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Varieties of universalism: post-1990s developments in the initial school-based model of VET in Finland and Sweden and implications for transitions to the world of work and higher education

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Varieties of universalism: post-1990s developments in the initial school-based model of VET in Finland and Sweden and implications for transitions to the world of work and higher education

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Abstract

The Nordic countries are often referred to as a group even though their education systems and training models are very different. The aim of this study is to advance understanding of those differences and compare the developments and organisation of initial vocational education and training (IVET) in Finland and Sweden since the 1990s as examples of school-based models of IVET in statist regimes. The research questions address the following: how these two countries have institutionalised school-based IVET since the 1990s; the kinds of legislative reforms that have been decisive for the construction of school-based IVET; and how the models of school-based IVET in these two countries allow access to higher education and the world of work. The analysis shows the heterogeneity of the statist model of school-based IVET systems in two Nordic countries and underlines differences with respect to school-to-work transitions between IVET and different labour market sectors.

Keywords: vocational education and training; welfare regimes; transitions; employment

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Introduction: varying degrees of universalism in Scandinavian countries

The Nordic countries are often referred to as a group that represents *a universalistic transition regime*, even though their education systems differ considerably (Gallie and Paugam 2000, Walther 2009). In such regimes, welfare and rights, such as the right to education and social benefits, are based on citizenship status; in other words, they are universal. Individuals are given educational and social benefits relatively independently of their household members' resources. In this respect, Nordic countries are unlike other groups of countries and regimes (e.g., Anglo-Saxon and Mediterranean) where the coverage of welfare benefits in relation to unemployment and its duration are weaker. Their employment policies are not as active as those in Nordic countries, and the role of the family as primary provider is more important. Intergenerational autonomy is more advanced in Nordic countries. With respect to the provision of education and training pathways and their role in society, this means that education is seen as a tool for activating policies that enable and enhance opportunities for employment for both men and women (Gallie and Paugam 2000). For example, Walther (2009) uses Denmark as his example of the universalistic transition regime in the Nordic countries, while Busemeyer (2015) explores Sweden in detail but also refers to Finland and other Nordic countries as examples of the statist provision of education and universal regimes providing welfare and education.

For Busemeyer (2015), the statist provision means that the state has a comparatively active role in financing, organising, guiding, and assessing educational institutions and their provision of qualifications. It is reflected in the relative proportion of public and private expenditure on education. In Finland, Sweden, and Denmark, public sources covered more than 95% of expenditures for all levels of education. This is in contrast to the United

Kingdom, where the figure was 68.9% (OECD 2012, 257). In Finland and Sweden, the state's role in organising initial vocational education and training (IVET) is even more substantial than in Denmark and Norway, since the latter two give more emphasis to apprenticeship training in their IVET models.

In contrast to the typical grouping together of the Nordic countries, we want to advance understanding of the differences between their education and training models, and we argue that comparisons of youth transitions and educational careers would benefit from carefully acknowledging the differences in the educational systems. In particular, the relations between general and vocational education at the upper-secondary level deserve more detailed scrutiny. To that end, we compare developments in Finnish and Swedish IVET programmes since the 1990s (and prior to the 1990s when developments have meaningful continuations or disruptions) in order to contribute to a more differentiated view of the development of universalistic regimes with respect to education in the Nordic countries. In Finland and Sweden, the model that combines school-based learning with work-based learning in IVET is the dominant model for post-16 education. The Swedish model is even more unified than the Finnish model where general upper-secondary education is a route of its own and general upper education typically takes place in different institutions. The comparison of Finland and Sweden is interesting because their models of organising IVET have given more emphasis to the school-based model of organising IVET than have the models of Denmark and Norway. They also picture how work-based learning has been adopted in predominantly school-based IVET through varying approaches that can help practitioners and policy makers understand the problems surrounding development of these institutions. The role, status, and traditions of work-based learning and apprenticeship training currently differentiate Finland and Sweden from one another as well as from Denmark and Norway.

In the following, we first reflect on Walther's (2009) and Busemeyer's (2015) accounts of Nordic universalism and statist organisation of education and then present our research questions. Thereafter, we describe the development of Finnish and Swedish models for organising IVET since the 1990s (and prior to that when relevant). After exploring the development of IVET in Finland and Sweden, we compare their models. We conclude with the lessons that we learnt from our findings, which are important to consider when studying the diversification of IVET.

Universalism as the context of youth transitions

The welfare regimes are often seen as having an important organising function for education (Walther 2009). The regimes refer to ways that societies differ from one another with respect to the forms and types of institutions they have for mediating between family, market, and state and how these institutions intervene in relations between the individual and the state. Transition regimes cluster countries on the basis of how their education systems and related benefits enable transitions to higher education and employment, and society's role in supporting citizens in the case of unemployment (Walther 2009).

Esping-Andersen's (1990) classic model of welfare regimes recognises three worlds of welfare capitalism where different forms of regulating the relations between state, market, and family are referred to as different 'regimes'. These regimes are seen as outcomes of historical processes. While provision of welfare states' services, as well as educational benefits and social benefits, are an outcome of policy making, the historical decision-making processes produces institutional path dependency and continuity to transition structures. The four welfare regimes suggested by Gallie and Paugam (2000) differ in how they regulate access to social security in particular. They differentiate between countries representative of

the universalistic regime of Scandinavia (Denmark and Sweden), the Anglo-Saxon liberal regime (United Kingdom and Ireland), the employment-centred regime of continental Europe (France, Germany, Netherlands, and Belgium), and the sub-protective regime of the Mediterranean countries (Greece, Italy, Portugal, and Spain).

Both Walther (2009) and Busemeyer (2015) have drawn on these classifications in their research, but they have given different emphasis for welfare regimes as an organising function of education. Walther (2009) emphasizes the subjective experiences of agency. In his study, the universal regime is taken as the specific societal context for biographical agency. At the same time, Walther (2009) acknowledges that the value of regime modelling is heuristic, and there is a need to consider structures of education and training and how they produce stratification and standardisation of transitions. In Walther's (2009) empirical study, Denmark is used as the example of the universalistic transition regime in the Nordic countries. Young people are entitled to an education and student benefits as citizens, regardless of the economic status of their family. Walther's (2009) study of universalism differentiates Denmark, as the representative of Nordic countries, from other countries and their regimes, which is an example of how transition structures construct transition experiences for young people. In the empiric part of the study, there are no other Nordic countries included, and thus, the differences in educational contexts are irrelevant for his conclusions concerning biographical transitional agency in different regimes. Walther (2009, 133–135) presumes that, in the Danish example of the universalistic regime, the 'individualized education and welfare options encourage and support young adults in experimenting with transitions'.

In contrast to Walther's (2009) approach, Busemeyer's (2015) study aims to understand how and why vocational education and training regimes are differentiated and what kind of outcomes (with respect to inequality and transition opportunities) they have

produced. We utilize Busemeyer's (2015) study and reflections on theories regarding institutionalization because he addresses vocational education and training. While change of institutions has become a research area of its own, empiric accounts of developing education and training institutions have not been frequent. Busemeyer (2015) begins with an empirically justified grouping of countries to represent liberal regimes (United States, Canada, Australia, New Zealand, United Kingdom, and Japan), statist skill regimes (Scandinavian countries, the Netherlands, France, Ireland, Portugal, and Italy) and continental European countries (Germany, Austria, Switzerland, and Belgium). The grouping is based on students' expectations regarding opportunities to participate in higher education and private spending on education. In order to understand the differentiation of the regimes, Busemeyer (2015) explores and reviews the contributions that existing theories make to explain the institutional diversity of education and training systems. The study itself exploits, in particular, theories of historical institutionalism, neo-institutionalism, classical power resources theory, and partisan theory to explain the differences between regimes. Busemeyer (2015) further utilises the criticism these theories have received and modifies them in order to avoid their pitfalls and reach a more comprehensive understanding of the phenomenon. In the following, these approaches are briefly characterised on the basis of his account because we find it useful for our comparison of the development of Finnish and Swedish school-based systems of IVET.

Neo-institutionalism often attributes diversity of educational regimes to path dependency where choosing to build new institutions or ways of organising would increase costs (Pierson 2000, see also Busemeyer 2015, 38). Also, over time, actors and members of institutions develop an interest in the success of their institutions; their personal and institutional interests become confluent. The major shortcoming of this approach has been

that it explains the continuity and stasis of an institution, but it does not explain its change (Streeck and Thelen 2005; Mahoney and Thelen 2010; Busemeyer 2015).

The theory of classical power resources, on the contrary, has focused on the role of building political coalitions as driving forces; the coalitions between trade unions or employer organisations and parties govern the development of welfare through the choices they make regarding the building of institutions and the provision of resources (Busemeyer 2015). When the focus of this theoretical approach has been on the struggle over power and the building of coalitions by some parties and organisations (e.g., Finnish Social Democratic party and trade unions), it has not been used to explore coalitions across class interests, particularly in relation to education. Even though cross-class coalitions have been studied from this perspective in relation to social insurance institutions, such as old-age pensions and health insurance (e.g., Korpi and Palme 1998), IVET has not been considered to a similar extent. In contrast to these approaches, the advantage of partisan theory is, according to Busemeyer (2015), that it does not suppose that political parties aim to attract voters only from their traditional constituencies. Partisan theory allows parties to cater to various interest groups, such as hesitant members from competitive parties, through mobilising different arguments (Boix 1997; Ansell 2010; Busemeyer 2015, 44). The shortcoming of the approach is that it places too little emphasis on the planning and decision-making processes that organise the parties' policy options.

The modifications Busemeyer (2015) suggests for these theories emphasise paying attention to the following crucial factors that differentiate vocational education and training policies in welfare states. First, political parties not only struggle over reaching coalitions to define policy aims, they also define the policy processes where interests are settled. Secondly, it is not possible to pursue reforms starting from *tabula rasa*; parties have to start by acknowledging the existing institutional context, which 'modifies the menu of options

available' (Busemeyer 2015, 42). Thirdly, Busemeyer underlines the temporality of policies in which practice is unavoidably sequential (i.e., implementation follows planning and decision making). Additionally, changing organisations is slow, and long-term policies and changes in organisations demand a long-term commitment to similar aims.

The following comparison of the development of Finnish and Swedish school-based IVET systems utilises Busemeyer's (2015) analysis concerning the driving forces that have differentiated the systems in these two welfare states. While our comparison focuses on the recognition of developmental turning points in the building of school-based models in these two Nordic countries, the emphasis is on the formation of particular models of the universal regime through state actions. In studies explaining institutional change, these passages have been cited as critical junctures (Mahoney and Thelen 2010). We find the focus on state actions relevant because the Swedish and Finnish models of providing education have been labelled as examples of statist regimes. We argue that, while the grouping of Nordic countries may be heuristically justified at times, it neglects meaningful differences. More importantly, it probably hides diversities among groups of young people who have been standardised through eligibilities produced by the different routes of the education system. The uneven structures of second chances may further accelerate the divergences of education systems. In addition, we note some theoretical and methodological shortcomings that the approaches described above have had in their understanding of the diversified models of vocational education in the Nordic countries.

Research questions and methodological approach

The aim of our study is to compare the development and organisation of school-based models of IVET in Finland and Sweden since the 1990s (and prior to that for the examples that were formative to later developments) because both countries represent school-based models of

IVET in universal, statist regimes. Yet, their developmental paths, forms of educational provision, and outcomes differ. We believe that a comparison of differences as well as similarities in these two countries contributes to discerning crucial factors in the educational contexts for youth transitions to higher education and to the world of work. The research questions we address in this paper are:

- How have these two countries institutionalized school-based IVET, considering central developments preceding and since the 1990s?
- What kind of historical turning points (i.e., critical junctures), decision-making processes, and reforms to legislation have been decisive for the construction of school-based IVET?
- How do the two models of school-based IVET allow access to higher education and to the world of work?

Our study builds on previous research completed in the Nord-VET project, which explored how the IVET systems of Nordic countries give access both to higher education and to the labour market. Our study utilises, for example, historical reports written for the Nord-VET project to enable the comparison of Finnish and Swedish models. We also draw on national statistics.

Previous research (e.g., Dobbins and Busemeyer 2014) has illuminated a strong continuity in the school-based models in Sweden and Finland during the last decades. We studied pre-1990s reforms that are relevant to developments in the 1990s because recent changes to IVET are based on these earlier policies and represent a critical juncture in the two neighbouring countries. In the following sections, we describe the developments in each country and then examine their differences. Thereafter, we draw on Busemeyer's modifications to theories, which explain institutional diversity of national education and

training systems in order to recognise starting points for further empirical research and theoretical consideration.

The development of the Finnish model of school-based IVET

Pre-1990s: establishing the basis for a school-based model of IVET

Prior to the 1990s, there were three major reforms that preceded and confirmed the pathway towards state-led, school-based organisation of vocational education and training in Finland. First, the Act on Vocational Institutions, passed in 1958 (Laki ammattioppilaitoksista 184/1958), resulted in the establishment of a network of vocational schools across the country (Laukia 2013). Next, the Comprehensive School Reform in 1972–1977 and upper-secondary school reforms enhanced the universal model of education and the school-based model of IVET. In the upper-secondary school reform, the provision of education and the number of study places was increased so that every compulsory school graduate was to have a place to continue his/her education for the first time in history (Salminen 1999; Numminen 2000). In addition, the vocational education system developed towards a more uniform and coherent model. The number of vocational specifications was decreased from 700 to around 250 (Salminen 1999; Numminen 2000). Furthermore, a general study component was introduced by organising 25 basic orientations, after which students would choose their specifications in parallel upper-secondary and post-secondary specialisation lines making it possible for them to continue their studies in higher education through vocational post-secondary education (Numminen 2000; Laukia 2013).

The planning periods for each of these reforms were lengthy and involved numerous committees and working groups (Volanen 1995; Salminen 1999). The reformation processes reflected the tensions found in gaining wide political approval. While Finland industrialized

and further developed into a service society faster than other European countries after World War II (Kettunen 2013), the interests between industrialising towns and population-losing rural areas became differentiated. The tensions were reflected in the changes of dominant parties. Between the 1960s and the 1990s, the governments were formed² by the predecessor of the Centre Party (Maalaisliitto), then the Centre Party and the Social Democrats in turn, with occasional periods of governments led by officials because no party was able to win a majority in Parliament. The long-term period of these parties' governance was only interrupted when the right-wing National Coalition Party formed the government in 1987–1991. In Sweden, by contrast, the Social Democratic Party had a stronger position in Parliament during the 1970s, which meant that they did not have to compromise with other parties in implementing a unification strategy. The strong centralised union also supported the Social Democratic Party during the 1970s and early 1990s reforms.

The development of the Finnish IVET prior to the 1990s gives support to Busemeyer's (2015) theory-driven notions; the differentiation of IVET systems is dependent on the political planning process, the need to find political cross-class coalitions, and long-term policies. Also, the former choices built a context in which the education system was developed further. In the Finnish case, the previous development completed in the education system and, in particular, prior reforming of IVET, were found to be inadequate by the 1990s. The time lag from planning vocational upper-secondary education reform to its implementation took about two decades (Salminen 1999). During that time, both society and the world of work changed. Several problems were recognised as starting points for further reform of post-compulsory education: prolonged study times, dropping out, overlapping education, differentiation of general and vocational upper-secondary education, the jam of

² The prime minister leading the forming of the government came from the party in question. Since Finland has a multi-party system, the governments have typically had representatives from two dominant election-winning parties and some minor parties.

matriculated upper-secondary students without higher education study places, and the inability and rigidity of the education system to meet the demands of changing knowledge and skills (Väärälä 1995; Salminen 1999; Numminen 2000; Ahola 2010).

From 1990s to 2010s: enhancement of access to higher education and work-based learning

The further development of the Finnish education system was intensely discussed by the beginning of the 1990s (e.g., Numminen 2000). While the left-wing parties in general supported following the Swedish example and organising uniform upper-secondary education, this reformatory pathway was opposed by the right-wing parties. The tensions of reforming post-secondary education were addressed by starting two experimental reforms: the youth education pilot project and the polytechnics reform.

The youth education experiment began in 1991, and the last age cohort entered pilot programmes in 2001. The experiment allowed providers of general and vocational upper-secondary education to cooperate regionally. Students were given the right to choose 30–40% of their studies from other general and vocational upper-secondary institutions in order to build individual study programmes. Typically, students utilized their opportunity to exercise free choice in order to gain eligibility to higher education or to choose interest- or hobby-related studies not available at their own institutions (Virolainen and Valkonen 1999). For upper-secondary educational institutions, the demand to collaborate regionally became formalized by law in 1998 (Laki ammatillisesta peruskoulutuksesta [Act on vocational education and training] 21.8. 630/1998, 10§; Lukiolaki [Act on general upper-secondary schools] 21.8. 629/1998). Thus, many (60–80%) vocational institutions and general upper-secondary schools continued collaborating or established new collaborative networks, but the

share of students choosing studies across the general/vocational division was stabilised to a rather moderate average level of about 5% by 2005–2006 (Mäensivu et al. 2007).

The polytechnic experiment ran parallel to the youth education experiment through a process in which former vocational education colleges applied to the Ministry of Education for positions as experimental polytechnics; the curricula of former vocational colleges providing post-secondary qualifications were developed to a higher level. The process led to establishing multi-field polytechnics and an enhanced need for student initiative and autonomy in the planning of their own studies. The aim was not only to enhance educational opportunities for progress to higher education, but also to provide a competitive option on the side of traditional science universities (Salminen 1999). The former separate vocational colleges were gradually displaced by polytechnics, and they were adopted as the second pillar of the dually organised higher education system (Böckerman 2007).

Alongside these experiments, the qualification structures and curriculum of vocational upper-secondary education were also reformed consecutively in 1995 and 1998-2001 (Stenström 1997, Numminen 2000). As a result of the reform in 1995, the number of IVET qualifications decreased further (from 170 to 77), even though several specialisations remained. In the late 1990s, the provision of vocational education was uniformly extended to last three years in all sectors, and all qualifications were to give eligibility to higher education (see also Virolainen and Stenström 2015).

The next reforms of the Finnish school-based IVET differentiated the model from its Swedish counterpart even more in the 2000s. IVET curriculum required a total of 120 study credits, where 90 credits were defined as vocational studies including a minimum of 20 study credits of on-the-job learning (40 credits per year, 1 credit is equivalent to 40 hours of study) (Tynjälä et al. 2006; Virtanen 2013; Stenström and Virolainen 2014). Furthermore, skills

demonstrations were adopted as a new form of assessment taken during on-the-job learning periods.

As a result of these reforms, participation in Finnish IVET after compulsory education increased from 32% in the 1990s to 42% in 2012 (Statistics Finland 1994; Lasonen and Stenström 1995). The reforms enhanced linkages to the world of work and eligibility to higher education. In the latest IVET curriculum reform, begun in 2015, vocational and general components have been reorganised in the curriculum on the basis of the principles of the competence-based approach, which has raised concerns about the development of IVET students' academic skills and preparedness to continue to higher education.

These reformative acts have taken place in a political context where the Centre Party, the Social Democrats, and the National Coalition Party have formed various coalitions with each other and with minor parties (the Christian Union, the Finnish Swedish People's Party, the Green Party, and the Left Alliance) to form the government from 1991 through 2015. After the elections of 2015, the Centre Party formed the government among three major parties: the Centre Party, the National Coalition Party, and the Finns Party. With respect to Busemeyer's (2015) notions about the factors that explain the diversification of education systems, this variance in the Finnish government suggests that, in a multi-party system, the processes of forming coalitions and planning reforms for the education system gains more importance. Also, the impact of European policies became more evident after the adoption of an outcomes-based approach, which has been invading the European discussion since the 2000s (Cedefop 2008).

Upper-secondary IVET in Sweden: continuity and change from 1990–2015

The development of the Swedish upper-secondary IVET system between 1990 and 2015 represents both continuity and institutional changes in relation to the ground-breaking public reforms in the late 1960s and early 1970s (Olofsson and P. Thunqvist 2014). The basic institutional set up of the universal upper-secondary IVET was established in the early 1970s and comprises a relevant background for subsequent reforms and turning points discussed below. At the core of IVET policy during the late 1960s was the issue of parity of esteem between general and vocational education, given several political and cultural drivers in all Nordic countries for equal opportunities to upper- and post-secondary education. Education reform in 1971 in Sweden was clearly a sign of the political hegemony of the Social Democratic Party in close cooperation with the Centralised Union (LO), which was heavily engaged in education policy. The support from the Centre Party (Centern) also paved the way for the reform. However, the upper-secondary IVET system had its critics. The pre-vocational character of IVET was an obstacle to many smaller firms with lesser resources than big companies to provide their workforce with specialised vocational training. The Conservative Party was also critical of the stronger unification of general and vocational education (Lundahl et al. 2010). The 1971 reform integrated upper-secondary general education and vocational education into a new upper-secondary school system. IVET programmes gained broader content and more preparatory character than they had before (Olofsson 2005). This pattern was further strengthened through reforms at the beginning of the 1990s. In 1994, all IVET programmes were extended from two to three years and led, for the first time, to general eligibility for higher education.

The central aim of the 1991 reform (fully implemented in 1994) was to create small numbers of vocational and academic study programmes with broad scopes that would allow for gradual differentiation and specialisation in order to promote flexibility, lifelong learning,

and access to higher education (P. Thunqvist and Hallqvist 2014). The reform comprised the introduction of 17 three-year national educational programmes, 14 of which were vocational. The IVET programmes were typically school-based and contained (formally) 15 weeks of workplace training outside the school.

The finalisation of this unified upper-secondary IVET system by the 1994 reform was not only a result of progressive Social Democratic policy; the Swedish Employers' Confederation (SAF) and the Swedish Confederation of Trade Unions also actively promoted the 1994 reform, arguing that modern workers needed more theoretical education as well as workplace training to meet future labour demands (Lundahl et al. 2010). Moreover, particularly the large export-oriented industries in Sweden have gradually adopted strategies for skill provision for the school-based IVET system (Olofsson and P. Thunqvist 2014; Busemeyer 2015). Since the early 1970s, IVET has largely remained a public responsibility. Taking an advisory role, school committee representatives for the employer organisations have frequently required more workplace-based training, but the labour market partners have not seriously questioned the public responsibility of IVET. The organisation and planning of IVET in the upper-secondary school system has taken place within the education sector (Olofsson and Panican 2008). Hence, in terms of theory, the institutionalisation of the universal upper-secondary IVET system during the 1990s reveals a strong 'path dependency'.

1990-2011: a liberal turn—decentralisation and stronger academic orientation

Several significant changes have been introduced since 1990 that have transformed the school-based model of IVET in a more liberal and academic direction. The 1994 reform went further than previous public reforms in integrating general and vocational education, partly in order to overcome recognised problems in the existing structure of IVET; upper-secondary IVET did not meet demands in the 'knowledge society' in terms of flexibility and life-long

learning (Olofsson 2005; Nylund 2012). The role of working-life orientation and preparation was redefined in the new national curriculum for vocational education (Olofsson 2005). More attention was paid to the quality of subject content and academic preparation. At the same time, the ambition to narrow the gap between vocational and general education, offering broad education and *Bildung* to every student, can be interpreted as a continuation of the general integration philosophy of the 1960s. On the other hand, the 1994 reform was more anchored in liberal values and visions of an individualised school with diversified philosophy rather than a philosophy of uniformity (Olofsson and P. Thunqvist 2014). For example, providing the individual student with more freedom of choice was emphasised more strongly than during the previous rounds of reforms.

In addition, two parliamentary reforms of upper-secondary school (in 1991 and 1992), driven by the bourgeois government coalition in charge from 1991 to 1994, also marked a shift to a neoliberal political agenda in IVET policy. In 1991, the parliament decided to decentralise the governance of upper-secondary education, shifting the responsibility away from the government and the county boards of education to the local level. The municipalities were given increased autonomy and new roles as self-governing units and considerable freedom to act (Lundahl and Olofsson 2014). In 1992, the municipal school governance was challenged by a parliamentary reform that made it possible for parents and pupils to choose freely among schools. Moreover, local municipalities were forced to support independent private schools. From the mid-1990s onwards, independent private schools have expanded considerably. Recently, for example, during the 2012–13 school year, 25% of upper-secondary school students attended a school with a private principal (Swedish National Agency of Education 2013). To some extent, these parliamentary reforms constitute a turning point in Swedish IVET policy in the post-war era. Market forces were allowed to influence vocational education at the upper-secondary level, meaning that a long tradition of centralised

state regulation in the context of IVET was weakened (Olofsson and P. Thunqvist 2014). Still, the state has retained control over important decisions such as national curriculum and school inspections.

In sum, the above-mentioned changes (i.e., decentralisation, privatisation, and the establishment of a university-oriented upper-secondary IVET system) did not alter the school-based model per se, but they significantly affected the relationship between upper-secondary IVET and the world of work. Decentralisation and privatisation have promoted flexibility and individual choice in the education system, and they also contributed to less standardisation in the field of IVET. In the absence of regulatory frameworks and structures for cooperation between schools and labour-market partners, employers might find it difficult to interpret the system and to assess vocational students' competencies and skills (P. Thunqvist and Hallqvist 2014). Additional challenges are, for example, that the education market tends to focus more on what schools can supply rather than what the labour market demands (Lindell and Abrahamsson 2002). The gap between theoretical and vocational study programmes was reduced by the 1994 reform, but at the same time, increasing the elements of general education in the vocational programmes weakened the direct link between training and the labour market. Moreover, recognising that many vocational students experienced difficulties in coping with the extended academic curriculum and did not reach the final exam in four years, the government has upgraded the priority of social inclusive policies in IVET (Olofsson and P. Thunqvist 2014).

2011 onwards: a turn to the world of work

In recent years, Swedish VET policy has followed a similar direction as Finland, albeit later, by upgrading the priority of building stronger links between upper-secondary IVET and the labour market. Since the latest 2011 reform (driven by a Centre Right political alliance), the

programme structure of upper-secondary school has been modified again; the amount of vocational content increased at the expense of higher education preparatory courses (P. Thunqvist and Hallqvist 2014). One implication was that vocational education no longer automatically led to eligibility to higher education. By building new formal frameworks for cooperation between IVET and the labour market at central and local levels, the quality and efficiency was expected to increase as well. In addition, a new apprenticeship programme, along with ordinary IVET programmes, was introduced by the reform and is still in progress on a small scale.

In part, the 2011 reform represents policy attempts to counteract the unintended consequences of the reforms of the 1990s. By prioritising a stronger academic orientation in all IVET programmes (the 1994 reform), the school-work ties became weaker. The 2011 reform established a stronger division between higher education preparatory programmes and vocational programmes. In their parliamentary motions, the three opposition parties (the Social Democrats, the Left Party, and the Green Party) argued that dead-locks would increase and exacerbate differences related to class, gender, and ethnicity because young people would have to make career decisions earlier in their educational and vocational trajectory (Lundahl et al., 2010). In the current educational debates, the weaker links between IVET and higher education are generally discussed as a decisive factor for the decline of applicants to vocational programmes in recent years (P. Thunqvist 2015). For several decades, IVET in Sweden has attracted approximately half of an age cohort (Virolainen and Stenström 2014), but since the 1990s, enrolment in vocational programmes has fallen (from 50% in the 1990s to 27% in 2013, according to the Swedish National Agency of Education 2013). Again, presently, the issue of parity of esteem between vocational education and general education remains at the core of education policy.

Finland and Sweden: comparison of transitions to the world of work and higher education

In this section, we compare the contextual drivers that have diversified developments in Finnish and Swedish education and training systems, the response of national education policies to these contextual changes, and the recognized outcomes of policy shifts. The outcomes of these IVET reforms, in terms of access to higher education and the labour market, bring up interesting similarities and differences in these countries' developments. Both Finland and Sweden suffered from high youth unemployment and economic crises during the 1990s (see, e.g., Nordic Statistical Yearbook 2014). In both countries, the provision of upper-secondary education and higher education was extended and expanded. In Finland, the reforms established since the 1990s have explicitly targeted the problem of prolonged transitions to higher education. Rapid expansion of upper-secondary education and higher education were the strategy used, in part, to tackle the high level of youth unemployment.

In Sweden, before 1990, youth unemployment had been relatively low and school-to-work transition rather smooth, even for the young people without an upper-secondary school education (Murray 1997; Olofsson 2006). The reforms of the early 1990s coincided with a severe economic recession in Sweden, and it had dramatic effects on the labour market. Young people were more affected by the crisis than any other age group. The subsequent and persistent high youth unemployment (Olofsson 2006) also led to doubt regarding the efficiency of IVET policy and the capacity of the university-oriented IVET system in terms of school-to-work transitions (Olofsson and Panican 2008; Lindahl 2011). The fast expansion of upper-secondary education and higher education contributed to the prolongation of school-to-work transitions. The average age of establishment in the labour market increased from 21 years in the early 1990s to 28 years in 2006 (Lundahl and Olofsson 2014). In accordance,

many Swedish reports have presented a rather dim view of the employment effects of the university-oriented IVET system launched in 1994. Comparative statistics (for overviews, see Bäckman et al. 2011; Lindahl 2011) reveal that school-to-work transitions have generally been smoother in the other Nordic countries (Denmark, Norway, and Finland) than in Sweden. However, young people's access to permanent employment depends not only on the organisation of VET, but also on the functioning of the labour market. In the European context, Sweden has one of the EU's highest percentages of 15–24 year olds in temporary employment (60% while the EU average was just over 40%, European Commission 2012). According the Organisation for Economic Co-operation and Development (OECD 2016), the liberal legislation regarding temporary employment in Sweden (in contrast to the more rigid employment protection of permanent and full-time employment in the Swedish labour market) constitutes an important explanation for the high share of temporarily employed young people. Another challenge is a mismatch between the vocational students' formal qualifications and their actual jobs. A national survey study (Statistics Sweden 2012) revealed that approximately 40% of the vocational students who completed upper-secondary school in 2008–2009 had a job in a different area than that of their IVET programme.

However, in-depth longitudinal studies of various types of vocational programmes and labour market sectors in Sweden provide a more complex and diverse picture regarding transitions from different subsystems of upper-secondary IVET and different labour markets (e.g., Olofsson 2005; Statistics Sweden 2012; P. Thunqvist and Hallqvist 2014). Vocational programmes designed for well-defined occupations, and with established certification systems, tend to promote smoother transitions between school and the labour market than other programmes. Students in technically-oriented vocational programmes, particularly energy, electrical engineering, and building and construction, establish themselves in the labour market more quickly than do students in programmes like food, arts, and media, which

have weaker links to specific occupations. School-to-work transitions have also been affected by a stronger tendency towards segmentation in the Swedish labour market over the last two decades. Transitions from the female-dominated programmes in the context of health and care and, in particular, vocational programmes targeting the large service sector in Sweden, are fraught with a high degree of insecure temporary employment (P.Thunqvist and Hallqvist 2014, 18–20).

In Finland, recovering from the crisis of the 1990s took a long time, and general unemployment only reached the level of other Nordic countries shortly before the latest recession in 2008 began. The field-specific differences in Finland have also been significant and well documented (Official Statistics of Finland 2014).. Typically, graduates from the field of social and health care as well as humanities and education have found transition to the world of work smoother (Stenström et al. 2012).

When it comes to transitions between upper-secondary and higher education, the number of students continuing to higher education has continually increased in Sweden since the 1990s. In general, these transitions can be described as frequent but slow; in 2010, 45–50% of an age cohort began some form of higher education before the age of 25. However, less than half as many began higher education immediately or within one year after graduation (Statistics Sweden 2013). For example, among vocational students in 2010, 67% finished their upper-secondary education and were qualified for higher education. At the same time, these transitions have continued to follow a familiar historical pattern in Sweden; most students in higher education come from theory-oriented programmes, whereas students in vocational programmes more often seek employment after upper-secondary school (Högberg 2009; Statistics Sweden 2013). Transitions to higher education have been particularly low (3–7%) in male-dominated IVET programmes aimed at relatively specific occupations, such as building and construction, but higher in female-dominated programmes,

particularly those oriented towards broad occupational areas such as arts and media programmes.

In Finland, the level of young IVET graduates continuing their studies at universities of applied sciences has increased, but due to field-specific differences, it varies significantly from 17% to 80% (Stenström et al. 2012; Hintsanen et al. 2016). The progress of VET graduates in their higher education studies has also varied from field to field (Stenström et al. 2012). At the same time, it is notable that the gap between education levels of the youngest and oldest generations has been among the highest within the countries of the Organisation for Economic Co-operation and Development in Finland (OECD 2004; Böckerman 2007). It has reflected the post-World War II baby boom and stratification of upper-secondary education to the general and vocational routes until the compulsory school reform since 1972, which differentiated Finland from other Nordic countries. The intergenerational mobility in education is still stronger in Finland than in other Nordic countries (OECD 2015). The expansion of higher education has engaged more students among younger age cohorts than in other Nordic countries since the establishment of the Universities of Applied Sciences in the 1990s (Virolainen and Stenström 2014; Nordic Statistical Yearbook 2014).

Conclusions: the lessons for understanding diversification of IVET and the commitments' of educational provision in a statist regime

We have described the reforms and compared the development of Finnish and Swedish IVET since the 1990s in order to reveal specificities in these two Nordic countries' statist models of organising IVET. We think that our study reveals societal contours behind the persistence of these Nordic countries' IVET models and helps to understand the challenges existing for reforming IVET systems internationally. In line with Busemeyer (2015), we have shown some path dependency of the model of IVET in each country. The introduction of the school-

based model of IVET took a long time in both countries. It did not take place without political negotiations, and some of the resistance and its arguments have prevailed and been reflected in the later reforms, for example, in the reform of 2011 in Sweden and in the reforms of apprenticeship training in Finland. At the same time, the formation of political coalitions has followed different patterns in each country in relation to the differences of societal change (i.e., their pace in shifting towards an industrialized and service society). Furthermore, these comparisons show that while both countries enhanced the model of school-based IVET, in Finland, the turn towards enhancing work-based learning in the curriculum took place earlier and was stronger than in Sweden, including the introduction of a new form of assessment: skills demonstrations. In both countries, the enhancement of the school-based model has been related to increased transitions to higher education; thus, the models have contributed to increasing the educational level of the population and establishing equality of educational opportunities, but not at a similar pace and to a similar extent. Particularly in Finland, differences between the generations' education levels and intergenerational mobility in education have been high (Böckerman 2007; OECD 2004, 2015).

Both in Finland and Sweden, the weaker transitions to the world of work have been interpreted as outcomes of the failure of the school-based model. For example, Busemeyer (2015, 22) argues that 'the crowding out of employers in the provision of training has led to high levels of youth unemployment in countries like Sweden and Finland'. The differences between educational fields and the general levels of employment seem to suggest that blaming the school-based model should be reconsidered when applying theories of institutionalism and interpreting the reforms. Our analysis has indicated some of the heterogeneity of the statist models of school-based IVET systems in the Nordic countries, illuminating remarkable differences in some school-to-work transitions between IVET and

various labour market sectors. Thus, it seems necessary to recognize both endogenous and exogenous drivers of change affecting IVET as institutions. It would be fruitful to focus on shifts in the dominant fields of production, their adjustment to the global economy, and the capability of the economies of the nation states to adjust to such shifts. Furthermore, education planning, curriculum development, and the revision of study places on both the general upper-secondary level and the higher education level, as well as between different fields, might deserve more detailed scrutiny before drawing conclusions about the strengths and weaknesses of statist models. Additionally, the Finnish 2015 adoption of a competence-based national basis for qualifications suggests that the interpretation of European educational IVET policies differs from Finland to Sweden.

References

- Ahola, S. 2010. "Ylioppilassuman mysteeri." [The dilemma of the matriculated general upper secondary students not finding a higher education study place.] *Tiedepolitiikka* 35 (2): 47–51.
- Ansell, B. W. 2010. *From the ballot to the blackboard: The redistributive political economy of education*. Cambridge: Cambridge University Press
- Boix, C. 1997. "Political parties and the supply side of the economy: The provision of physical and human capital in advanced economies, 1960–1990." *American Journal of Political Science* 41 (3): 814–845.
- Bussemeyer, M. R. 2015. *Skills and Inequality: Partisan Politics and the Political Economy of Education in Western Welfare States*. Cambridge: Cambridge University Press.
- Bäckman, O., V. Jakobsen, T. Lorentzen, E. Österbacka, and E. Dahl. 2011. *Dropping out in Scandinavia. Social Exclusion and Labour Market Attachment among Upper Secondary School Dropouts in Denmark, Finland, Norway and Sweden*. Stockholm: Institutet för framtidsstudier, Arbetsrapport 8.
- Böckerman, P. 2007. "Polytechnic Graduate Placement in Finnish Manufacturing." *Journal of Education and Work* 20 (1):1–16.
- Cedefop (European Centre for the Development of Vocational Training). 2008. *The Shift to Learning Outcomes: Conceptual, Political and Practical Developments in Europe*. Luxembourg: Office for Official Publications of the European Communities.
- Dobbins, M., and M.R. Bussemeyer. 2014. "Socio-economic Institutions, Organized Interest and Partisan Politics: The Development of Vocational Education in Denmark and Sweden." *Socio-Economic Review* 12 (3): 1–32.
- Esping-Andersen, G. 1990. *Three worlds of welfare capitalism*. Cambridge: University Press.
- European Commission. 2012. *Status of the Situation of Young People in the European Union*. EU Youth Report, Commission staff working document. Luxembourg: Publications Office of the European Union.
- Gallie, D., and S. Paugam, eds. 2000. *Welfare Regimes and the Experience of Unemployment in Europe*. Oxford: Oxford University Press.
- Hintsanen, V., Juntunen, K., Kukkonen, A., Lamppu, V.-M., Lempinen, P., Niinistö-Sivuranta, S. Nordlund-Spiby, R., et al. 2016. *Liikettä niveliin* [Smooth transitions]. Helsinki: Finnish Education Evaluation Centre, FINEEC.
- Högberg, R. 2009. *Motstånd och konformitet: om manliga yrkeslevers liv och identitetsskapande i relation till kärnämnena* [Resistance and Conformity: Male VET Students' Life and Identity Formation with Respect to Core Subjects]. Linköping: Linköpings

universitet. Institutionen för beteendevetenskap och lärande. Kettunen, P. 2013. "Vocational Education and the Tensions of Modernity in a Nordic Periphery." In *Education, State and Citizenship*, edited by M. Buchardt, P. Markkola, and H. Valtonen, 31–55. Helsinki: Nordic Centre of Excellence NordWel.

Korpi, W. and Palme, J. 1998. "The paradox of redistribution and strategies of equality: Welfare state institutions, inequality, and poverty in the Western countries." *American Sociological Review* 63 (5): 661–687.

Laki ammattioppilaitoksista 184/1958. [Act on vocational institutions 184/1958].

Lasonen, J., and M.-L. Stenström, eds. 1995. *Contemporary Issues of Occupational Education in Finland*. Jyväskylä, Finland: University of Jyväskylä, Institute for Educational Research.

Laukia, J. 2013. "Tavoitteena sivistynyt kansalainen ja työntekijä. ammattikoulu suomessa 1899–1987." [Educating Good Citizens and Workers: Vocational School in Finland 1899–1987]. PhD diss., University of Helsinki.

Lindahl, L. 2011. "Den gymnasiala yrkesutbildningen och inträdet på arbetsmarknaden." In *Vägen till arbete – arbetsmarknadspolitik, utbildning och arbetsmarknadsintegration* [Upper Secondary Vocational Education and Training and Access to Labour Market], edited by O. Nordström Skans, 103–169. SOU 2010:88. Stockholm: Fritzes.

Lindell, M., and K. Abrahamsson. 2002. *The impact of lifelong learning on vocational education and training in Sweden*. Adelaide: National Centre for Vocational Education Research (NCVER). <http://www.ncver.edu.au/wps/wcm/connect/852c9cb2-01cb-4f07-99fa-715e68308fa2/The-impact-of-lifelong-learning-744.pdf?MOD=AJPERES&CACHEID=852c9cb2-01cb-4f07-99fa-715e68308fa2>

Lundahl, L., I. Erixon Arreman, U. Lundström, and L. Rönnberg. 2010. "Setting Things Right? Swedish Secondary School Reform in a 40-Year Perspective." *European Journal of Education* 45 (1) Part I: 46–59.

Lundahl, L., and J. Olofsson. 2014. "Guarded Transitions? Youth Trajectories and School-to-work Transitions Policies in Sweden." *International Journal of Adolescence and Youth* 19 (S1): 19–34.

Mahoney, J. and Thelen, K. 2010. "A theory of gradual institutional change". In *Explaining institutional change: Ambiguity, agency and power*, edited by J. Mahoney and K. Thelen, 1–38. Cambridge: Cambridge University Press.

Mäensivu, K., H. Mäenpää, M. Määttä, M. V. Volanen, G. Knubb-Manninen, J. Mehtäläinen, and A. Räisänen. 2007. "Lukiokoulutuksen ja ammatillisen koulutuksen yhteistyö opetuksen järjestämisessä" [Co-operation for Organising Education in Upper Secondary Education and Vocational Education and Training]. *Koulutuksen arviointineuvoston julkaisuja* No. 23. Jyväskylä, Finland: Koulutuksen arviointineuvosto.

Murray, Å. 1997. "Young People without an Upper Secondary Education in Sweden. Their Home Background, School and Labour Market Experiences." *Scandinavian Journal of Educational Research* 41 (2): 93–125.

Nordic Statistical Yearbook. 2014. Vol. 52. <http://norden.diva-portal.org/smash/get/diva2:763002/FULLTEXT07.pdf>

Numminen, U. 2000. "Strategies for Improving Vocational Education: The Finnish Case." In *Strategies for Reforming Initial Vocational Education and Training in Europe*, edited by M.-L. Stenström and L. Lasonen, 74–91. Jyväskylä: University of Jyväskylä, Institute for Educational Research.

Nylund, M. 2012. "The Relevance of Class in Education Policy and Research: The Case of Sweden's Vocational Education." *Education Inquiry* 3 (4): 591–613.

OECD. 2004. *Education at a Glance 2004: OECD Indicators*. Paris: OECD Publishing. <http://dx.doi.org/10.1787/eag-2004-en>

OECD. 2012. *Education at a Glance 2012: OECD Indicators*. Paris: OECD Publishing. <http://dx.doi.org/10.1787/eag-2012-en>

OECD. 2015. *Education at a Glance 2015: OECD Indicators*. Paris: OECD Publishing. <http://dx.doi.org/10.1787/eag-2015-en>

OECD. 2016. *OECD Employment Outlook 2016*. Paris: OECD Publishing. DOI: http://dx.doi.org/10.1787/empl_outlook-2016-en

Official Statistics of Finland. 2014. "Transition from school to further education and work." Helsinki: Statistics Finland. Accessed September 26 2016. http://www.stat.fi/til/sijk/2014/sijk_2014_2016-01-26_tie_001_en.html

Olofsson, J. 2005. *Svensk yrkesutbildning. Vägval i internationell belysning* [Swedish vocational education and training. The chosen route in international perspective]. Stockholm: SNS Förlag.

Olofsson, J. 2006. "Stability of change in the Swedish Labour Market Regime." Working-paper series 2006: 3. Lund: Socialhögskolan, Lunds universitet.

Olofsson, J., and A. Panican, eds. 2008. *Ungdomars väg från skola till arbetsliv* [Pathways of the young from education to working life]. Nordiska erfarenheter, TemaNord 584, Copenhagen: Nordiska ministerrådet.

Olofsson, J., and D. Persson Thunqvist. 2014. "The Swedish Model of Vocational Education and Training: Establishment, Recent Changes and Future Challenges." Report A, Nord-VET. http://www.nord-vet.dk/indhold/uploads/report1a_se.pdf

Persson Thunqvist, D., and A. Hallqvist. 2014. "The Current State of the Challenges for VET in Sweden." Report B, Nord-VET. http://nord-vet.dk/indhold/uploads/report1b_se.pdf

Persson Thunqvist, D. 2015. "Bridging the Gaps: Recent Reforms and Innovations in Swedish VET to Handle the Current Challenges." Report C, Nord-VET. http://nord-vet.dk/indhold/uploads/report1c_se.pdf

Pierson, P. 2000. "Increasing returns, path dependence, and the study of politics." *American Political Science Review* 94 (2): 251–67.

Salminen, H. 1999. "Ammattikorkeakouluudistuksen ja keskiasteen tutkinnonuudistuksen yhteneväisyyksiä ja eroja" [The AMK Reform and the Reform of Upper Secondary Education Qualifications in Finland: Similarities and Differences]. *Kasvatus* 30 (5): 472–490.

Statistics Finland. 1994. *Education in Finland*. Helsinki: Statistics Finland.

Statistics Sweden. 2012. *Etablering på arbetsmarknaden tre år efter gymnasieskolan Temarapport 5*. [Establishment on the Labour Market Three Years After Upper Secondary School. Theme Report 5]. Örebro: Statistics Sweden, Statistiska centralbyrån.

Statistics Sweden. 2013. *Övergång från gymnasieskola till högskola, 2010/2011*. [Transition from Upper Secondary School to Higher Education]. Örebro: Statistiska centralbyrån.

Stenström, M.-L. 1997. *Opetussuunnitelmaudistuksen seuranta: Toisen asteen ammatillinen koulutus* [Follow-up Study on Curriculum Reform]. Helsinki, Finland: National Board of Education.

Stenström, M.-L., M. Virolainen, P. Vuorinen-Lampila, and S. Valkonen. 2012. *Ammatillisen koulutuksen ja korkeakoulutuksen opintourat* [Student careers in VET and in higher education]. Jyväskylä, Finland: Jyväskylän yliopisto, Koulutuksen tutkimuslaitos.

Stenström, M.-L., and M. Virolainen. 2014. *The History of Finnish Vocational Education and Training*. <http://nord-vet.dk/indhold/uploads/History-of-Finnish-VET-28062014-final2.pdf>

Streeck, W. and Thelen, K. 2005. "Introduction: Institutional change in advanced political economies". In *Beyond continuity: Institutional change in advanced political economies*, edited by W. Streeck and K. Thelen, 1-39. Oxford: Oxford University Press.

Swedish National Agency of Education [Skolverket]. 2013. *Skolor och elever i gymnasieskolan, läsåret 2012/13* [Schools and students in the gymnasium 2012/13]. Report Dnr 71-2013:28.

Tynjälä, P., A. Räisänen, V. Määttä, K. Pesonen, A. Kauppi, P. Lempinen, R. Ede, M. Altonen, and R. Hietala. 2006. *Työpaikalla tapahtuva oppiminen ammatillisessa peruskoulutuksessa* [On-the-job Learning in Vocational Education: Evaluation Report]. Jyväskylä, Finland: Education Evaluation Council.

Väärälä, R. 1995. "Ammattikoulutus ja kvalifikaatiot" [Vocational Training and Qualifications]. PhD diss., University of Lapland.

Virolainen, M., and S. Valkonen. 1999. *Nuorisoasteen koulutuskokeilut joustavuuden näkökulmasta*. [Youth Education Experiments: The Perspective of Flexibility]. University of Jyväskylä, Finland: Institute for Educational Research.

Virolainen, M., and M.-L. Stenström. 2014. "Finnish Vocational Education and Training in Comparison: Strengths and Weaknesses." *International Journal for Research in Vocational Education and Training* 1 (2): 81–106.

Virolainen, M., and M.-L. Stenström. 2015. *Recent Finnish VET Reforms and Innovations: Tackling The Current Challenges*. Report C, Nord-VET. http://nord-vet.dk/indhold/uploads/report1c_fin.pdf

Virtanen, A. 2013. "Opiskelijoiden oppiminen ammatillisen peruskoulutuksen työssäoppimisen järjestelmässä" [Students' Workplace Learning in Finnish Vocational Education and Training]. PhD diss., University of Jyväskylä.

Volanen, M. V. 1995. "Yritys ja erehdys - keskiasteen uudistuksen arviointia." In *Ammatillisen keskiasteen koulunuudistus* 9–35, edited by J. Ekola. Jyväskylä: Kasvatustieteiden tutkimuslaitos.

Walther, A. 2009. "'It was not my choice, you know?' Young People's Subjective Views and Decision-making Processes in Biographical Transitions." In *Transitions from School to Work: Globalization, Individualization and Patterns of Diversity*, edited by I. Schoon and R. K. Silbereisen, 121–144. New York: Cambridge University Press.