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Croatia: Impact of Europeanization on Skill Formation.

Teo Matković and Nikola Buković

Introduction

The development of the Croatian education policy from independence onwards can best be understood in terms of it having two successive phases, each shaped by the dominating political paradigms at the time (Žiljak 2013; Žiljak & Molnar 2015). In the first phase, which spanned the 1990s, the education system was primarily seen as a tool of (re)creating national identity and the nation-state. The second phase began in the 2000s and is still in effect. This phase is characterized by the paradigm of Europeanization and its key features: lifelong learning, competitiveness, and employability. This has entailed harmonizing national policy with the education policy of the European Union, while also implementing policy learning from other member states.

A recent analysis of the institutional features of the Croatian skill production regime (Buković 2019) classified it, following Busemeyer and Trampusch (2012, 12), as ‘predominantly statist, with partial collectivism in training for occupations in skilled trades.’ This means that the central state and its subsidiaries control, deliver, and fund most aspects of skill formation in Croatia, with general education tracks enjoying more prestige than their vocational counterparts (Buković & Matković 2018). The critical exception — which inserts a measure of hybridity into the system — comprises programmes for skilled trades occupations (in Croatian: *programi za obrtnička zanimanja*), which include apprenticeships. Here, the Croatian Chamber for Trades and Crafts (CCTC) plays a significant role in programme design, delivery, and administration. This cannot be considered an example of corporatism in the sense of developed industrial democracies, however, since it lacks a sustained and equitable partnership between the state, employers, and trade unions in delivering programmes.

This chapter aims to deepen understanding of the dominant forces shaping and maintaining the Croatian skill production regime over time. It will set the scene by offering a demographic and industrial context for this, and by describing the education and labour market linkages across the spectrum of education. It will then describe the institutional particularities of the social partnership in Croatia, regarding governance of the skill production regime. In the two central sections, we present cases of policy transfer that characterize the functioning of the Croatian skill production regime. These are: (i) the struggle related to apprenticeship-based VET, which has been ongoing for two and half decades, and the succession of solutions and actors involved; and (ii) the policy transfer process and challenges around the implementation of the Croatian Qualification Framework which has been proclaimed by policymakers as the main instrument for overcoming skill mismatches within the labour market. The final section offers some conclusions.

Demographic and industrial context

Any changes in the system of skill formation must be analysed within the context of broader structural developments over the past three decades: (1) declining cohort size, (2) labour migration, and (3) changes in the industrial structure.

(1) Demographics

Demographic developments present the first set of challenges to the functioning of the Croatian skill production regime. With birth cohorts steadily on the decline — from 69,000 in 1979 to 41 thousand in 2001 — Croatia's education system has faced a diminishing number of pupils at the upper secondary education level since the late 1990s (Figure 1). The size of the generation entering the labour market has also begun to shrink since the early 2000s. Throughout the 2010s the size of

the cohorts leaving the labour market was about 20 per cent larger than the cohorts completing their education. This makes for a substantial cohort replacement challenge.

(2) *Work immigration*

In the 1990s, a flood of Croatian nationals immigrated from the other ex-Yugoslavian countries (particularly from Bosnia and Herzegovina), with 30–50,000 people settling in Croatia annually. This workforce had experienced similar education systems but was generally less qualified than the resident population. This inflow declined to 15–20,000 in 2002–2008. It then mostly ended, with the prolonged economic crisis and with Croatia’s accession to the EU in 2013, as many Croatian nationals residing in neighbouring countries opted to move directly to other EU Countries. Recently the work immigration quota system for non-nationals has become more salient. Only established in 2003 — and effectively frozen over the crisis period (2010–2015) — the immigration quota exploded thereafter, increasing from 7,000 in 2017 to 55,000 in 2019. This is an important development for the skill formation regime, since up to 90 per cent of the quota was specified for skilled, VET-related occupations. Thus, in recent years, the level of immigration of skilled workers has dwarfed the annual output of the national VET system.

The annual level of youth emigration (aged 20–29) seems to have stabilized at about 9,000 in 2018–2019 — after the initial post-accession wave relented — or at about 1.9 per cent of the population. The brain drain appears to have had most impact amongst tertiary education graduates; the pilot 2018 Eurograduate survey identified 5–6 per cent of Croatian graduates as living abroad a year after graduation (Meng et al. 2020, 238).

(3) *Industrial structure*

In the decades since the transition began, Croatia's industrial structure has followed a long-term shift towards services, coupled with deindustrialisation and a reduction in total employment (Table 1). During the decade 2009-2019, the absolute number of people employed bounced back to about the pre-crisis level (1.56 million vs. 1.57 million), but the structure of employment changed substantially. There has been strong growth (over 20 per cent) in all personal service sectors, ICT, and professional and support business services; modest growth in health and education; and a decline in finance, in most transformative industries, and — particularly — in the extractive sector (Matković 2020, 15).

Table 1: Mid-term changes in broad sectoral employment

	1981	1991	2001	2011
Total employment (in 000s)				
Agriculture	449	265	175	80
Manufacture, construction, mining	631	590	386	377
Other (services)	783	892	847	1004
Total employment	1863	1747	1408	1461
Structure of employment (per cent)				
Agriculture	24.1	15.2	12.5	5.5
Manufacture, construction, mining	33.9	33.8	27.4	25.8
Other (services)	42.0	51.1	60.2	68.7

Source: Census (1981–2011 rounds)

Current (2018) Cedefop skills forecasts indicate that the trend may change again. The strongest growth is projected to be in health, education, professional activities, and green jobs, whereas hospitality services may join manufacturing and agriculture as a declining sector.

It is important to mention employment in sole proprietorships (non-incorporated businesses), as they are main providers of workplace training for skilled trades occupations. Sole proprietorships also gain the most from the occupational labour market and standardised workplace training since they lack the resources and size to train internally. The share of employment in such entities steadily

increased from 9.6 per cent of all employment in 1991 to 17.5 per cent in 2008. Yet this sector was badly affected during the 2009–2015 crisis and has not recovered since. By 2019, employment in the sector had shrunk to 194 thousand, or 12.5 per cent of all employment. This has implications for both the sector's labour demand and its training provisions.

Education system and labour market linkages, 1990–2020

The skill production regime that emerged during the transition must be understood as a reaction to the one that preceded it. In 1975, Yugoslavia implemented a sweeping national education reform, setting up a system called vocational-oriented education (in Croatian: *usmjereno obrazovanje*). This was not just characterized by vocationalized curricula, localised links between the education and productive sectors, and a focus on learning through work; it was also explicitly designed to facilitate the emancipation of the working class and the suppression of the (white-collar, critical intellectual) middle class. This made the concept toxic during the democratic transition. Dismantling the pre-transition system was made easier by the fact that VOE did not reach its proclaimed skill matching goals, and that industry itself only partially embraced its principles (Baćević 2016).

Upper secondary education and VET

The main features of the current system were introduced in 1992. They clearly reflected the dominant paradigm of the time, which favoured a clean break with the socialist era. To be more precise, this break was with *the late socialist era*, since the system set up in 1992 closely resembles the one put into place by the earlier socialist reform of 1958. After eight years of compulsory education, most students choose from three main tracks, which differ considerably in prestige and social selectivity (Buković & Matković 2018; Matković et al. 2013), duration, horizontal

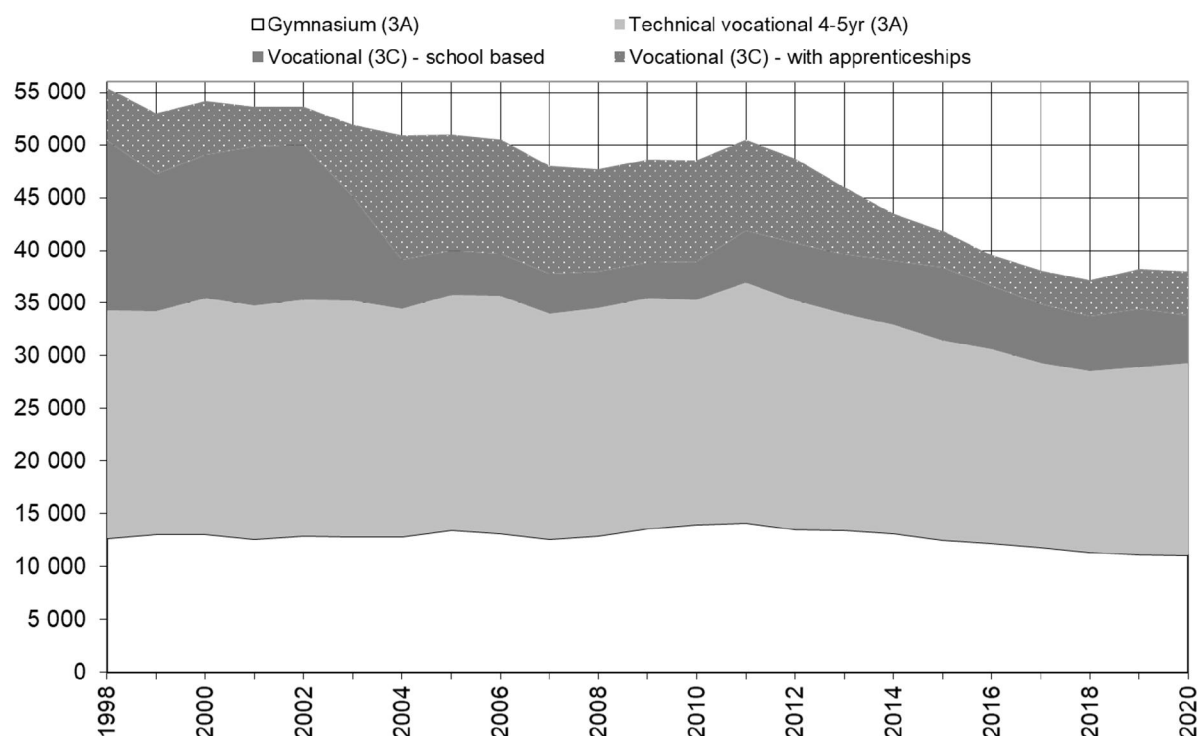
differentiation, vocational specificity, approach to workplace training, labour market linkages, and vertical permeability (Matković 2011). The most selective — accounting for 29 per cent of entrants in the year 2019/2020 — is the general secondary, or grammar school, track. This track concludes with a matriculation exam (*matura*), with 87–88 per cent of graduates entering higher education (HE) outright (Šabić 2019). The other two tracks are vocational.

The first group of VET programmes takes four years (five in the medical field) and prepares entrants for a group of occupations whose practitioners are usually referred to as ‘technicians’. This is the largest track overall (accounting for 44 per cent of the enrolments in 2019/20) and it represents a middle ground between general education and pure VET, with the curricula containing a significant share of general content during the first two years. These curricula usually entail no, or very little, workplace learning (up to two weeks, often only in the final years of study). There is also no standardization in terms of execution, monitoring, or pupil-employer matching regarding workplace learning. Such programmes are prevalent in sectors such as economics, electronics and engineering, health, and hospitality. This track has a hybrid nature since, apart from providing vocational credentials, it allows students to apply for a matriculation exam and enter any tertiary education programme. Many do; 43–45 per cent of the 2015–17 cohort of technical education graduates (and as many as 56 per cent of economics course graduates) immediately enrolled in HE after graduation (Šabić 2019).

The lower tier of VET programmes in Croatia lasts just three years. It could be qualified as purely vocational with a high degree of vocational specificity, a strong practical orientation, very narrow general curriculum and no direct access to tertiary education or a matriculation exam (Buković 2019; Matković et al. 2013). This track is in long-term decline, shrinking from 39 to 24 per cent of overall enrolment between 1999 and 2019 (Figure 2); the available places in three-year VET programmes are rarely filled (Christiaensen et al. 2019). There are two sub-groups within this

track. In one, students are trained for skilled occupations. The other sub-group provides a workforce for retail and industry. Workplace learning is far more prevalent within the skilled trades segment. The decline in the upper-secondary education cohort size began in the late 1990s. Yet, until 2011, the 3-year VET track bore the brunt of this decline — dropping from 21.0 to 13.5 thousand entrants. As the entrant cohort size continued to decline over the 2010s, the sharp contraction within the 3-year vocational track has continued (from 13.5 in 2011 to 9.2 in 2020). This time around, however, some decline in enrolment has also appeared in the technical (22.1 to 17.6) and gymnasium (13.6 to 11.1) programmes.

Figure 1: Enrolment in upper secondary education tracks, 1998–2020



Sources: CBS first releases ‘Upper secondary schools.’ Apprenticeships: CCTC statistical reports (up to 2012), *Školski e-rudnik* (since 2013).

Note: first-year entrants, no repeaters. Regular art and design programmes displayed among technical schools. Special needs education track not displayed.

On the output side, the number of pupils graduating annually from 3-year vocational tracks declined from 20.4 to 8.4 thousand between 1999 and 2019. Over the same period, the decline in the number of graduates was lower for technical tracks (19.3 to 17.4 thousand) and stagnant for gymnasium tracks (11.9 to 12.0 thousand), with some contraction occurring after 2016. Consequently, while the share of upper secondary graduates completing vocational education declined from 77 per cent to 68 per cent of the cohort, the share of purely vocational three-year VET graduates almost halved from 40 per cent to 22 per cent.

Higher education

Higher education was the last segment of the Croatian education system to be reformed during the transition. The Act on Higher Education Institutions (AHEI) was fully implemented only in 1995. Based on the constitutional guarantee of autonomy for universities, academic self-management (i.e., the ability to determine their own programmes, rules, and criteria) was guaranteed to higher education institutions (HEI). Tertiary education was re-established as a binary single cycle ‘diploma’ system, with strongly separated academic and professional tertiary education (PTE) tracks. Unlike the pre-transition regulations, workplace-based training or involvement of firms was not mentioned in the AHEI, while connection to the labour market was mentioned only via the notion that programmes ought to be ‘appropriate to needs of employers.’

The more comprehensive Act on Scientific Activity and Higher Education was introduced in 2003 and remains in force as of 2020. With respect to linkages with employers, the only remaining vestige of the fundamental principles was the ‘unity of professional and education work for the purpose of training for specific professional knowledge and skills.’ Neither the labour market nor employers are otherwise mentioned, indicating a significant decoupling from the labour market.

However, this Act also set up the groundwork for the implementation of the Bologna sequential study regime (Bachelor – BA / Master MA) starting in 2005, and for an external assessment and accreditation process.

The Agency for Science and Higher Education (ASHE) has had responsibility for the HEI assessment since 2010. An overview of the 2010–2016 cycle (Petrušić 2017), indicated the weak to non-existent involvement of labour market stakeholders (institutions or firms) in strategic planning, quality assurance, and revision of study programmes. Internships and practical work were sporadic, and the assessment of labour market needs, alumni organizations, and graduate tracking practices were virtually non-existent. This is common to assessments regardless of field of study or type of institution. Many appeals have been made in the assessments for institutions to formalise cooperation with industry. Yet the conclusions of the National Committee for Professional Higher Education Excellence (NCPHEE) state its main strength as

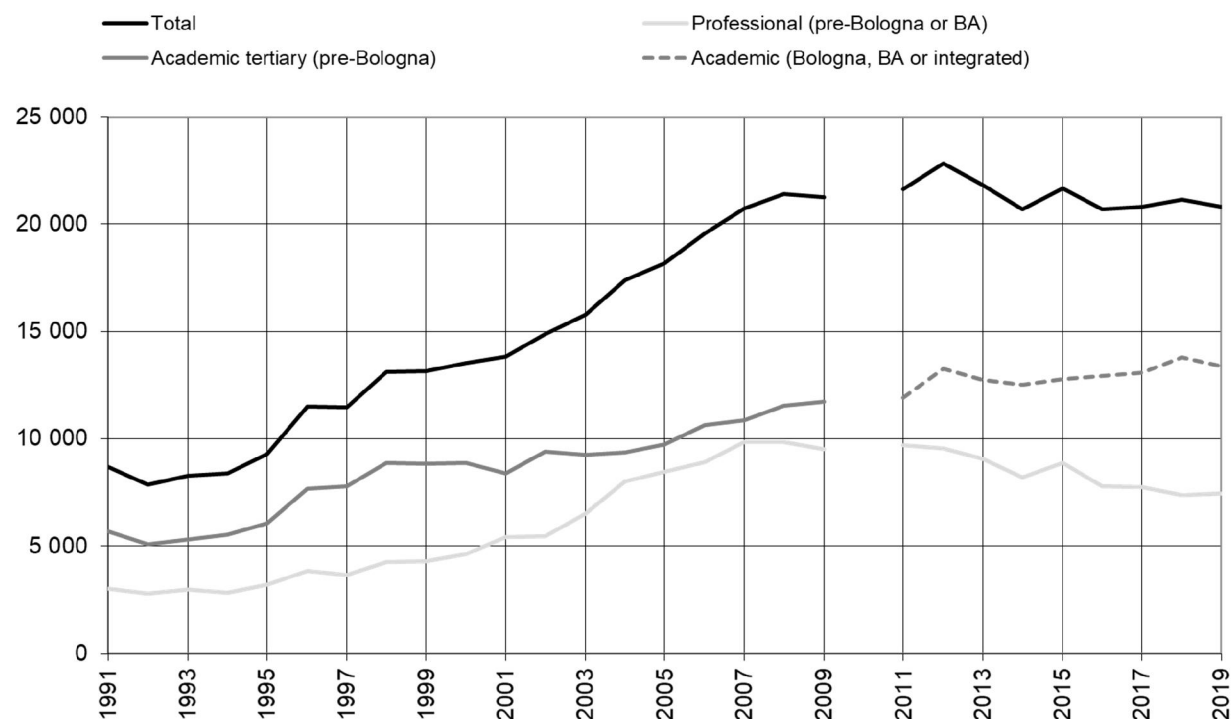
the well-established link between PHE and the world of work seen through the fact that programmes are developed in cooperation with the world of work and the education process is connected with practical exercises. The perception of the world of work regarding PHE students' competences is positive (Poličnik et al. 2017, 14).

Indeed, four of the nine PHE strengths identified via a SWOT analysis pertain to cooperation with industry. As for evidence of work-based learning, Botrić (2017) identified that in 2015-2016 just 49 per cent of university students attended programmes that involve work placements, along with 73 per cent of students in professional programmes. Within university programmes, there is a higher prevalence of work placements in the medicine and biotechnical fields (83-96 per cent) and a lower prevalence in social sciences and humanities (36-37 per cent). The average annual duration — for those who attended the work placement — averaged a modest 65 hours in academic courses and 95 hours in professional programmes. Such placements were commonly based on bilateral agreements between the HEI and employers. As for employer linkages via career guidance

services, a recent analysis showed that just one in five HEIs reported offering a career guidance centre, yet most HEIs reported their intention to open such a centre (Đorđević 2017).

With HEIs being legally positioned to determine the number of placements and retain the income — yet without enforceable staffing standards or external assessment prior to late 2000s — the number of enrolled students increased rapidly from the mid-1990s to the mid-2000s, particularly in PTE and the social sciences (Babić et al. 2007). Consequently, by the late 1990s the number of graduates recovered to the levels achieved in early 1980s (Matković 2009). It then increased sharply from 2001–2008, levelling off at about 21 thousand thereafter (Figure 2). Initially, PTE courses were the major contributor to the growth, as the number of graduates from professional courses almost equalled those from academic courses in the 2004–2008 period. While the supply of placement positions in PTE has remained high, the number of entrants and graduates has decreased strongly since then. By 2018–2019, the share of professional graduates (at the BA level) dropped again to about 35 per cent, similar to the early 1990s.

Figure 2: Graduates from professional and academic tertiary education



Source: CBS First Releases 'Students who Graduated from University Study or Completed Professional study'.

Note: 2010 break due to the 'overlap year' of pre-Bologna and Bologna.

While the number of graduates declined slightly since 2012, the cohort size has declined dramatically (cf. Figure 2 and Figure 1). Consequently, according to the Labour Force Survey (LFS), the share of 25–34-year-old workers with tertiary education doubled from 18 to 35 per cent between 2002 and 2019.

Adult education and lifelong learning

During the 1990s 'adult education was marginalized and the key actors of its implementation were presented as redundant remnants of the old socialist education system' (Žiljak 2018, 55). The area was initially regulated via bylaws, with comprehensive regulation introduced only through the

Adult Education Act in 2007. The Agency for Adult Education was set up in 2006, and was tasked with monitoring, developing, evaluating, and running the registry of adult education. It merged into the Agency for Vocational Education and Training and Adult Learning (AVETAE) in 2010, institutionally framing adult education as continuous vocational education.

Adult education courses are provided by a patchwork of public open universities, VET schools, HEIs, language schools and private firms, with the number of registered entities doubling from 345 in 2009 to 618 in 2018. Providers are organized under the umbrella of the Croatian Association of Open Universities (1954), the Association of Institutions for Adult Education (2009) and the Association of Employers in Education within the Croatian Employers' Association (2011), but none has power of representation. There is a possibility, but no mandate, for providers to associate with firms to provide courses (including provision of work-based training). About 800-900 courses are registered annually across the country, with 11,309 entries in the registry by the end of 2018. (Christiansen et al. 2019, 315). Some providers are private, some are established by local governments, but there is little publicly funded provision. Local governments fund some operational expenses, while central government (and EU instruments such as Erasmus+ and ESF) funds some development activities. Yet apart from provision of elementary education, all the courses are paid for by attendees (or their employers), with few placements being offered by the Croatian Employment Service and occasional opportunities being provided by NGOs or funded by towns or municipalities.

Despite recent developments, such arrangements led to low and stagnant participation in lifelong learning, especially in non-formal education. The monthly participation rate in education and training for population aged 25-64, as measured by the Labour Force Survey, remained stagnant at 2.5-3.5 per cent for the entire 2006-2019 period, and was among the lowest in the EU. The findings of the 2016 Adult Education Survey were similar, with only around a third of adults participating

in education during the previous year. Both sources indicate that the participation is particularly low among those aged over 45, those without tertiary education and the unemployed. When it comes to corporate HRD policies, training makes up an average 1.3 per cent of the labour costs of Croatian firms (EU average 1.7 per cent) as per the 2015 Continuous Vocational Training Survey. Furthermore, only 55 per cent of Croatian firms provide training (cf. 73 per cent EU average), with the incidence of externally provided courses declining over the 2010-2015 period. Any business-driven initiative to upgrade the system of skill formation seems unlikely, as 79 per cent of employers claimed that qualifications, skills and competences correspond to the current needs of their enterprises, while 65 per cent assessed the level of training they provide as appropriate (cf. 52 per cent EU average).

Adult education holds a prominent place in the Strategy for Science, Education and Technology (Hrvatski sabor 2014), but public and political interest has remained lukewarm, while the amendments to the Adult Education Act and improvements in quality assurance stalled during the 2015-2020 period (Žiljak 2018).

Social partnership and skill formation in Croatia

Several factors have affected the current state of social partnership within the Croatian system of skill formation. The first is weak co-ordination, exemplified by the various advisory councils established since the 2000s. This includes the Council for VET (2009), the National Council for Science, Higher Education and Technological Development (NCSHETD, 2004) and the National Council for Human Potential Development (NCHPD, 2014). The latter is a central forum established to monitor and improve the implementation of reforms, revolving around the national qualification framework. A common feature of all these forums is their broad membership: their 18 (NCSHETD), 21 (Council for VET), and 25 (NCHPD) members are usually drawn from state

administration, business associations (including chambers), and trade unions. Academic professionals are also represented — as are, sometimes, other stakeholders such as NGOs or individual entrepreneurs. Another important feature of such national councils is their strictly advisory role, even though the members of the NCSHETD and NCHPD are elected by the Croatian Parliament (CVET members are appointed by the minister in charge of education). These bodies sometimes face prolonged periods of inactivity, usually because new appointments have yet to be confirmed by the competent bodies. Unlike proactive examples such as Austria's Federal Council for Apprenticeships (*Bundesberufsausbildungsbeirat, BABB*), which all but autonomously put forward a proposal for a key bylaw governing the delivery of apprenticeships (BMA 2012, 21), the existing literature shows little evidence of those bodies significantly influencing policy in Croatia. This could be attributed primarily to lack of tradition and institutional capacity for participative policymaking, but also reflects the nature of social partnership in Croatia, which is elaborated in the following paragraphs.

Second, with respect to tripartite social dialogue, the national-level Economic and Social Council (ESC) represents a key forum for coordination among social partners: the central state, the representative association of employers, and three trade union federations. One of the ESC working groups, the Commission for Employment, Education and Alignment with the Labour Market, regularly produces opinions and recommendations on legislative proposals and draft strategies relevant to the field of skill production. Yet the work of this commission, and of the ESC in general, is also characterized by discontinuities. These dynamics are framed by Bagić (2013) as 'an unproductive balance of power' between social partners. He argues that the central state usually holds enough political power to pass policies — regardless of disagreements among the social partners — but that it is sometimes blocked by the mobilisation of trade unions, via protests, referendum petitions, strikes and withdrawal from the ESC. The central state also often requires

some involvement from employers for policy to have any tangible impact; the national employers' association has only a limited capacity to organise and, particularly, to sanction employers who break the rules. According to Bagić, such a balance is 'unproductive' because it is unlikely to facilitate compromises and joint stakeholder action, as opposed to confrontations and unilateralism from the central state.

Third, the current economic structure itself does not seem to be conducive to bilateral and sectoral collective bargaining. Economic sectors usually consist of just a few major firms and many small ones, impeding the development of mutual interests and undermining the organization of employers at sectoral level (Bagić 2010).

The situation is even more complicated in the field of VET, the workings of which strongly influence the nature of Croatia's system of skill formation. The national trade union federations and national employers' association do not possess the capacity to directly influence policymaking. Trade unions that organize workers in the education sector are relevant and influential but seem to place more emphasis on issues crucial to the interests of their members (such as wages, teacher training, and teaching hours) rather than on the direction of education policy. Nevertheless, issues related to the functioning of the education systems and those related to trade union members' interests can overlap — particularly in relation to discussions on the network of schools, as these can directly influence the sustainability of teaching jobs. There is some involvement of chamber bodies: the CCTC continuously assumes a prominent role in VET development and delivery, while the Croatian Chamber of Economy (CCE) has recently discovered an interest in VET policy, particularly around expanding apprenticeships into other sectors of the economy. Yet the relationship between the chambers and the central state could be better described as a sort of 'outsourcing', rather than social partnership (Buković 2022). It seems that the central state, and particularly the ministry in charge of education, is willing to relinquish some control of the skilled

trades programmes to minimise its operational involvement in this segment of the education system — which is not usually considered to be particularly prominent, from the economic and political perspectives. However, contrary to the practice of corporatist skill production regimes, the position of the CCCT remains highly precarious and subject to unilateral action from the central state aimed at curbing its role in the apprenticeship provision.

These factors result in a near-absence of meaningful social dialogue within governance arrangements for the system of skill formation in Croatia, both at the bipartite and tripartite levels.

Policy transfer: Apprenticeship learning in VET

This case was selected primarily because the introduction of apprenticeship learning gives the entire Croatian system of skill formation a distinctively hybrid character. It is also worth looking at in more detail because the governance and implementation of apprenticeship learning established in Croatia functions quite differently to the institutional models of developed industrial democracies. Apprenticeships, as a form of intensive work-based instruction, were introduced in Croatia through legislative changes in 1993 and 1996. The former introduced the possibility of delivering skilled trades programmes through apprenticeships but left out many elements vital to its practical implementation. The latter represented an attempt to address these omissions. This initiative is an example of early Europeanisation, as the apprenticeship system of the Federal State of Bavaria was used as a model and source of policy transfer. It was also an example of policy entrepreneurship by the CCTC which was the primary instigator of this scheme but also its primary beneficiary.

This initiative also created a parallelism within the VET system, with apprenticeship-based and school-based programmes for the same craft vocations running in parallel. Apprenticeships initially failed to expand in other sectors (e.g. VET training for industry) or solidify their position *vis-à-vis*

the school-based variant of education for skilled trades (Figure 1, dotted area). Therefore, in 2003, the dual model was changed into the Joint model of education (in Croatian: *jedinstveni model obrazovanja*; JMO). This change was introduced through a series of changes at the curricular level, without larger legislative and institutional reforms. The JMO model was less ambitious in terms of workplace training but resulted in apprenticeships becoming more prevalent between 2004 and 2012.

Throughout the JMO programmes, there is balance in terms of instruction time allocated towards three main components (general education, professional theory, and the practical component) is similar. In a typical example, the still-active 2003 curriculum for the occupation of pedicurist, 77 per cent of the total instruction time is allocated to vocational content, combining ‘professional theory’ (17 per cent) and the practical component (60 per cent). The remaining 23 per cent is allocated to general education content. The education plan sets the ceiling for practical training delivered in schools, as well as for the minimum amount of workplace training. Apprentices should spend a minimum of 36 per cent of total instruction time with licensed businesses in their first year, increasing gradually to 48 per cent in the third/final year. The actual intensity of workplace learning is relatively low, in the context of similar programmes in other countries. In Austria, for instance, apprentices spend around 80 per cent of their instruction time in workplace/company training (BMA 2012, 5), whereas among their Croatian counterparts the minimum rarely exceeds 50 per cent, even in their final years of study.

The second key feature of apprenticeships within the JMO is remuneration. Because apprentices do not have the status of employee but are regarded as students and apprentices in their trade, only some provisions of labour legislation apply. Compensation is also set at a minimal 10 per cent of the average net wage in the Republic of Croatia for first-year students, 20 per cent for second-year students, and 25 per cent for third-year students (in 2019, 87.3, 174.6 and 218.3 EUR, respectively),

although employers have the discretion to compensate apprentices more generously. These sums are paid in a net amount, without contributions for social insurance. A recent Council of Europe (2017, 5) report has established that Croatia is in breach of the European Social Charter on this issue, exposing the country to a collective complaint procedure. Moreover, research indicates that even this (relatively) low level of financial commitment is fully upheld by only a minority of employers (Cedefop 2019, 17; Herceg 2010, 26). However, there is increasing financial support for apprenticeship programmes from public sources. For example, more affluent local governments often provide stipends for students enrolling in occupations classified by the Croatian Employment Service as being in high demand. More recently, the central state has begun to offer grants disbursed via the ministry in charge of entrepreneurship, mostly funded through the European Social Fund (ESF). This includes student stipends and compensation of employer apprenticeship expenses for VET programmes that train students in skilled trades that are in high demand. Such schemes began about 2010, with HRK 2-5 million disbursed annually, escalated between 2015 and 2018 with annual disbursements of about €1.6-3.6 million, and boomed in 2019, with €10.5 million, about €200 monthly allocated to 4,165 pupils in skilled trades programmes (Ministarstvo gospodarstva, poduzetništva i obrta 2020). Following the CCE initiative, in 2018, another element was introduced to the 3-year VET track: experimental ‘dual education’ programmes. Overall instruction time has been reduced in the new dual model, compared to the JMO, at 3,845 versus 4,334 class contact hours on the basis of a full-time three-year programme. Dual programmes are less focused on general educational content, compared to the JMO (784 versus 848 hours), with more emphasis being placed on vocational theory (921 versus 886 hours). Dual programmes contain more practical instruction at schools (513 versus 475 hours), but less workplace training (1,627 versus 2,125 hours) (HOK 2019). Contrary to the abovementioned legal provisions on remuneration, the dual model allows for remuneration to be determined at company level. The pilot

started with four programmes, 10 schools, and 147 pupils. In two years, by 2020/1, the dual model expanded modestly to nine programmes, 25 schools, and 451 pupils (cf. JMO crafts: 39 programmes, 100 schools, 4,120 pupils). All but one of the newly introduced dual programmes were already delivered as JMO programmes with apprenticeships.

The number of pupils entering work-based training arrangements (Figure 1, dotted area) has been subject to great variation — accounting for about 3-5,000 placements (up to 10 per cent of the total cohort) in 1998–2002, then increasing to about 10–12 thousand in 2004–10 (about a fifth of the cohort). Apprenticeships declined sharply from 2012 and were down to under 3,000 in 2015. Since then, there has been a slight recovery rising to 4,571 in 2020. All apprenticeship arrangements are affected within the rapidly contracting 3-year VET track, which currently stands at about nine thousand entrants. Apprenticeships now comprise about half of all placements in this track, while all other pupils attend school-based VET programmes, as do all 4-year technical VET pupils.

The key features of the apprenticeship model and its implementation in Croatia can be summarised thus:

- it is limited to a relatively narrow sector of economy (trades and crafts);
- it was negatively impacted by demographic decline;
- there is a prominent role of the CCTC in delivery and administration, but with a status that is vulnerable to abrupt political intervention by the central state;
- there is a relatively low intensity of workplace learning, compared to similar programmes in developed industrial democracies;

- there is weaknesses in monitoring and rule enforcement, as evidenced by the case of sub-standard financial compensation for apprentices, with the bulk of employers apparently unwilling to pay even such low amounts;
- it can be characterized as an educational dead-end, with links towards HE largely disrupted and limited opportunities in the field of continuing VET.

Deeper understanding of these outcomes, particularly in terms of their causality, is necessary and requires additional empirical research.. Below, we outline several explanatory tracks that could provide the foundation for such research.

The first explanation relates to the central state, which avoids expanding apprenticeship into other fields of education/economy because it is potentially a very demanding and politically risky reform. This interpretation would see maintaining the current *status quo* as a way of satisfying the basic needs of the most prominent apprenticeship advocate in Croatia (namely, the CTCC), while delegating some accountability for unfavourable outcomes to it. In this context, it will be interesting to observe whether the recent resurgence of interest within the CCE could lead to a more coherent push from employers' side. However, initial evidence (Cedefop 2019, 81) indicates that the two chambers have thus far not coordinated their positions — with the CCE being interested in establishing its own apprenticeship system, under the 'dual education' trademark, and the CTCC being primarily interested in protecting the JMO.

The second set of factors relates to the transformation of the economic structure — characterised by industrial decline (Table 1) and the prolonged recession (2009–2014). This decimated the number of sole proprietors and radically limited many firms' capacity to retain such a demanding and relatively expensive learning scheme as apprenticeships (Matković et al. 2013). Persistently high unemployment also weakened trade unions in the private sector — while the relatively low mobility of the workforce (prior to Croatia's accession to the EU) allowed firms to build their

competitiveness based on the price of labour, rather than on investing in knowledge and innovation (Mršić 2018). It may thus not be surprising that both the central state's and the CCE's renewed interest in apprenticeships emerged only after the EU labour market was open to Croatian workers seeking employment. This resulted in significant workforce migration and, consequently, in shortages in some key economic sectors with widespread apprenticeship training, like tourism and construction. It remains to be seen whether these developments will incentivize key actors to adopt a more favourable view of apprenticeship in Croatia.

Europeanization can influence policy through other important channels, apart from the common market. The apprenticeship model is, in Croatia, associated with the tradition of German-speaking states that often served as institutional models. It is thus not surprising that apprenticeship was (re)introduced in Croatia based on the German/Bavarian model. These ties persist. For instance, many German-speaking companies doing business in Croatia provide direct funding for VET reforms, as does the Swiss-Croatian Cooperation Programme. Austrian institutions are also involved as partners in the 2016 Cap4App capacity building project, supporting the most recent introduction of the dual system. Yet other elements of Europeanisation may have adverse effects on the development of apprenticeship in Croatia. Some authors (Powell & Trampusch 2012, 285-286) emphasize tensions between national qualification frameworks and the collectivist approach to skill formation, which is particularly prominent in the case of apprenticeships. This is primarily due to their focus on learning outcomes, rather than on the overall educational experience of 'becoming' a member of the occupational community through an intensive mentorship programme, which is fundamental in the case of apprenticeships.

Finally, the government's political orientation is likely to play a role, with centre-right/conservative parties being more open to apprenticeships than social democrats. It seems that the latter often perceive apprenticeships as overly skill-specific, which in the long run favours the

interests of employers over those of workers (Busemeyer & Trampusch 2012, 26). The evidence from Croatia is consistent with this pattern, as apprenticeships were introduced and reinforced only during the rule of the centre-right Croatian Democratic Union (in Croatian: *Hrvatska demokratska zajednica*; HDZ). It was then scaled down and weakened, via the JMO framework, during the 2000–3 coalition rule of the Social Democratic Party of Croatia (*Socijaldemokratska partija Hrvatske*; SDP). A robust expansion of JMO apprenticeship took place during another HDZ mandate (2004–11). Yet the trend was then halted during the SDP tenure (2012–15), as the 2013 legal changes stripped a number of powers in the delivery and administration of skilled trades programmes from the CTCC in favour of central state agencies. During the HDZ's most recent period in government (since 2016), most powers have been reinstated to the CTCC by legislative changes of 2019. The number of apprenticeships ticked up and investment intensified, a considerable part of this coming from the European Social Fund.

Policy transfer: The Croatian Qualifications Framework

In the mid-2000s, the process of developing the European Qualification Framework gained much traction in the Croatian education policy sphere, just as Europeanization had gathered momentum. This case was selected due to its transformative potential for the functioning of the entire system of skill formation in terms of stakeholder involvement, the balance of power between stakeholders, and possible changes to curricular design, validation and instruction.

The process of adoption of the Croatian Qualification Framework (hereafter CROQF) was initiated in 2006, by a Minister-led committee producing the CROQF founding principles, which were adopted by the Government in 2007. Those steps preceded adoption of the EQF recommendation in 2008. An operative support team was established in 2008, which engaged about 5,000 people with presentations and consultations (Beljo Lučić et al. 2009). The process has

introduced a competence framework into the national education discourse, while reinforcing notions of learning outcomes and European learning credit mechanisms. Yet the early focus of the process was mostly directed towards defining the levels of learning outcomes and allocating existing education programmes accordingly.

Originally planned to be implemented in 2010, the process survived several changes of ministers, election cycles, and a change of government. The Croatian Qualifications Framework Act was eventually adopted in 2013. The Act was made operational with a bylaw on the register of the Croatian Qualification Framework in 2014 — which defined 25 sectors and sectoral councils as instrumental in managing the CROQF, as well as the sub-registers of (a) occupational standards, (b) qualification standards, and (c) learning outcomes.

Sectoral councils were originally established by the 2009 VET reform, which essentially introduced the instruments of qualification framework, national macro-coordination and educational profiles based on labour market needs. With some changes, the Act on CROQF extended these instruments to the entire education system. The first sectoral councils were established in November 2014. Yet the majority were founded only in July 2017, after repeated calls, and the final three came as late as February 2018. The CROQF register itself went online in 2016. The first occupational standard was adopted in September 2017 and the first qualification standard in January 2020. As of September 2020, 35 occupational standards and 8 qualification standards (with 329 learning outcome sets) had been adopted (SRCE 2020). Considerable bottlenecks were evident within the process by the end of 2020, with over 350 pending submissions. As sectoral councils themselves were evidently failing to fulfil their competence of reviewing proposals and issuing recommendations for individual standards, the recent amendments of Act on CROQF (February 2021) were set to address the situation by transferring this task to independent commissions set up by ministry in charge of labour (occupational standards) and

educational agencies (learning outcomes and qualification standards): AVETAE (VET and Adult Education), ASHE (tertiary education) and the Teacher Training Agency (general education). Sectoral councils retained the strategic role of providing recommendations on sectoral development to the ministries involved. At the time of writing, it is still too early to assess the effectiveness of this shakeup, but the new qualification standards, and the learning outcomes they are designed to deliver, are meant to be the main reference points for corresponding educational programmes, which should consequently undergo adequate revisions.

This is stressed at the strategic level, as CROQF figures prominently within the Strategy for Science, Education and Technology (Hrvatski sabor 2014). It is stressed in the preamble and is then highlighted in the context of the recognition of informal learning (lifelong learning, 3); curricular reform (pre-tertiary education, 2); assessment of learning outcomes (pre-tertiary, 8.6); as a tool for the adaptation of the content of HEI programmes with clearly defined learning outcomes (tertiary, 1.2); and the internationalization and European integration of HE (tertiary, 7). CROQF has, additionally, featured heavily in every National Reform Programme (NRP) that the Government of Croatia has submitted — between the country's EU accession in 2013 and 2020 — with 7–47 mentions per year. Within the NRPs, the CROQF and its standards have been consistently touted as key instruments for aligning Croatia's education system with its labour market needs, at all levels of education.

While its name is suggestive of national ownership, the CROQF has been strongly linked with the European level initiatives since its inception. It has drawn support from the European Training Foundation and Instrument for pre-accession assistance. Since accession, the development of CROQF was supported by a total of nine ESF operations, initiated in the 2013–2019 period (Ministarstvo znanosti i obrazovanja 2020) for a total of HRK272 million (€36.8 million), or about 7 per cent of total ESF education investments. The ESF operations provided support to the

implementation of the CROQF — such as in the development and management of sectoral councils, registers, survey methodology, and labour market tools. There were also four open calls for education system stakeholders to develop standards and programmes. These resulted in a total of 97 projects worth HRK231 million, which have included several hundred partners and education programmes over the decade. One of the calls was used by the ministry in charge of labour, for the definition of 200 occupational standards. A separate HRK234 million VET modernization project, led by the AVETAE, aims to develop 108 occupational and 195 qualification standards by 2022.

There is little evidence that the CROQF is regarded as a threat by any stakeholder. This is somewhat unexpected because chambers and employers' association(s) in some more collectively oriented skill production regimes have perceived qualification frameworks as mechanisms that diminish their own role in skill formation (Powell & Trampusch 2012). Furthermore, trade unions — especially those with significant private sector worker membership, organized around the Union of Autonomous Trade Unions of Croatia — saw CROQF as an opportunity to establish a more fruitful cooperation with employers and the state, compared to the processes of traditional social dialogue (Buković 2022). Such support for the CROQF, shown by key non-state actors, is indicative of their attitude towards the existing policy coordination mechanisms. In the context of the CCTC, it could also represent a pragmatic acceptance of necessary change which could nevertheless be made compatible with existing organizational interests.

Furthermore, some actors are clear winners of the 'CROQF reshuffle'. The ministry in charge of labour is one such 'winner', as it established itself as a key stakeholder in the skill production process through its coordinating role in developing occupational standards and its control of the EU funding underpinning the reform process. Similarly, the state agency in charge of VET (AVETAE) strengthened its role — not just as administrator of the EU funding propelling the CROQF reforms, but also as a driving force of its implementation in the VET domain. Yet despite

this, it does not seem that the introduction of CROQF has diminished the position of the ministry in charge of education, as this ministry retained *de facto* veto actor position, while becoming significant beneficiary of EU funding pertaining to CROQF.

Finally, it is interesting to regard the policy re-framing of the CROQF as a key instrument of ‘aligning education with the labour market needs’ in the 2010s. This discourse has mostly replaced the initial focus on defining learning outcomes, their levels, and positioning of educational programmes within the qualification framework. The period over which the CROQF was taking shape in Croatia was defined by protracted economic crises and high rates of unemployment. Croatian policymakers were immersed in a frenetic search for mechanisms to alleviate this problem, with the idea of supply-side intervention gaining traction. This was similar to the paradigm promoted at the time by the European Commission within the 2010 *Agenda for New Skills and Jobs*. The finalization of the CROQF occurred against the backdrop of Croatia’s accession to the EU in 2013, which also marked the high point of European influence on national policymaking. Within this context, (re)aligning the CROQF with EU- policy priorities provided an acceptable roadmap and allowed for substantial funds to be drawn down from EU sources.

Conclusions

The analysis in this chapter validates our basic assumption that *Europeanization mattered* with respect to the development of the Croatian system of skill formation. However, it suggests a highly specific type of impact, as Europeanization seems to function as a sort of ‘great accelerator’: It pushed national policymakers to respond to policy initiatives coming from the EU level, ‘playing catch-up’ with more developed member states, whilst also providing a selection of ‘oven ready’ institutional solutions, often coupled with considerable funding to facilitate their implementation.

However, it would be wrong to assume that this has led to significant structural changes in Croatia's skill production regime. In the terminology of historical institutionalism, the dominant mechanism of institutional change, from Croatian independence onwards, was the layering, rather than displacement, of existing arrangements (Fioretos et al. 2016, 8–13). The analysis of both cases in this chapter — the development of apprenticeships and the introduction of CROQF — indicates that, despite their ambition, they did little more than create additional institutional layers over what is still a predominately statist regime. In the case of apprenticeships, they remain constrained to a sort of 'corporatist oasis' of training for skilled trades occupations — failing to expand into other educational tracks, while remaining precariously sensitive to the central state's unilateralism (making it resemble outsourcing, more than fully-fledged corporatism). In the case of the CROQF, it has thus far done little to 'align education to the labour market needs' — and, while not necessarily representing a zero-sum game, it most certainly has not weakened the central state vis-a-vis other actors.

There are at least three overlapping lines of argument that may be helpful in interpreting such outcomes. *The first* is the classic path dependence argument, with the institutional state-building setup of the early 1990s proving difficult to disrupt in the later phases of development. The economic and political transition, having taken place under conditions of war, created a lasting framework with a powerful central state that can always function as a 'veto actor.' Yet, compared to the statist regimes of developed industrial democracies like Sweden or France, the Croatian state acts as a successful policy instigator and implementer less frequently. *The second* line of argument is that non-state actors — particularly employers' associations — generally lack the interest, ambition, and capacity to assume a greater role in skill formation and thus to challenge central state dominance. The absence of functioning mechanisms of social dialogue presents an additional difficulty. *Third*, there are several structural elements that must be taken into consideration when

analysing the development of the Croatian skill production regime. Throughout the 1990–2015 period, Croatian employers enjoyed an abundance of qualified labour, this being particularly the case in the context of industrial decline and the rise of unskilled and semi-skilled roles within personal and distributive services revolving around tourism. In this context, it is not surprising that the focus was primarily on cost reduction rather than on innovation and the development of human capital. Demographic change has had little impact on this situation, because the decreasing number of young people enrolling in three-year VET programmes was offset by immigration from neighbouring countries (Bosnia and Herzegovina, in particular).

All these factors have created a dynamic of ‘constant change that changes precious little’. Yet two important developments are now evident, which have some potential to disrupt the *status quo*. First, labour market shortages — which have impacted numerous sectors of the economy — seem to have changed the climate within a segment of the employer community, in terms of their willingness to take a more active role in skill formation. As a corollary, the CCE’s interest in developing and deploying infrastructure to support workplace training in the initial VET may be a game changer. Yet the recent rise in unemployment, due to the COVID-19-induced recession in 2020, may tempt many Croatian businesses to proceed with business as usual — pushing for (further) flexibilization of the labour code and tax exemptions, rather than more demanding reforms such as the development of a joint infrastructure to deliver skill formation. Second, it remains to be seen whether substantial sums invested via EU funding (both in CROQF and in VET) will have a substantive impact on the workings of the skill production regime. In theory, it could improve the quality of the initial VET teaching through equipment modernisation; incentivise a further expansion of workplace learning; and support the development of standards and curricula. Finally, the effects of the recent amendments of the Act on CROQF should be monitored and assessed. They are likely to be successful in resolving the institutional gridlock and improving the average

time needed for approving new occupational and/or qualification standards. However, they will probably further consolidate the statist nature of the Croatian skill-production regime, raising broader questions over strategic directions within this policy domain.

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