled young people. Three factors are decisive for this: While the dual system of learning (practical-company training combined with theoretical-school education, known as the apprenticeship system), fell into crisis, especially in Germany,⁷⁹ and hardly exists in France, Switzerland managed to maintain the apprenticeship principle through continuous reforms and even to upgrade. To ensure this success, the autonomy of the 26 cantons in implementation coupled with coordination through multilevel agreements (covenants) was decisive. This was supported by strong social partners and professional associations as well as the strategic leadership of the federal government that set high and contemporary quality standards and provide reliable bridges between the multiple institutions of basic, professional, and tertiary education and training. This institutionalized bridging led to a situation that entering the track of dual vocational education and training – which is still the case for almost two third of young Swiss – does not represent a stigma but to the contrary. This stands in contrast to the other countries analysed here. In addition, these governance structures not only support companies' willingness to train but they also support their innovative strength and moreover foster labour mobility.

At the European level, three initiatives are influencing national school-to-work transitions: the European Qualifications Framework, the European Alliance for Apprentices (including the Erasmus programme), and the European Youth Guarantee. We highlighted partial successes, but also major deficits. Above all, there is a lack of administrative and sometimes also financial capacities for implementation.

As EU member states can learn from each other, so could Europe from its member states. While the governance systems of other countries cannot be copied, general principles can be taken up and politics can be aligned with them in the given institutional context. In addition to the characteristics of Switzerland's success, we consider the following principles, among others, to be worth considering:

⁷⁹ We remind the reader of the respective case studies 4.3 and 4.4. The crisis in Germany relates both to the decreasing willingness and declining ability of SME to offer apprenticeship places, and to the decreasing motivation of the young generation entering a dual-learning pathway. As a result, the rate of young adults in age 20 to 34 without vocational (or tertiary) qualification is 15.5 percent (2020) with rising tendency, entailing a high risk of unemployment, non-participation and unskilled work.

- First, the principle of hybridization or institutional layering supplementing established institutions with new elements, such as the combination of apprenticeship systems with professional academic education, for which there are good examples above all in Switzerland (dual universities of applied sciences), but also in Germany (dual study tracks at universities in cooperation with – mostly large – enterprises).
- Second, the principle of "moral assurance", i.e. the forgotten counterpart to the neoliberal emphasis on "moral hazard", specifically: the support for taking risky decisions through a system of active securities, particularly pronounced in the Danish education and vocational training system, for example in the form of generous universal educational grants, but also in the form of reliable wage cost subsidies for companies to support on the job-training, job retention or further training, well developed or planned in Germany, for example.
- Third, the principle of flexible implementation, i.e., programme development tailored to the needs of young people as well as to local or regional needs and capacities, which appears to have been particularly successful in the youth guarantee programme in Austria.
- Fourth, the principle of learning by experimentation, particularly and vividly demonstrated in the development of the individual training account in France.

The European youth labour market policy, currently slowed down despite the European Year, could make use of these principles, and take the overarching idea of dual learning as a guideline. Switzerland upgraded its Federal Institute for Vocational Training (EHB) to a university in 2021; in addition to the previous focus on teacher training, research into vocational education and training is to be intensified. Europe could strengthen its strategic role by establishing a European University for Vocational Education and Training. Moreover, Europe could follow the Swiss cooperative federalism in changing its strategy from harmonized results to harmonized capacity building.

It goes without saying that we did not find the Panacea for how to assure “just transitions” from school to work and thereby assuring the right to decent work in the future ‘green’ and ‘digital’ economy and society for the young generation. Yet we hope to have provided a fresh and consistent theoretical approach in tackling the tremendous complexity of school-to-work transitions in a comparative perspective and using this framework for EU’s ambitious objectives articulated in the “European Year of Youth” in 2022.

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Appendix

*Table A1a: Transitions of labour market status in the EU-27, 2019-2020
(population aged 15-74, as a % of initial status) - male*

	Employment 2020	Unemployment 2020	Inactivity 2020
Employment 2019	93.3	2.5	4.2
Unemployment 2019	30.5	41.9	27.5
Inactivity 2019	7.4	3.8	88.8

Source: Eurostat 2022.

*Table A1b: Transitions of labour market status in the EU-27, 2019-2020
(population aged 15-74, as a % of initial status) - female*

	Employment 2020	Unemployment 2020	Inactivity 2020
Employment 2019	91.1	2.5	6.4
Unemployment 2019	29.5	37.6	32.9
Inactivity 2019	6.7	3.2	90.2

Source: Eurostat 2022.

Tab. A2: Disaggregated NEETs aged 15-24 and 30-34 in 2019 as % of total

AGE	AUS		DEN		FRA		GER		SWI		EU-27	
	15-24	30-34	15-24	30-34	15-24	30-34	15-24	30-34	15-24	30-34	15-24	30-34
Reentrants	18	7	27	7	18	7	19	4	n. a.	n. a.	16	5
Short-U	26	21	21	21	24	19	19	13	n. a.	n. a.	22	15
Long-U	8	6	1	5	17	15	10	8	n. a.	n. a.	14	13
Illness-Dis	13	17	16	36	6	11	10	11	n. a.	n. a.	9	11
Family-Resp	18	39	7	12	8	26	19	46	n. a.	n. a.	16	40
Discouraged	1	:	1	:	3	2	1	1	n. a.	n. a.	6	4
Other	15	10	25	19	24	21	23	17	n. a.	n. a.	18	12
Total NEET	7.1	11.7	7.7	11.4	10.6	16.9	5.7	13.6	6.2	7.8	10.1	17.4

Source: Eurofound 2021, additional material for the report; Eurostat for total NEET (accessed 11.10.22).

Table A2 shows, first, that Switzerland performs best in terms of overall NEET for age-group 30-34, followed by Denmark and Austria. Compared to the best results related to the age-group 15-24, Germany falls behind related to young adults.

Second, long-term unemployment among the NEETs is especially pronounced in France.

Third, Germany and Austria are the countries where family responsibilities play an important role for being in NEET.

Fourth, Denmark “excels” in terms of illness/disability as relevant factor determining NEET.

*Table A3: Occupation specific transitions into the labour market of graduates in apprenticeship 2013 and 2014 in Germany (selected occupations) **

Status after finishing apprenticeship	Employed at training enterprise in the same or in another occupation in %	Employed at another enterprise or in another occupation in % ****	Short-term or long-term unemployed in %
Women			
71402 Clerical and secretarial staff	60	19	21
81302 Health and Nursing	42	46	11
71302 Commercial and technical management	71	18	10
81102 Medical Assistant	60	16	23
Men			
25212 Automotive mechanics **	53	18	29
25102 Mechanical and industrial engineering	76	17	8
24412 Metal construction	59	16	24
34212 Sanitary, heating, air conditioning technology	65	16	20
Total	59.6	21.2	19.3***

*) Selected according to occupations mostly (or much) favoured by young women of young men

***) Not including electronic components as in the recently established occupation "Mechatronic"

****) Most unemployment is short time (13.6% one to three months); a period of short-time unemployment, however, is punished by lower entry wages of 11.3 to 18.8 percent; longer-term unemployment (4 months and more) is punished by 16 to 25.6 percent lower entry wages.

*****) Change of enterprise without occupational change is rewarded by slightly higher entry wages; change of enterprise with occupational change is punished by slightly lower entry wages

Source: Seibert and Wydra-Somaggio (2017).

Table A4: Transition matrix for employment policy targets (EU14), Status at time t (1998)

	<i>Inactive</i>	<i>Unemployed</i>	<i>Low-skill job</i>	<i>High-skill job</i>
<i>Inactive</i>	87.5	5.0	5.0	2.5
<i>Unemployed</i>	17.5	52.5	20.0	10.0
<i>Low-skill job</i>	7.5	12.5	50.0	30.0
<i>High-skill job</i>	2.5	2.5	5.0	90.0

Source: European Commission (2004), Table 48

Table A4 shows realized transitions between 1997 and 1998 in 14 EU member states. What does the matrix tell us? In 1997, 87.5 percent of the population fit for work who were economically inactive were also inactive in 1998; 5 percent of the inactive population moved into employment, 5 percent into poor-quality jobs and 2.5 percent into good jobs. Of the unemployed population, 17.5 percent moved into activity, more than half remained unemployed, only 20 percent went into poor-quality jobs and 10 percent into good jobs. Of the low-skill people, 7.5 percent became inactive, 12.5 percent unemployed, 50 percent remained in unskilled jobs and at least 30 percent moved up. The overwhelming majority of workers in good jobs (90 percent) were still in good jobs in the following year.

Some of these transitions are very disappointing, but may be explained to a large extent by the poor economic situation in the base year 1997. In order to be able to make predictions over a longer period, it would certainly be more sensible to take as a starting scenario the average values from several years, possibly even of an entire business cycle. For a thought experiment, however, we can use this matrix as a baseline for estimating the impact of employment strategies aimed at speeding up ‘good’ transitions and preventing or reducing ‘bad’ transitions.

A simulation of these effects carried out by the European Commission produced the following results: (1) The increase in the rate of transition from bad to good jobs from 30 to 40 percent would increase the employment rate over ten years by one percentage point; (2) the reduction in the rate of transition from bad jobs into unemployment from 12.5 to 7.5 percent, with a simultaneous provision of training opportunities, would increase the employment rate by a further 1.5 percentage points; (3) the increase in the rate of transition from unemployment into bad jobs from 20 to 25 percent, again combined with training opportunities, would increase the employment rate by a further percentage point; (4) if all the measures were combined, then the employment rate would increase by almost four percentage points, while the unemployment rate would be reduced by two percentage points.

Table A5: Multi-year transitions by main economic activity (EU15 total, row percentages), $t+6$

	<i>Permanent</i>	<i>Temporary</i>	<i>Self-employed</i>	<i>Not employed</i>	<i>Education/training</i>
<i>Permanent</i>	76.7	4.0	3.1	15.8	0.5
<i>Temporary</i>	55.0	16.4	6.4	20.7	1.5
<i>Self-employed</i>	12.5	2.9	68.3	15.8	0.5
<i>Not employed</i>	18.7	6.1	4.8	69.0	1.3
<i>Education/training</i>	41.6	13.4	4.8	16.1	24.1

Source: European Commission (2004), Table 50

Table A5 shows multi-year transitions by main economic activity for EU15 which demonstrates that only 0.5 percent of permanent employees moved into education or training in the six-year period 1995-2001. This low figure might be a concern given the need for greater adaptability in the low-skill segment of the adult workforce. Of temporary employees, 55 percent moved into permanent employment; however, one in five moved into inactivity or unemployment. Stability among the self-employed was almost as high as among the permanently employed, and almost one eighth moved into permanent employment

Table A6: Multi-year transitions by pay level (EU15, row percentages), $t+7$

	No pay	Low pay	Medium pay	High pay
No pay	62.4	9.1	22.7	5.8
Low pay	29.8	26.2	39.2	4.8
Medium pay	17.4	5.2	61.3	16.1
High pay	17.0	0.9	17.0	65.1

Source: European Commission (2004), Table 54

Table A6: This multi-year transition matrix by pay level shows that only 26.2 percent of low-paid workers were still low-paid after seven years; 44 percent (39.2 plus 4.8) moved to the medium or high pay brackets. On the other hand, however, almost 30 percent moved to no pay, which means they became unemployed or inactive or disappeared into the informal or even illegal sector. The Commission has developed an interesting mobility index based on the aggregation of several transitions between employment statuses in the period from 1994 to 2002. This index correlates strongly with the employment rate. The causal direction, of course, is unclear, but it seems to be a plausible hypothesis that a sustainable increase in the employment rate requires higher mobility rates.

This assumption is supported by the fact that mobility is positively correlated ($r=.44$) both with transitions from inactivity to employment (indicating an open labour market) and ($r=0.55$) with transitions from temporary to permanent jobs (indicating a kind of job-to-job security). However, as Figure 7 shows, higher mobility seems also to be related with fewer transitions from low pay to higher pay ($r=-0.46$). Again, the causal relationship is unclear, but it is reasonable to be concerned about the possible negative impact of employment status mobility. A possible interpretation could be that modern labour markets – exposed increasingly to international competition – increasingly require ‘active’ social spending that attempts to change the distribution of market income by promoting labour market participation among the segments of the population with lower-than-normal market income. Such an active spending policy would also make higher mobility more acceptable if it linked job mobility with upward status mobility or at least with retention of the same income status. Acceptance of mobility, however, requires workers to feel they are being treated fairly. There is increasing empirical evidence that social expenditure as such is not detrimental to adaptability. Far from there being any intrinsic contradiction between an efficient and dynamic economy and one that places social justice at its core, the achievement of the former seems to require the latter, albeit in a form that directs redistribution into investment in the individual capacity to participate in the modern economy.

Tab. A7a: Transition from school to work: Share of population by education and labour force status, age 15-19, 2020 (Denmark, Germany 2019), women

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	13.4	X	3.0	10.9	28.9	m
	2. Other work ¹⁾	5.7	36.7	2.1	9.5	8.8	10.2
	3. Inactive or no work ²⁾	68.4	51.9	87.0	72.0	50.8	82.4
	4. Sum	87.4	88.7	92.1	92.5	88.5	92.6³⁾
In Labour Force	5. Regular Work	6.5	6.5	2.2	5.1	7.8	3.5
	6. Inactive	3.9	4.1	3.5	1.7	2.8	3.5
	7. Unemployed	2.2	0.8	2.2	0.8	0.9	1.4
	8. NEET (6+7)	6.0	4.9	5.7	2.5	3.7	4.6
	9. Sum	12.6	11.3	7.9	7.5	11.5	8.0

Tab. A7a: Transition from school to work: Share of population by education and labour force status, age 20-24, 2020 (Denmark, Germany 2019), women

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	3.7	w	7.0	12.4	7.8	m
	2. Other work ¹⁾	17.2	34.8	7.5	20.3	28.1	16.8
	3. Inactive or no work ²⁾	21.6	22.5	32.5	24.4	21.4	38.8
	4. Sum	42.5	57.4	47.0	57.0	57.2	54.5³⁾
In Labour Force	5. Regular Work	45.4	30.1	33.1	32.7	36.3	30.3
	6. Inactive	7.2	8.4	10.8	8.1	3.5	9.8
	7. Unemployed	4.9	4.1	9.1	2.2	3.1	5.9
	8. NEET (6+7)	12.1	12.5	19.9	10.3	6.5	15.6
	9. Sum	57.6	42.6	53.0	43.0	42.8	45.5

Tab. A7a: Transition from school to work: Share of population by education and labour force status, age 25-29, 2020 (Denmark, Germany 2019), women

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	0.4	x	1.1	1.9	2.6	m
	2. Other work ¹⁾	10.8	15.2	3.6	9.9	12.9	8.6
	3. Inactive or no work ²⁾	6.9	14.8	5.0	6.6	3.9	7.6
	4. Sum	18.1	30.0	9.7	18.4	19.5	16.2³⁾
In Labour Force	5. Regular Work	66.0	51.8	66.4	65.2	71.2	62.9
	6. Inactive	11.8	10.8	15.4	14.2	6.6	15.9
	7. Unemployed	4.1	7.3	8.6	2.2	2.8	6.0
	8. NEET (6+7)	15.9	18.1	24.0	16.4	9.4	21.7
	9. Sum	81.9	70.0	90.3	81.6	80.5	84.4

x = value contained in another category; m = missing value

¹⁾ Work combined with school or study or volunteers

²⁾ "Inactive" on the labour market due, mostly, to school, college, university; usually only a minority looking for (probably) part-time or occasional jobs

³⁾ Not exactly the sum due to missing values or rounding

Source: own compilation from OECD-Statistics

https://stats.oecd.org/Index.aspx?datasetcode=EAG_TRANS

Tab. A7b: Transition from school to work: Share of population by education and labour force status, age 15-19, 2020 (Denmark, Germany 2019), men

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	26.5	X	8.0	18.4	43.1	m
	2. Other work ¹⁾	4.0	31.4	0.9	7.5	4.9	8.4
	3. Inactive or no work ²⁾	57.9	60.3	79.6	66.0	40.5	80.7
	4. Sum	88.3	91.7	88.5	91.9	88.5	90.8³⁾
In Labour Force	5. Regular Work	6.3	4.3	4.1	5.0	4.8	4.2
	6. Inactive	2.6	3.1	4.2	1.7	4.6	3.5
	7. Unemployed	2.8	0.9	3.2	1.4	2.2	1.9
	8. NEET (6+7)	5.4	4.0	7.4	3.1	6.7	5.3
	9. Sum	11.7	8.3	11.5	8.1	11.5	9.4

Tab. A7b: Transition from school to work: Share of population by education and labour force status, age 20-24, 2020 (Denmark, Germany 2019), men

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	4.6	x	8.4	15.1	11.6	m
	2. Other work ¹⁾	11.1	27.6	4.1	15.2	15.0	13.0
	3. Inactive or no work ²⁾	18.6	20.6	29.6	23.8	21.4	31.5
	4. Sum	34.3	48.2	42.0	54.1	47.9	45.7³⁾
In Labour Force	5. Regular Work	50.2	38.9	39.9	38.4	41.9	40.2
	6. Inactive	7.1	7.8	11.2	4.1	5.7	7.1
	7. Unemployed	8.4	5.1	6.9	3.5	4.5	7.2
	8. NEET (6+7)	15.5	12.9	18.1	7.6	10.2	14.2
	9. Sum	65.7	51.8	58.0	45.9	52.1	54.3

Tab. 7b: Transition from school to work: Share of population by education and labour force status, age 25-29, 2020 (Denmark, Germany 2019), men

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	0.7	x	0.9	2.8	2.6	m
	2. Other work ¹⁾	10.0	13.6	3.2	10.4	13.7	8.0
	3. Inactive or no work ²⁾	7.7	9.3	3.3	9.0	6.8	6.7
	4. Sum	18.4	22.9	7.4	22.1	23.2	14.9³⁾
In Labour Force	5. Regular Work	69.8	61.6	75.7	69.6	71.8	71.9
	6. Inactive	7.3	7.6	7.0	4.3	1.4	6.5
	7. Unemployed	4.6	7.9	9.9	4.0	3.5	7.0
	8. NEET (6+7)	11.9	15.5	16.9	8.3	4.9	13.4
	9. Sum	81.6	77.1	92.6	77.9	76.8	85.2

x = value contained in another category; m = missing value

¹⁾ Work combined with school or study or volunteers

²⁾ "Inactive" on the labour market due, mostly, to school, college, university; usually only a minority looking for (probably) part-time or occasional jobs

³⁾ Not exactly the sum due to missing values or rounding

Source: own compilation from OECD-Statistics

https://stats.oecd.org/Index.aspx?datasetcode=EAG_TRANS

Tab.A8aa: Differences from average of the share of population by education and labour force status, age 15-19, 2020, in percentage points, women

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training						
	2. Other work ¹⁾						
	3. Inactive or no work ²⁾						
	4. Sum						
In Labour Force	5. Regular Work						
	6. Inactive						
	7. Unemployed						
	8. NEET (6+7)						
	9. Sum						

Tab. A8ab: Differences from average of the share of population by education and labour force status, age 20-24, 2020, in percentage points, women

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	- 0.4	W	- 0.7	- 1,4	- 1.9	c
	2. Other work ¹⁾	3.1	3.7	1.7	2.7	6.7	1.9
	3. Inactive or no work ²⁾	1.5	0.9	1.5	0.3	0.0	4.7
	4. Sum	4.1	4.7	2.5	1.5	4.7	4.5
In Labour Force	5. Regular Work	- 2.4	- 4.7	- 3.4	- 4.0	- 2.8	- 5.1
	6. Inactive	0.0	0.3	2.0	2.1	- 1.1	1.4
	7. Unemployed	- 1.8	- 0.5	- 1.0	- 0.7	- 0.7	- 0.6
	8. NEET (6+7)	- 1.8	- 0.2	1.0	1.4	- 1.9	1.7
	9. Sum	- 4.0	- 4.7	- 2.5	- 1.5	- 4.7	- 4.5

Tab. A8ac: Differences from average of the share of population by education and labour force status, age 25-29, 2020, in percentage points, women

Status	Status Category	AUS	DEN	FRA	GER	SWI	EU-22
In Education	1. Dual training	- 0.1	w	0.1	- 0.4	0.0	C
	2. Other work ¹⁾	0.4	0.8	0.2	- 0.2	- 0.5	0.3
	3. Inactive or no work ²⁾	- 0.5	2.8	0.8	- 1.2	- 1.6	0.6
	4. Sum	- 0.1	- 3.6	1.1	- 1.9	- 1.9	0.9
In Labour Force	5. Regular Work	- 1.9	- 5.0	- 4.5	- 2.3	- 0.3	- 4.6
	6. Inactive	2.3	1.6	4.1	5.1	2.7	4.9
	7. Unemployed	- 0.3	- 0.3	- 0.6	- 0.9	- 0.4	- 0.5
	8. NEET (6+7)	2.0	1.3	3.5	4.2	2.3	4.2
	9. Sum	0.1	- 3.6	- 1.1	1.9	1.9	- 0.2

x = value contained in another category; m = missing value

¹⁾ Work combined with school or study or volunteers

²⁾ "Inactive" on the labour market due, mostly, to school, college, university; usually only a minority looking for (probably) part-time or occasional jobs

³⁾ Not exactly the sum due to missing values or rounding

Source: own compilation from OECD-Statistics

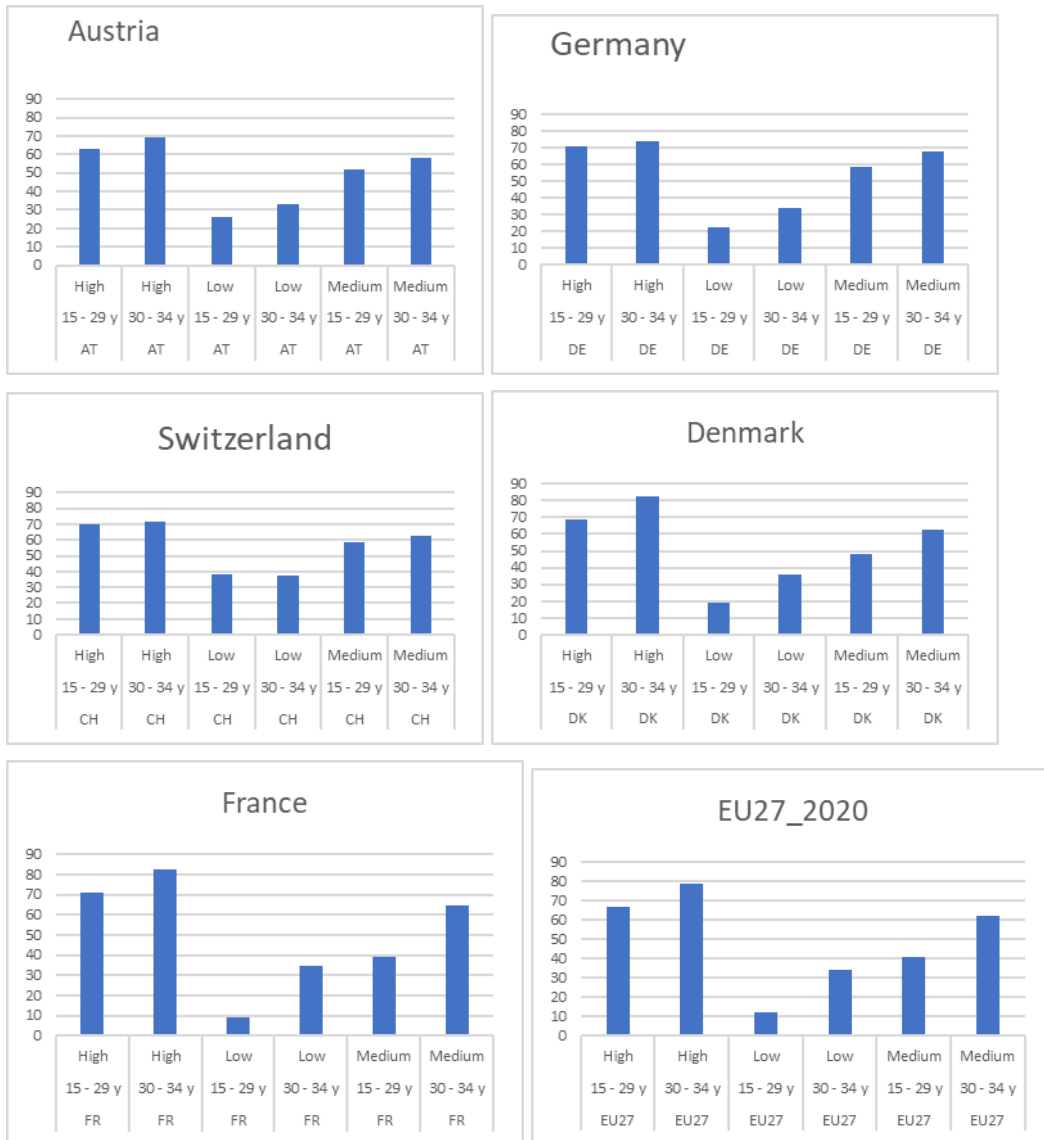
A9: *Tentative performance indicators of SWT governance, 2020 (young adults age 30-34, figures as % and rounded up)*

	AUS	DEN	FRA	GER	SWI	EU22
Level of Education						
(1) YA Educ. below Sec. II	11	16	12	14	9	15
(2) “ “ Sec. II / Postsec.	46	32	39	48	38	43
(3) “ “ Tertiary	43	53	50	38	55	42
Level of Employment*						
(4) “ Empl. Rate below Sec. II	54	63	55	58	68	56
(5) “ “ Sec. II / Postsec.	82	83	78	86	88	80
(6) “ “ Tertiary Education	88	90	90	90	92	88
Risk of unemployment						
(7) “ U-Rate below Sec. II	26	8	19	10	13	17
(8) “ “ Sec. II / Postsec.	7	5	9	3	5	7
(9) “ “ Tertiary	4	4	5	3	4	5
Risk of poverty (25-34)						
(10) Inequality below Sec. II	32	31	34	43	30	25
(11) “ Sec. II / Postsec.	17	17	22	21	21	14
(12) “ Tertiary	14	14	11	12	10	9

Source: For items 1-9, Eurostat, special extracts; 4-6: *) quarterly data; “employment” according to Eurostat-definition (i.e., any employment in the reference period of >1 hour); to correct for part-time see next Figure A10; for items 10-12 see OECD (2022: table A 4.2). Furthermore, indicators for fitness of job demand and job supply and/or for structural adjustment capacities would complement the performance of SWT-regimes, e.g., ratio of vacancies/job seekers or unemployed and/or chronically skill shortage. Other indicators could include qualification for greening and digital economy, e.g., share of young adults in MINT occupations, as well as indicators for employability enhancement (e.g., share of young adults in further training and education); regional mobility indicators also might be telling for adjustment capacity.

Brief interpretation of Table A9: In terms of the education level, Switzerland performs best at the low and high level; not surprisingly, dual VET-countries Austria and Germany perform best at the middle level. Switzerland scores also best at all qualification levels with respect to the employment in the age-group 30-34, however this is not anymore the case if we correct for part-time (see Figure A10). In terms of risk of unemployment for young adults, France performs worst, except for the low-skilled, whereby Austria displays exceptionally high figures (possibly an out-layer for the year of measurement). Switzerland scores also best with respect of the risk of poverty measured as share of employees in age 25-34 with less than or equal half of the median income: ‘only’ 30 percent of low-skilled face the risk of poverty compared to 43% in Germany and 31% in Denmark. Interestingly, however, Switzerland performs less well as Austria and Denmark at the high-skill level.

A10: Full-time equivalent employment rates for women by age group, 2021 (as one job quality indicator)

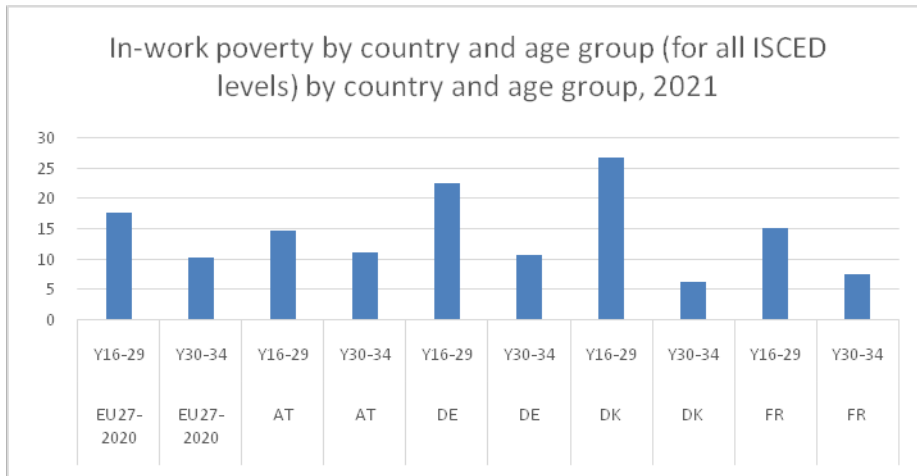


Source: Eurostat LFS – special extracts; A11: low qualified (ISCED 0-2), missing information for almost all cells due to unreliable values; household type: single persons without kids.

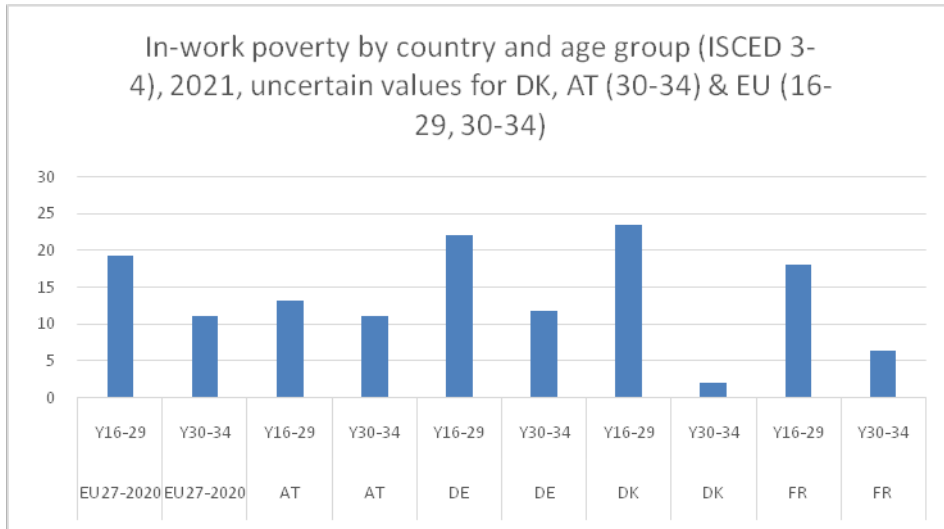
Brief interpretation of Figure A10: In the age group 30-34, Denmark scores highest (except for low-skilled) in terms of full-time equivalent employment rates for women, accompanied by France in the high-qualification segment; Austria displays the lowest scores in any category; Switzerland also tends to score low, probably due to high part-time employment rates combined with education.

Figure A11: In-work-poverty in the age-group 30-34 is highest in Austria and Germany (above EU-27 average), definitively lowest in Denmark, and France also scoring lower than EU-27 average. The high in-work-poverty figures for age group 16-29 in Denmark are probably due to the overrepresentation of young workers in single households compared to the other selected countries.

A11: In-work-poverty by country and age group (for all ISCED levels), 2021



Medium qualified (ISCED 3-4)



High qualified (ISCED 5-8)

