Apprenticeship in evolution: trajectories and prospects of dual systems in Europe and in Italy

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ABSTRACT

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The paper gathers the results of a study on the evolution trajectories of the dual systems in some European countries - Austria, France, Germany, Switzerland – due to the transformations on economy and work induced by global megatrends, including technological innovation, globalization, demographic trends. The changes introduced in the last decades have been successful in maintaining a certain level of quality and attractiveness of dual system to businesses and young people; however, today dual systems show a reduced inclusive capacity towards low-educated youth and other vulnerable groups, such as young people with a migration background and women. In the light of these findings on the European experiences, we examine the latest initiatives adopted in Italy to develop a 'dual apprenticeship' linked to VEaT, the three-year and four-year learning paths awarding nationally recognised certifications even if managed by the Regions. The paper intends to offer some food for thought to set up a new dual apprenticeship development strategy in Italy which, in line with the indications of the PNRR, can assist in counteracting the effects of the pandemic on youth employment and tackling the fragility of the Italian vocational education and training system, which, if not addressed, risk hindering the pursuit of the objectives set.

KEYWORDS: apprenticeship, VET systems, inequality, youth employment

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1. Introduction

There are still few studies – especially in the Italian context – that have looked into the impact that global transformation phenomena are having on vocational education and training systems, which have analysed the initiatives adopted by policymakers to address them and assessed the effects produced from the implementation of the policies. To highlight the trajectories of change, the study on the evolution of dual systems in Europe has adopted a dynamic approach that looks beyond the current context providing information on the most significant transformations that have taken place in recent decades, on the pressures that generated them and the results achieved in dealing with them, with a description of strengths and critical points identified by the stakeholders.

The object of the observation is dual apprenticeship, a tool that enjoys great prestige at both national and international levels for its effectiveness in promoting young people’s transition from school/training to work. For some years now, the European Union has been pushing for the development of work-based learning, encouraging the construction of a solid dual system in all Member States, while the apprenticeship schemes addressing adult workers are expanding at European level.

The research done by Inapp focuses on the dual systems of the so-called DACH countries, where apprenticeships addressed to upper secondary school students are prevalent and well-established; it’s no coincidence that these countries have managed better than others to contain the youth unemployment rate, even during the Great Recession. The research took into consideration France as well, a country that shares many characteristics with Italy in the field of vocational training and that for some years has been engaged in a profound renewal of its system.

In all these countries, the changes in the economy and the world of work induced by megatrends have forced decision-makers and various stakeholders to question how to improve consistency of the vocational education and training pathways to the needs expressed by companies and individuals. Over the last decades this recurring debate has often led to the adoption of policy measures bringing about a revision of the dual systems, and, more broadly, of the entire vocational education and training system.

The analysis of these transformations makes it possible to identify some points of convergence in the evolving trajectories of European dual systems, both in relation to the objective of strengthening the quality of the training and in the attention to integrating apprenticeship in lifelong learning systems.

However, while the changes adopted seem to have supported the achievement of these goals in the selected countries, and apprenticeships maintain a certain level of attractiveness for companies and young people, they have also shaped a training path that seems to have lost some of its inclusive capacity. In fact, a common denominator stemming from the analysis is the reduced capacity of these dual systems to provide adequate responses for the integration into the labour market of low-skilled young people and other vulnerable groups, like as migrants and women traditionally less interested in participating in apprenticeships.

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1 DACH is an acronym formed by the international acronyms of Germany (D), Austria (A) and Switzerland (CH).
In recent years, Italy has been committed to re-launching an “Italian path to the dual system” as a policy measure aimed at pursuing two objectives: to counteract school and vocational training dropout rates and reduce the number of young people not engaged in either work or education by including them in a path that can promote their employability. However, in light of the results that emerge from the study on the evolutionary trajectories of European dual systems, the choices made in the construction of an Italian dual system are cause for reflection. Indeed, the traditional fragility of the Italian vocational education and training system puts the possibility of achieving the objectives set at risk and at the same time urges a rethinking of the policy design, especially with regard to the inclusion of the most vulnerable young people. This is all the more urgent at a time when the set of measures needed to counteract the impact of the COVID-19 pandemic on youth employment must be structured. In the context of labour market active policies, apprenticeship can certainly be one of the initiatives addressed to promoting youth integration into the working world, but it is necessary to raise awareness of the most appropriate ways to make it effective and the results that can be achieved with respect to the most vulnerable categories.

2. Changes in the labour market and the VET systems: the context of the study

2.1 Global megatrends and the labour market

The global transformation of economic systems in recent decades is proceeding at a speed that is constantly accelerating. So-called “global megatrends” – tertiarisation, globalisation, technological innovation and digitisation, population ageing etc. – trigger wide-ranging renewal processes that affect everything, from economies, labour markets and welfare systems to vocational education and training systems (VET) and institutional structures. Managing changes while ensuring equitable and sustainable growth is a challenge for all countries. Actually, the transformations of the last decades have produced benefits enjoyed only by a select few, which ended up increasing inequalities. In most of the economically strongest areas and in several developing countries, the gap between the highest and lowest incomes has increased considerably (ILO 2016). Compared to other continents, Europe has been more successful in containing the growth of income inequalities since the early 1980s, even though the increase in the gap has not spared any European country.

Among the various target groups, young people are among those who, in the process of transforming economies, have shown a greater vulnerability with respect to inclusion in the labour market (Esping-Andersen 1998; Emmenegger et al. 2012), thus being defined as the ‘losers’ of globalisation (Buchholz et al. 2009). In fact, during the 1980s and 1990s in almost all OECD countries there was a slow contraction in the youth employment rate, accompanied by a gradual increase in the share of young...

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2 The term ‘megatrend’ has been firstly used by John Naisbitt in the title of his book Megatrends: Ten New Directions Transforming Our Lives, issued by Sperling & Kupfer in 1982.
people employed in temporary or part-time jobs (OECD 1996). Especially after the Great Recession, the participation in the labour market of this segment of the population decreased across the board. Only in the years immediately preceding the onset of the COVID-19 pandemic had there been timid signs of recovery, differentiated by territory (Scandurra et al. 2021; ILO 2020).

The worsening of the situation of youth in the labour market occurred despite the progressive contraction of the number of young people in almost all the most advanced countries and the significant increase in their education level. The snapshot taken by ILO in November 2019 indicated a youth unemployment rate of 13.7% globally, corresponding to 497 million 15-24 year olds, plus 267 million more young NEETs (Not in Education, Employment, or Training) (ILO 2020). Compared to other industrialized countries, in Italy young people are most disadvantaged. In a country reaching in 2019 an overall unemployment rate of 10.0%, for 15-24 year olds the value stood at 29.2%, scoring eight points higher than 2008 (21.2%). The economic crisis triggered by the pandemic is also proving to be more difficult in particular for young people: according to data referred to December 2020, for 15-64 year-olds the unemployment rate has decreased by 0.6 points and the inactivity rate has increased by 1.5 points compared to the same month of the previous year; on the other hand, for young people aged 15-24, the values of the two rates increased respectively by 1.3 and 3 percentage points (Istat 2021). The situation is bound to get worse when the impact of the COVID-19 pandemic will fully affect economies and labour markets. Likely, difficulties for young people will be much more significant if appropriate initiatives – aimed primarily at the institutional reorganisation of the labour market and the welfare system, and then involving the VET system – are not readily and effectively implemented.

2.2 The evolution of apprenticeships in the context of European vocational education and training systems

In the light of changes in production systems and labour markets, VET systems have also been forced to renew themselves. According to Cedefop, the need to strengthen the role of VET has stimulated the search for a closer integration with the business world in order to increase the effectiveness of programmes and courses, and employability of the graduates. The transformations of economy and work, together with demographic and social changes, have pushed a reorientation of VET systems towards a perspective of lifelong learning: the need to accompany the transition to a knowledge society has forced the expansion of the training offer and its differentiation in order to respond to the different needs of the population at various stages of life, working and beyond (European Commission 2020).

Developments over the last decades have gradually reduced the focus on initial vocational training, which is the most traditional core of European VET systems. The range of provided opportunities has been enriched with new learning paths, with the aim of also welcoming young people with higher educational qualifications, and has expanded to new economic sectors in the wake of tertiarisation of the production systems (OECD 2020). At the same time, the increase in the average age of the

3 For information on Cedefop research on last decades changes in vocational education and training systems and its results, published in eight volumes, see the pertinent pages <https://bit.ly/322p9Eb>.
population and the lengthening of the duration of working lives are slowly shifting the focus to adults, in order to enable workers’ skills to be adapted and individuals’ employability to be maintained. Within this context, it has spread a renewed interest in apprenticeship, as a training path that can promote a rapid integration into work for young people, but also for adults, beyond the borders of the countries which are traditionally more inclined to use it. The benchmark dual system – i.e. the model that scholars and decision-makers are most interested in – is the one implemented in Germany and in neighbouring countries such as Switzerland and Austria, recognised as ‘apprenticeship countries’ (ILO 2012). These countries show the lowest youth unemployment rate and have successfully managed to keep it at a low level during the Great Recession, even reducing it in some cases.

Today an apprenticeship or a dual system⁴ is implemented in many countries on almost all continents. In Europe this training path is operating in 24 out of 30 countries. In four of the six countries where no apprenticeship programme has been identified, a legal framework remains in force and/or dual training programmes have been tested (Cedefop 2018). Italy is among the countries that launched a process of revitalisation of its traditional apprenticeship scheme starting in the late 1990s. The latest reform approved in 2015 focused on the establishment of a dual system inspired by the model of the ‘apprenticeship countries’ aimed at young people up to 25 years of age who have not earned any high school diploma.

The various European models are characterised by a broad heterogeneity with respect to the primary educational or employment purpose, the articulation and strategic positioning in the education system, the social recognition and attractiveness for companies and users, the governance and operating model. But the element that most distinguishes the various systems is the relevance of apprenticeships in the educational choices of young people of upper secondary school age.

2.3 The study on European dual systems

The idea of thoroughly examining the models that inspired Italy to build its own "path to a dual system" guided the research carried out in the three-year period 2018-2020⁵. Attention was focused on Austria, Germany and Switzerland, which share a fairly homogeneous cultural background. In addition to DACH States, the French model was also analysed, as it has a VET system that is much more similar to Italy’s. France and Germany represent two paradigmatic models of dual system and initial vocational training in the European context, which Italy has looked at several times in recent history to renew its own system.

The main objective of the research was to provide useful information regarding the policy options to evaluate and decide on to develop the Italian dual system, which is still in gestation. To this end, the study has focused on the evolutionary trajectories in recent decades, and the effects produced by the policy interventions that have been deemed necessary to adapt the dual systems to the changing needs of the working world in a context of rapid transformation. Particular attention was paid to the

⁴ In this paper, the terms ‘apprenticeship’ and ‘dual system’ are used synonymously.
⁵ The full report presenting the results of the study has been published by Inapp in Italian, in the volume *Apprendistato in evoluzione. Traiettorie e prospettive dei sistemi duali in Europa e in Italia*. 
results achieved in terms of equity, i.e. ensuring access to different groups of young people and promoting their successful integration into the workforce.

The research was carried out by drawing on the numerous studies available and examining the specialised literature. In addition to what emerged from the desk analysis, a survey was carried out involving experts from the selected countries, identified among institutional officials, representatives of trade unions and employers’ organisations, other stakeholders in the labour market and representatives of the world of VET.

Apprenticeship is part of a context determined by the set of institutional structures and relationships which characterise each country’s VET system, but also the labour market and the productive system have a great influence on it. Therefore, when analysing the various dual systems it is necessary to take into account some basic indicators and figures that contribute to giving a more precise idea of the contexts under examination (see table 1).

Table 1. Main macroeconomic and labour market indicators for the countries in question (year 2019)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Germany</th>
<th>Switzerland</th>
<th>Austria</th>
<th>France</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface (Km²)</td>
<td>357.1</td>
<td>41.3</td>
<td>83.9</td>
<td>544.0</td>
<td>302.1</td>
</tr>
<tr>
<td>Population (thousands)</td>
<td>83,019</td>
<td>8,545</td>
<td>8,859</td>
<td>67,178</td>
<td>59,817</td>
</tr>
<tr>
<td>% Population 15-24 years old</td>
<td>10.4</td>
<td>10.6</td>
<td>10.9</td>
<td>11.8p</td>
<td>9.8</td>
</tr>
<tr>
<td>GDP per capita*</td>
<td>38,350</td>
<td>50,170</td>
<td>40,250</td>
<td>33,770</td>
<td>30,460p</td>
</tr>
<tr>
<td>Median age</td>
<td>46.0</td>
<td>42.5</td>
<td>43.4</td>
<td>41.8p</td>
<td>46.8</td>
</tr>
<tr>
<td>activity rate 15-24 years old</td>
<td>51.4</td>
<td>66.5</td>
<td>56.4</td>
<td>36.9</td>
<td>26.1</td>
</tr>
<tr>
<td>activity rate 15-64 years old</td>
<td>79.2</td>
<td>84.3</td>
<td>77.1</td>
<td>71.7</td>
<td>65.7</td>
</tr>
<tr>
<td>unemployment rate 15-24 years old</td>
<td>5.8</td>
<td>8.0</td>
<td>8.5</td>
<td>19.6</td>
<td>29.2</td>
</tr>
<tr>
<td>unemployment rate 15-74 years old</td>
<td>3.1</td>
<td>4.4</td>
<td>4.5</td>
<td>8.5</td>
<td>10.0</td>
</tr>
<tr>
<td>NEET 15-24 years old</td>
<td>5.7</td>
<td>6.2</td>
<td>7.1</td>
<td>10.6</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Note: * GDP per capita at current prices (nama_10_pc) with constant purchasing power (CP_PPS_HAB); p provisional data.
Source: Eurostat database

3. The evolution of the trajectories of the dual systems in the DACH countries and in France

With the progressive worsening of youth employment and unemployment rates, especially after the economic and financial crisis of 2008, several European countries have intervened to strengthen the multiple forms of work-based learning programmes, with a particular consideration to apprenticeship. These countries include Germany, France, Austria, Switzerland and Italy, which have committed themselves to a greater effort to renew their dual systems with the aim of fostering youth vocational training and employment.

The analysis of the evolutionary trajectories of the dual systems in Austria, France, Germany and Switzerland must start from an examination of the profound structural differences that distinguish them. They are recognised as different skill formation regimes, as identifiable on the basis of two
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Central dimensions: the more or less strong commitment of companies to participate in initial vocational training and incur significant investment in skill formation; the commitment of the State to support VET as a valid alternative to academic educational paths (Busemeyer and Trampusch 2012). According to this paradigm, Germany, Austria and Switzerland are identified as ‘collectivist’ or ‘corporatist’ systems, as the extensive participation of companies is accompanied by an equally high commitment of the State, while France has a ‘statist’ system where the engine driving initial vocational training is the public sector (Busemeyer and Trampusch 2012).

Germany, Austria and Switzerland share a strong tradition and a long process of consolidation of dual system, together with a high social recognition of its educational and employment value. In these countries, apprenticeship is considered an important segment of the secondary education system and each year a significant proportion of young people participate in it. Companies also show a high level of confidence in the dual system as a programme to prepare a skilled workforce, and contribute to its development driven by reasons related also to social responsibility (Pfeifer et al. 2019). Institutions and social partners see the dual system as a collective good and actively strive to preserve its role and function.

In Germany, the dual system boasts a participation of 1,328,964 apprentices in 2019, of which 513,309 new entrants (BIBB 2020); in 2018 among 18-34 year-olds who obtained a qualification in the dual system the unemployment rate was 3.2% (Solga et al. 2014). In Switzerland, 220,894 young people are enrolled in an initial vocational training course in the year 2018-19, almost all in apprenticeship (90.6%); of the cohort of 2012 graduates who achieved a federal certificate of ability (AFC), only 8% are not working and not in training three and a half years from the end of the course (OFS 2018). Finally, in Austria in 2019 39.5% of the total 15-year-olds chose an apprenticeship path, and among those who obtained a qualification in the dual system the unemployment rate was 3.5% (Dornmayr and Löffler 2020). To date, the dual model of these countries has maintained its essential and distinctive characteristics: organised according to market rules, even if it is a highly regulated market; focused on profiles and occupations and responding to the diversified needs of the economic sectors; organized on a learning process that is mainly carried out at the workplace, assigning a fundamental educational function to companies; developed through a process of consultation that is based on consensus and requires close collaboration between the public authority and the social partners to define the content of qualifications and the guidelines of training policies, with the State acting in the role of mediator (Lasserre 2014).

In France, on the other hand, apprenticeship has never enjoyed the same social recognition as dual systems in Germany, Austria and Switzerland, and has seen a rather limited success in terms of participation of young people and companies, even though it has been in operation in its current configuration for almost 50 years. In 2018 it has involved only 5.3% of young people between 16 and 25 years (DEPP 2019). The apprenticeship in France is fully integrated into the education system, as it allows for the acquisition of the same technical and vocational qualifications obtainable in upper secondary and tertiary education institutions through full-time courses. In the French ‘statist’ model, it is mainly the State, with its different configurations, that strives to ensure the formative value of

apprenticeships and of the entire VET system as an effective alternative to academic school paths. The commitment expressed by social partners to support the initial vocational training of young people is weaker (Busemeyer and Trampusch 2012).

The reform approved in France in 2018 with the law for “The freedom to choose one's professional future”7 seeks to move in the direction of the ‘collectivist’ systems, shifting apprenticeship into the domain of continuous vocational training and assigning a predominant role to social partners and sector organisations in the definition of training profiles and in the management of the system, to the detriment of the regional governments. It will only be possible to assess the success of these measures in the coming years.

In recent decades, all the mentioned European dual systems have had to deal with the effects of the transformations linked to technological innovation, globalisation and tertiarisation, demographic change and the lengthening of schooling. Therefore, they strived on defining strategies to continue ensuring that apprenticeships meet the needs of businesses and to strengthen their attractiveness among young people.

The processes of deindustrialisation and tertiarisation have led to the progressive contraction of the places available in the industries where dual systems traditionally thrived, pushing a horizontal expansion towards new sectors and businesses that are flourishing powered by innovation. However, apprenticeships have experienced difficulties in finding space in the tertiary sector, where companies historically developed the skills needed by the production system through full-time training courses, as clearly observable in Germany and Switzerland.

The enlargement towards new occupations has also pushed a vertical expansion, following the evolutionary trajectories of jobs. In fact, in the transition to a knowledge economy, companies have expressed a need for workers with a more crosscutting background founded on a higher level of basic knowledge and transversal skills, combined with a broader set of specialised skills. This has forced all countries to make an effort to renew their training provision, generating large-scale operations to revisit curricula and learning references, both for on- and off-the-job learning paths. At the same time, businesses’ demand for higher-level skills has stimulated a shift in the dual systems centre of gravity, from the issuing of post-compulsory school qualifications, which are at level 3 of the European Qualification Framework, to higher level qualifications at level 4 EQF (corresponding to upper secondary school diploma) or even level 5, corresponding to advanced technical education qualifications.

On a systemic level, the same vertical expansion has pushed for speeding up the process of developing new training regulations – as was recently the case in Austria – or reducing the training standards set at national level in order to allow more flexibility and autonomy for individual sectors, as occurred in Germany with its 2005 reform. The same need for flexibility is behind the introduction of learning programmes organised in a modular form, different from those focused on a single occupation. For example, in Austria modular apprenticeship is structured in a two-year basic module, a main one-year module specific for each occupation, and finally an optional module that imparts knowledge and skills related to special productions or services, lasting six months/one year.

7 French Law n. 2018-771 of 5 September 2018 “pour la liberté de choisir son avenir professionnel”.
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The slow contraction of youth cohorts entering the labour market and especially the progressive ‘academization’ of individual education paths have reduced the demand for apprenticeships. On the supply side, changes in economic systems and consequently in jobs have produced an internal stratification of apprenticeship profiles according to a hierarchy of occupations, based on the education requirements to access, attractiveness of trades in terms of chances of getting hired, job stability, career opportunities and expected remuneration. This stratification has been made explicit in some countries through structural changes to the dual system: in Germany, in 2003 two-year courses were introduced (while an apprenticeship generally lasts 36–42 months); in Switzerland in 2002 the federal CFP certificate was introduced, which can be acquired at the end of a two-year course, whereas the AFC requires 3–4 years, and the development began of a dual system that expands towards tertiary education.

The same forces that spurred the expansion of apprenticeships across sectors, occupations and qualification levels are also affecting the current boundaries with the education system, pushing toward tertiary education along two directions: on the one hand, options are being developed that allow apprenticeship graduates to access to tertiary education – or parts of it –, and, on the other hand, new forms of collaboration are being set up, through programmes based on the integration of dual training and tertiary education.

France was the first to break through this barrier: the Séguin reform of 1987 extended the range of qualifications awarded through an apprenticeship to upper secondary education diplomas, such as the baccalauréat professionnel, and then further progress was made in opening it up also to qualifications awarded in tertiary education. In Switzerland, a professional diploma was introduced in 1993, which upon completion of the dual path allowed access to universities of applied sciences. Then, the Passerellen were activated with the 2002 reform, allowing admission for apprenticeship graduates to all tertiary education. In Austria, since autumn 2008 all apprentices may acquire a professional diploma in addition to a vocational qualification and then enter the tertiary system. Furthermore, the idea of implementing new training models that variously combine vocational training and higher education has come to the fore in recent decades. These ‘hybrid’ forms arising from the socio-economic developments strains take on various configurations, different in each institutional context (Graf 2013).

The outlined transformations have had an impact on the inclusive capacity of the dual systems. The participation of a higher proportion of young people with a diploma for entering university/or an intermediate diploma has increased the competition in the apprenticeship market, with the effect of displacing young people with low educational qualifications and skill levels. In Germany, for example, the increase in people with secondary school diplomas (including Abitur) seeking an apprenticeship has effectively rendered inaccessible occupations that were previously taken by generations of young people who did not graduated or achieved only low qualifications. In France, while until the 1980s growing up in a blue-collar family was much more common for apprentices than students of full-time vocational schools, since the 1990s the two groups have become more similar and the social origin of apprentices is less blue collar than for students (Kergoat 2015).

The repositioning of the dual systems affects the trajectories of low skilled young people not only on entering an apprenticeship, but also during the training and in the follow up. Actually, these young people are more likely to experience an early termination of the contract, have a lower success rate
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in the final exams, find it much more difficult to enter the labour market and are more often trapped in precarious jobs, with low salaries and few opportunities for career development (Solga et al. 2014).

In Germany, for example, within the dual system, the paths of those with low proficiency levels are more bumpy: the rate of early termination of the contract is 39.3% for apprentices without upper secondary school qualifications and 15.4% among those who have a university entrance qualification. The former also have a lower final exam success rate (84%) than the latter (97.9%) (BMBF 2020). In France, 29% of the apprenticeships which started between June 2015 and May 2016 were terminated before the scheduled deadline; this percentage rises to 39% among less educated young people under the age of 18, while it falls to 18% among apprentices in the 21-25 age group who should achieve a tertiary education qualification (Dares 2018).

Things are even more difficult for women. In general, women in the dual system make up a minority, remaining well below 40% in all the countries examined, and they gather in a limited number of profiles leading to occupations often characterised by lower wages and limited career opportunities. In Germany, for example, the presence of women in apprenticeships is low (36.8% in 2019) and in sharp decline in the decade (-19% since 2010). Women are mainly concentrated in some sectors: hairdressing, tailoring, cooking or sales – mostly low-paid jobs with fewer career opportunities (BIBB 2020). In Austria, the presence of female apprentices has remained at a constant level for some years (around 34%) and is highly concentrated: 41.4% of apprentices are employed in only three occupations, retail, office employee, hairdresser (Dornmayr e Löffler 2020).

The group with the most critical issues in terms of equity in participating in dual systems is young people with a migrant background. In Germany young people of foreign origin find it more difficult to enter an apprenticeship (Granato and Ulrich 2017), to pass the final exams and to insert afterwards in the labour market. Similar critical issues are experienced in France, where young people with a migrant background are under-represented both in apprenticeships of medium-low qualifications and in those that allow them to acquire higher-level diplomas (Kergoat 2017).

In Austria, in the 2018-19 school year, the proportion of foreigners in first grade at elementary school was 20%, while in the dual system it stopped at 13.7%; the percentage of those who do not use German as their main language of communication made up 31% in elementary schools and reached 18.2% in dual learning paths. The school dropout rate averaged 7.3%, three times higher for those born abroad than for natives (Dornmayr and Löffler 2020). In Switzerland, the results of the TREE survey⁸ confirm that not only gender and social origin, but also migration history have a particularly strong influence on educational success. In fact, the share of foreign apprentices in the year 2018-2019 is 21.6% of the total participants and usually these young people have to work hard to find a company that welcomes them: according to data from the August 2019 “Baromètre des transitions”⁹, students with a foreign origin have to submit an average of 25.7 applications, while the Swiss only 7.2. Therefore, in all these countries there remains a strong social selectivity in the apprenticeship market, at the expense of women and especially of young people with a migration background, but also linked to previous school choices and performances.

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⁸ TREE, School-work transitions, is a longitudinal national survey that studies the training of young people at the end of compulsory school and their entry into adulthood and the working world.

4. The construction of a dual path in Italy

In Italy, many reforms implemented since the end of the 1990s have tried to integrate apprenticeships in the education system, but mostly failed. Actually, over the years there has been a gradual withdrawal in the formative component of this employment contract and a departure from the European dual models. It is therefore no coincidence that the current Italian apprenticeship mostly identifies with one of the three forms it can assume according to the legislation. Indeed, the so-called vocational or second-level apprenticeship in 2017 represented 97% of the average number of apprentices (Inapp 2019a). This form does not lead to an educational diploma, being aimed exclusively at obtaining an occupational qualification as set by collective agreements. For vocational apprenticeship, the off-the-job training provision, aimed at developing basic and cross-cutting skills through courses lasting up to 120 hours, is in the responsibility of the Regions and Autonomous Provinces. Job-related training is provided under the responsibility of the companies, and its length and content varies according to collective bargaining agreements, on average being limited to 80 hours.

The other apprenticeship forms – so called first- and third-level apprenticeships – are much rarer: in 2017 the number of young people between 15 and 24 years of age participating in first-level apprenticeship amounted to 8,385, registering a slight increase compared to the previous year when they were 7,456; third-level apprenticeship remained almost stable, involving around 1,000 people (Inapp 2019a). These apprenticeships have a larger formative component as they lead to a secondary and tertiary education diploma/degree through a dual programme (Garofalo 2014).

In 2015 vocational apprenticeship, whose persistent critical issues had been well documented in previous years (Di Monaco and Pilutti 2012), ceased to be the focus of policy makers’ attention, interest shifting to the forms with a higher educational value, and in particular to the first-level apprenticeship (hereinafter dual apprenticeship). The turning point has been the reform introduced by Italian Legislative Decree n. 81/2015, which proceeds along two lines:
- the first, concerns the rationalisation and simplification of the legal framework. Therefore some measures are introduced aimed at promoting stronger consistency and standardisation in the apprenticeship regulation by setting up a broader and more specific national framework which defines qualifications awarded, length of the learning paths and outcomes to be achieved;
- the second, implies a redefinition of the costs for taking up an apprentice. Usually, hiring an apprentice is very convenient for companies, whatever form they use, since he/she receives a

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10 In the Italian legislation, apprenticeship is defined as an employment contract aimed at training and employment of young people, awarding an educational and/or an occupational qualification through a dual education path.

11 There are three forms of apprenticeship: 1. Apprenticeship for achieving a Vocational Qualification and Diploma, Upper Secondary Education Diploma and High Technical Specialization Certificate, which are qualifications at upper-secondary and post-secondary levels (Apprendistato per la qualifica e il diploma professionale, il diploma di istruzione secondaria superiore e il certificato di specializzazione tecnica superiore); this form is commonly known as first-level or dual apprenticeship; 2. Vocational or second level apprenticeship (Apprendistato professionalizzante), for achieving occupational qualifications with no educational value; 3. Higher Training/Education and Research or third level apprenticeship, for tertiary education qualifications (Apprendistato di alta formazione e ricerca).
significantly lower salary than a normal worker does. Nonetheless, in order to make dual apprenticeships even more profitable and to encourage companies to prefer it to other employment contracts for hiring young people, further economic incentives and other measures have been introduced for reducing the burden on companies.

The 2015 reform has left substantially unchanged the governance of the dual apprenticeship, which has a multi-level structure, whose main actors are:

- the Regions and Autonomous Provinces of Trento and Bolzano, that have a concurrent legislative power in the field of education and an exclusive power in the field of vocational training;
- the social partners, who are entrusted with the task of defining – through national cross-sectors or sector collective agreements – mainly job-related aspects, like as apprentices’ rights and duties and remuneration, and some elements related to the learning path as well, for the part provided under the responsibility of the company. Moreover, they draw up formal suggestions addressed to national and regional institutions on policies and interventions for the development of apprenticeship.

In parallel to the regulatory reform, the Ministry of Education and MLSP have launched two experimental initiatives to develop dual apprenticeship. The first initiative has started the implementation of dual apprenticeships awarding upper secondary technical and vocational school diplomas. To date, the implementation of this initiative has remained very limited, mainly due to some critical issues: the lack of a broader organic project able to unify in a single framework all the interventions promoted in different areas and that can give substance to the regulatory provisions; poor financial resources, inadequate to set up the necessary support services to educational institutions in order to ensure continuity to the initiatives, beyond the experimental level.

The second and more important national initiative to build an “Italian path to a dual system” began in 2015/2016 as an experimental project and was transformed into an ordinary measure in 2018, thanks to a specific legal basis. Inspired mainly by the German dual model, it concerns the development of dual apprenticeships awarding initial vocational education and training qualifications (hereinafter VEaT\(^{12}\)). The aim of the initiative, promoted by the MLPS and based on agreements with the Regions, is twofold: to more incisively counteract dropout rates by strengthening the methodology of experiential learning; and to reduce the number of young people not engaged in either work or education by including them in a programme that can improve their employability. These objectives are pursued through the strengthening of the VEaT offer of full-time courses and supporting the development of dual apprenticeships realized in connection with VEaT.

The most recent figures on the implementation of the "Italian path to a dual system" are from 2016/2017 school year, and come from the monitoring conducted by Inapp. Conversely, for the 2017/2018 school year partial data are available, regarding the experience of 148 training centres\(^{13}\) associated with Confap-Forma that participated in the project. In comparison to the original goal to

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\(^{12}\) Vocational Education and Training programmes (VEaT) are three-year and four-year courses for obtaining vocational qualifications corresponding to EQF level 3 and 4. These courses are organised by the Regions and issue certificates that are valid nationwide as consistent with qualification standards issued at national level.

\(^{13}\) Vocational Education and Training courses are realized by training centres accredited by the Regions. These centres are private educational institutes usually linked to religious associations or organizations of the world of work.
engage 20,000 youth in the initiative, the results for 2017 are very modest: only 3,306 apprentices participating in the VEaT courses, equal to 13% of the total 25,508 participants to the entire experimental project (Inapp 2019b). What is most striking, however, is the great territorial differentiation revealed by the data: 76% of all apprentices enrolled in VEaT courses are concentrated in Lombardy, followed by Veneto with 13% and Piedmont with just under 5%, while in the Central and Southern Regions there were practically none.

Reflecting on the first results, the 2015 reform does not seem to have paved the way for the spread of dual apprenticeship in VEaT across the country. The critical issues concern both the structural weaknesses of the Italian production apparatus and the system’s governance flaws, as well as the choice to embed it in VEaT without intervening on the critical aspects which are affecting the development of this training offer. Actually, problems arise in the implementation of dual apprenticeships, both for training institutions providing off-the-job training and for companies, and the cooperation between these two entities remains a difficult objective to be achieved, even in territories where vocational training is more developed.

With regard to companies, especially the smaller ones, the main obstacles to the use of dual apprenticeships concern: the risks connected to a medium to long-term investment on apprentices, which could be hampered by market uncertainties, thus making the use of flexible contracts more preferable; the limitations and burdens on the employer in relation to taking up apprentices under-18; the matching of the requirements for being a training company, which refer to activities and/or processes, equipment and machinery needed for acquiring of the skills defined by the ITP; the availability of qualified personnel to dedicate to tutoring. Moreover, there are difficulties in hiring dual apprentices due to the complex operations of correlation between the occupational qualifications envisaged by the collective agreements and the limited number of qualifications that can be awarded by VEaT.

Training institutions encounter numerous difficulties in expanding the number of companies offering apprenticeship places and tend to use established networks and relationships as a privileged channel to mobilise companies. In some Regions, training institutions can count on the contribution of the social partners that organise awareness raising and support actions for recruiting companies, also leveraging the bilateral system. The cooperative relationship between training institutions and social partners does not seem to have sufficiently developed, however, if, as underscored by the Confap-Forma monitoring report, the partnership of training bodies with trade associations operating in the territory still has ample space for improvement before becoming systemic and an integral part of a governance model that includes the different actors of the dual system (Noviter 2017).

In designing dual apprenticeship paths, one of the most critical issues is the drawing up of the Individual Training Plan (ITP); this plan should include – in a single, consistent pathway – off- and in-company vocational training and work experience, making theory and practice complementary and ensuring the circularity between concrete and experiential learning and the knowledge dimension. However, this need is often hampered by the absence of detailed training standards and specific curricula. Indeed, there is no formal link between the educational qualification awarded by VEaT courses – as dual-paths or full-time – and the occupational qualifications set in the collective agreements, which define the work experience (Cedefop 2017).

The training institutions are responsible for the management of dual apprenticeship for the part related to off-the-job teaching and calendars; often they are also required to support companies in
dealing with the administrative and labour law aspects. Hence, they organize information activities and carry out a range of support services for enterprises. At the same time, training institutions must provide guidance and support services for students as well, both before the signing of the apprenticeship contract and during the learning pathway. These complex additional activities, which require a further organisational effort and the availability of dedicated professionals with adequate skills, are poorly funded by the Regions, especially in comparison to full-time training courses.

All the mentioned critical issues give reasons for the poor performance of the initiative in its first years of implementation. However, as it has been transformed in an ordinary measure since 2018, some suggestions could be provided reflecting on the feedbacks provided by actors and stakeholders collaborating for its realization.

The critical issues described could be addressed within the framework of a multi-level governance system, based on a structured and continuous dialogue between the various actors involved in the dual apprenticeship. However, the current mechanism provides for different governance structures at the regional level, while at the national level the existing forms of coordination are weak and hinder the definition of an overall, consistent and uniform strategy for the implementation of the dual system, facilitating fragmentation (Cedefop 2017).

Moreover, it should be noted that the choice of the VEaT as a privileged channel for the development of the “Italian path to the dual system” has once again raised the issue of the significant heterogeneity of this provision from one region to another. There are significant inconsistencies related to the choices made by the Regions in the organisation of the training offer and the resources allocated, which result in a concentration of participants in the northern areas: considering only full-time VEaT courses, Lombardy, Veneto and Piedmont account for 60% of the total number of students, while the South reaches only 12% (Inapp 2019c). It is therefore no surprise that the southern Regions encountered greater difficulties in starting the development of the dual system, stipulating only 12 apprenticeship contracts.

In essence, while a part of the country could be prepared to seize the opportunity of the development of a dual system, for most of the country – the South, but also several areas of the Centre-North –, the launch of this initiative should have been based preliminarily on the strengthening of the regional VEaT, with a specific programme aimed at overcoming the fragilities of this segment of vocational training provision and its profound disparities at a national level.

5. Suggestions for Italy from the study on European dual systems

The evolutionary trajectories of apprenticeship in Germany, Austria, Switzerland and France over the last decades both confirm the peculiarities of the various systems and reveal some common points. Analysing these convergences, it is possible to offer some initial reflections on the strategies adopted by Italy to promote the construction of its own path to the dual system and on the measures that the country could implement to allow the apprenticeship to play a role in combating the youth employment crisis.

A first convergence between the European dual systems examined is their progressive integration into the general education system and repositioning towards non-academic tertiary education, in differentiated forms and new hybridisations. This shift has made it possible for the dual systems to
respond to the changing needs of businesses and to attract more and more young people with higher levels of qualifications, as their number has grown in the meantime due to the general increase in education participation.

Up until now Italy has gone in the opposite direction compared to the other European countries examined. Since WWII, the prevailing apprenticeship model has had a predominantly occupational value (Carinci 2012) and an increasingly weak link with its training component, while the first- and third-level forms have remained largely marginal (between 3% and 4% of the average total apprentices). The attempt to revitalise dual apprenticeship in 2015 was implemented by favouring the regional VEaT channel; in contrast, only a few experimental projects promoting dual apprenticeships in the upper secondary technical and vocational education were funded, which involved a total of less than a thousand young people up to the year 2017/2018 (Inapp 2019a).

Looking at the evolution of the European dual systems, Italy should therefore be urged to consider the opportunity to focus its efforts more on the development of apprenticeship in combination with the learning paths that lead to upper secondary and tertiary education diplomas and degrees, at least in the regions with a higher competitive advantage. Such initiatives could reveal useful also to promoting the horizontal and vertical integration of all the sectors of the education system in a lifelong learning perspective.

A second line of convergence among the European dual systems concerns the increasing attention to improving the quality of training programmes and learning processes through multiple policy measures that cover different areas: from strengthening the correspondence of training profiles to occupational needs to the revision of certification systems, from innovating teaching methodologies and tools to strengthening the trainers’ skills.

For Italy, the choice to focus on the quality of the training should pass through the restructuring of VEaT offer. It is a sector that is highly varied throughout the country, essentially absent in many areas of the South where its functions have been largely delegated to the school system, while it has a large number of courses and participants in Lombardy, Veneto and Piedmont. It is therefore no coincidence that in these Regions the policy measures adopted to relaunch dual apprenticeship have seen positive results, while in the rest of the country there have been no significant effects.

Promoting the quality of VEaT would require a preliminary strong action to support the development of this training provision in areas where it is absent or fragile, to make available sufficient financial resources to ensure compliance with the essential levels of supply which assume that all the demand expressed by young people and families should be met and, finally, to dictate rules and principles that ensure consistency among all the regional vocational training systems. The VEaT offer should be defined on the basis of a multi-year programming capable of supporting the process of ‘verticalisation’ towards Higher Technical Education and Training and Higher Technical Education through the country. No less important for the qualitative development of the system is the definition of a unitary

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14 Higher Technical Education and Training (HTET - Istruzione e Formazione Tecnica Superiore) and Higher Technical Education (HTE - Istruzione Tecnica Superiore) are learning programmes which are both open to young people who have already achieved an upper secondary education diploma or a four-year vocational diploma through VEaT. HTET consists of one-year courses, funded by the Regions, while HTE provides two or three-year courses, realized by foundations made up of schools, Universities, training centres and enterprises. Both programmes award nationally recognised certifications.
model of “standard costs”, essential to guarantee everywhere the same objective criteria of training quality, adequacy and efficiency (Zagardo 2019). These interventions require a vision that is also attentive to the specificities of the various regions, able to develop a set of tools and forms of support with variable intensity that are available and deployable according to the various local needs.

Among the measures adopted by the European countries to promote the quality of the dual systems, considerable importance is attributed to those aimed at building and strengthening stable and codified institutional fora. This process has often been accompanied by a strengthening of the role of the social partners, in particular as regards the identification and analysis of enterprises’ occupational and training needs and the setting up of registers of vocational qualifications. In some countries such as Germany strong collaboration among institutions and social partners has made it possible to build real partnerships for a shared definition of apprenticeship development strategies. This is an example of participatory governance that fosters an effective monitoring of the implementation of the regulatory framework of apprenticeship. In France, the 2018 reform has strengthened the role of workers’ and employers’ associations, in particular with regard to the definition and updating of vocational qualifications, the financing of CFAs and the determination of training costs.

Even in Italy the relaunch of the dual apprenticeship would require a structured, continuous dialogue at least between the main actors involved in making the apprenticeship successful: central governments, regions and social partners. A first step in this direction could be the establishment of a national coordination body that guarantees a uniform management of dual apprenticeships, eliminating the traditional separations between the Regional and State education learning provisions and facilitating the implementation of a unified programming process that extends to the local level (Cedefop 2017). This process would also require a redefinition of the role of the various actors in the partnership in order to eliminate the fragilities that characterise the current governance. Specifically, there is a need to strengthen the role of the social partners and it appears that the coordinating and directing role provided by the central government should also be boosted.

The third and final line of convergence concerns the modification of the inclusive capacity of dual systems. Since the 1980s the pre-selection performed by the school system has progressively assumed greater importance for admission into apprenticeships and the subsequent positioning of young people in the labour market, with a negative effect on the trajectories of young people with poor school backgrounds, who obtained only low qualifications or none. Moreover, dual systems tend to under-represent both young migrants and women; both groups find it more difficult to find an apprenticeship and often remain confined to sectors and enterprises that offer more difficult prospects on the labour market and in more precarious and lower-paid jobs.

The increase in educational and labour inequalities therefore does not concern only Italy, but here this issue is particularly acute, especially in the Southern regions where school dropouts and young people who do not study and do not work respectively reach peaks of more than 20% (Istat 2020) and 35% (Istat 2019). Combating these phenomena is therefore a priority objective for Italy, however, it is unlikely that dual apprenticeship is the answer to achieving this goal. Indeed, while it is usually implemented for correcting the effects of the reproduction of social inequalities in schools, instead it seems destined to become a means of amplifying such inequalities, combining the effects of the selection based on school performance with those of discrimination in the labour market.

Ultimately, in light of the evolution of European dual systems, it can be said that the project to relaunch apprenticeship in Italy is based on a paradigm – albeit in transformation – that could enjoy
affirmation and development only in some limited areas of Northern Italy, while nothing has been done to create the conditions for success in the South and in other areas of the country. Moreover, there is a lack of commitment to the development of apprenticeships in the higher technical education and in universities, while the other countries have been working for some time to achieve this objective with good results.

The arguments presented could offer food for thought with a view to a rethinking of the policy measures adopted to date with respect to dual apprenticeship. A unique, unmissable opportunity to define a new strategy for the development of the dual system will be provided by the Recovery and Resilience Plan, whose resources could also be used to finally equip Italy with a dual system that, with a view to lifelong learning, is able to support young people’s and adults’ skills development to boost the green and digital transitions, and that is connected with other policies for innovation and economic and social development. To reach these goals, the definition of a differentiated set of measures based on the specificities of local systems and individual needs has to be combined with the equally relevant objective to strengthen consistency in the vocational education and training system reducing the existing gaps among the Regions.
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