

The transfer of the Austrian dual system of vocational education to transition and developing countries. An analysis from a developmental perspective

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List of Abbreviations

ADA	Austrian Development Agency
ADC	Austrian Development Cooperation
BAG	Berufsausbildungsgesetz
BMAA	Bundesministerium für Auswärtige Angelegenheiten formerly: Austrian Federal Ministry for Foreign Affairs
BMBF	Bundesministerium für Bildung und Frauen Austrian Federal Ministry for Education and Womens' Affairs
BMEIA	Bundesministerium für Europa, Integration und Äußeres currently: Austrian Federal Ministry for Europe, Integration and Foreign Affairs
BMWF	Bundesministerium für Wissenschaft, Forschung und Wirtschaft Austrian Federal Ministry of Science, Research and Economy
BMZ	Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung German Federal Ministry for Economic Cooperation and Development
CBT	Competency-based training
CEE	Central and Eastern Europe
CSR	Corporate Social Responsibility
EFA	Education for All
EU	European Union
IHK	Industrie- und Handelskammern German Chambers of Commerce and Industry
ILO	International Labour Organization
IVET	Initial vocational education
LDCs	Least Developed Countries
MDGs	Millennium Development Goals
NGOs	Non-Governmental Organizations
NQF	National Qualifications Framework
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
SDC	Swiss Agency for Development Cooperation
SDGs	Sustainable Development Goals
SEE	South East Europe
TVE	Technical Vocational Education

TVSD	Technical and Vocational Skills Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training
VSD	Vocational Skills Development
WIFI	Wirtschaftsförderungsinstitut
WKÖ	Wirtschaftskammer Österreich Austrian Economic Chamber

Abstract

The increasing international interest in the Austrian dual system of apprenticeship has triggered a trend to transfer this system, or parts of it, to foreign countries including developing and transition countries. This paper analyzes the trend from a developmental perspective. After a historic outline of vocational education in international development and the discussion of current global trends in vocational education, the paper elaborates on the transfer of the dual system from a theoretical as well as an empirical perspective. It then goes on to describe the Austrian dual system of apprenticeship. In the empirical part, the paper first examines the status quo of the transfer trend as well as key players, funding possibilities, approaches, lessons of experience and challenges. Findings are subsequently analyzed from a developmental perspective. Finally, recommendations are made of how to strengthen the developmental impact. The paper concludes that while current transfer activities respond well to several criteria set out by the Austrian Development Cooperation, a number of open questions remain as to sustainability, systemic effect and economic bias, among others.

Keywords: Vocational Education and Training; Dual System of Apprenticeship

1. Introduction

In the last few years, Austria has experienced growing international interest in its dual system of apprenticeship. This is commonly attributed to an increase in youth unemployment in many countries in the European Union and beyond while the statistics show moderate scores for all core countries of the dual system (Austria, Germany and Switzerland¹). On the other hand, Austrian enterprises increasingly seek to transfer the dual system of apprenticeship to their establishments abroad for their own workforce requirements. This double dynamic has led to an increasing trend to transfer the Austrian dual system of apprenticeship to other countries, including a number of developing and transition countries, which has implications for the Austrian Development Cooperation (ADC). There is reason to believe that dual system transfer activities will increase in scope and political importance, both within and outside development cooperation.

While activities are expanding, research is scarce. This paper's intention is to shed some light on the current trend and its underlying rationales by applying a developmental perspective. Its conceptual part elaborates on two aspects. Firstly, it follows the critical academic discussion on global VET trends with particular emphasis on developing countries. The interesting question here is whether the transfer of the dual system corresponds to what McGrath (2012b) describes as the global tool kit of vocational education which appears to sit rather ill with the needs of developing countries (Allais 2011a, 2011b). The second aspect are considerations on the socioeconomic particularities of the dual system elaborated by the respective Germanophone academic discussion (cf. Deißinger 2001; Greinert 2001; Barabasch/Wolf 2011; Mayer 2001; Gonon 2014) which raise the question of the dual system's general transferability.

The empirical part of this paper draws on a recent study, which was undertaken between November 2014 and May 2015. Since literature on the current trend is limited, the study mainly draws on 17 semi-structured expert interviews carried out in the above period. Findings have to be considered as preliminary given the limited scope of the study. Further research is recommended.

Main findings include the key role of ADC, which is due to the fact that ADC currently offers the main funding source for private business willing to do vocational training in developing and transition countries. While current transfer activities respond well to the development criteria set out by ADC, a number of open questions remain. These include sustainability of activities and their systemic effect. From a wider developmental perspective, the economic bias of both policy approaches as well as prevailing concepts is remarkable. This goes to the detriment of educational considerations such as learners' rights and a more human centered notion of vocational education.

At this point it is worth spending a few words on terminology². Traditionally, the term mostly applied in the international discussion used to be Technical and Vocational Education and Training (TVET), however variations such as Technical Vocational Education (TVE) or Vocational Education and Training (VET) are equally widespread. In recent decades, terminology has increasingly followed conceptual shifts to include wider forms of vocational learning beyond formal teaching. The central concept has become that of 'skills' pointing to the result of a learning process rather than to its forms of provision. Terms commonly used today are Vocational Skills Development (VSD) or Technical and Vocational Skills Development

¹ According to OECD data for 2012: Austria 8.7 %, Switzerland 8.4 %, Germany 8.1 %, OECD total: 16.3 %, see: http://www.oecd-ilibrary.org/employment/youth-unemployment-rate_20752342-table2

² On questions of terminology cfr. King/Palmer 2010; 2007: 4; Maurer/Gonon 2014.

(TVSD), among others. Notwithstanding this terminological shift, this paper will apply the traditional term VET for three reasons. Firstly, the paper analyzes a trend emerging from the Austrian system of vocational education, which is highly formalized in comparison to the Anglo-Saxon one. 'Vocational Education and Training' is the term, which most closely corresponds to the German '*Berufsbildung*'. Also, transfer dynamics point to a formalization of skills, not to the contrary. Secondly, the term 'skills' is in itself not neutral, as will be discussed in chapter 2. Last but not least, VET is still a widely accepted term used by a number of players in international development.

In the first chapter, this paper will address VET and international development in four sections. A historical overview of VET support in international development will be followed by a critical discussion of current global VET trends. Subsequently, the transfer of the dual system of apprenticeship will be addressed from a theoretical as well as an empirical perspective. The final section in this first chapter describes VET support by the Austrian Development Cooperation. The following chapter addresses the Austrian dual system of apprenticeship in terms of its historical evolution, its current functioning and a critical assessment of its strengths and weaknesses. In the final chapter, findings of the empirical study are presented. The first section describes the status quo of the current trend to transfer the Austrian dual system to developing and transition countries. In the second section, findings are examined against the principles and criteria elaborated by ADC. The following section draws on critical theoretical approaches in the international VET discussion to elaborate on open questions as to the wider developmental impacts of the current trend. Finally, the chapter ends with a number of recommendations of how to strengthen the developmental impact. Conclusions summarize the paper's main messages.

2. Vocational education and international development

2.1. Historical outline of VET support in international development³

In the first decades of international development cooperation, VET was one of the major education sub-sectors to be invested in alongside higher education. In the 1960s and 1970s, the World Bank granted about 40% of all education loans in Sub-Saharan Africa to VET (Tikly 2013). VET was considered to be a major component of manpower forecasting in order to serve the needs of industrialization (Heyneman 2003: 317). UNESCO's focus was on fundamental education (Chabbott 2003), i.e. the basic education sector, but this also contained a lot of skills development components, as did its later functional literacy policy. A number of bilateral donors, primarily but not exclusively the German-speaking ones, supported VET as a priority sector.

However, criticism of VET was increasing. An early and quite influential publication is Foster's *The Vocational School Fallacy* (1965), which pointed to the disjuncture between the needs perceived in manpower planning and the realities in the labor markets. With the growing influence of the human capital theory and in particular the rate of return analysis of education investments undertaken by the World Bank (Psacharopoulos 1973, 1985), investments in VET were heavily questioned, while investments in primary education were considered to have the highest rates of return. The World Bank 1991 policy paper on VET (World Bank 1991) was very influential in that regard. It claimed public VET to be substantially inefficient.

³ For a more detailed account see King/Palmer 2010.

As priorities in international development cooperation shifted to primary education, VET became an increasingly neglected education sub-sector. The international education initiative Education for All (EFA) contributed to the narrowing of educational cooperation. Although skills were included in the EFA goals agreed upon at the 1990 EFA world conference in Jomtien, Thailand, and confirmed at the 2000 EFA World Forum in Dakar, this did not lead to an increase in investment in VET. In fact, the EFA skills goals are criticized for being so vague that neglecting them was all too easy (Palmer 2014: 32). The UN Millennium Development Goals (MDGs) adopted in 2000 consolidated the narrow focus on primary schooling. In practice, VET has almost disappeared from the international development agenda in the last two decades.

However, some bilateral donors stuck to their focus on VET even during these times of differing international priority setting. These were mainly the German-speaking countries of Germany, Switzerland and Austria, all of which had supported VET from a very early point in their development cooperation activities. Yet, even these donors were not immune to international policy pressures. Germany, historically among the biggest bilateral donors for VET, reduced the number of countries where it supported VET projects from more than 70 in the early 1990s to six countries in 2006 (Barabasch/Wolf 2009: 23).

In the aftermath of the 2008/2009 financial crisis, rising unemployment rates led to growing attention for VET as a perceived means to improve job opportunities. In international development this was accompanied by a second factor. Rapid expansion of enrollment rates in primary education in developing countries had resulted in considerably increased demand for secondary schooling, which education systems were unable to meet. Also, former beliefs of highest rates of return for primary education eroded. It became obvious that for various reasons primary education was not sufficient for people to substantially improve their living conditions. Several research findings point to inverted rates of return to investments in education with higher education offering the highest returns (Colclough et al. 2010; Aslam et al. 2010).

The VET renaissance was reflected in several influential publications, such as the 2012 Education for All Global Monitoring Report *Youth and Skills. Putting Education to Work* (UNESCO 2012a) and the 2013 World Development Report *Jobs* (World Bank 2012).

However, the renewed interest in VET in recent years has not yet translated into much-increased VET practice within development cooperation. The 2015 final EFA Report illustrates this contradiction (UNESCO 2015). Difficulties of measurement have resulted in the EFA skills goal being assessed in terms of participation in lower secondary education, which by definition does not cover the wide array of VET practice. According to this indicator, improvements are scant. This in turn has to do with the decades of neglect of any other education level than primary.

In recent years, a number of specific trends in the VET sector of international development cooperation have emerged. The potential contribution of VET to poverty reduction has been increasingly discussed resulting in an aspiration to reorient VET towards the informal economy and to include marginalized learner communities, especially women and youth in rural areas. With the rise of the sustainability agenda, VET's role in a green economy has become a topic. Secondary education is receiving more attention from the international development community as the main provider of vocational skills in the formal education system. The Shanghai Consensus, the outcome document of the Third International VET Congress held in Shanghai in May 2012 (UNESCO 2012b), coined the term of transformative VET, calling, among other things, for a diversification of provision, an inclusion of excluded communities of learners and an emphasis on lifelong learning.

In the current post-2015 debates, critics (Palmer 2014; King/Palmer 2012) point to insufficient attention to skills. It seems to be uncertain whether a VET target will be included in the final version of the new international development agenda, the Sustainable Development Goals (SDGs). Additional criticism concerns the risk of conflated skills concepts, which may lead to conceptual confusion and the diluted value of a skills target (Palmer 2014: 38) and the indispensable but difficult measurement of skills (Palmer 2014: 36). Generally, it appears from recent debates that however welcome increased international recognition of VET might be, the problematic nature of VET in terms of inhomogeneous VET traditions, concepts and patterns of provision continue to hamper the translation of increased political attention into practice.

2.2. Current global trends in VET and the academic discussion

As McGrath (2014: 114) points out, while VET still remains somewhat marginal to the international development debate, it has acquired quite an important space on other national and global agendas. The OECD skills strategy (OECD 2012) and the EU Agenda for cooperation in VET (Bruges Communiqué 2010) as well as its European Alliance for Apprenticeships⁴ are just a few examples of this, but also the Indian government's commitment to upskill 500 million citizens by 2022 (King 2012: 668). Hence, VET trends in international development should be considered in the wider context of global VET developments.

Generally, it appears that VET systems retain until today much more national specificities and are less subject to homogenization processes than general education systems. While the Anglo-Saxon VET system focuses on the notion of 'skills' and is widely practice-oriented and little formalized, the French VET system comprises a high share of general education and is highly formalized. The German VET tradition is framed by the concept of '*Beruf*', which results in a well structured and formalized system that is, however, strongly practice-oriented (see the following section). VET systems in developing countries are until to date shaped by the VET tradition of their former colonizing power⁵.

Notwithstanding these specificities, general trends have emerged in the context of educational globalization, which are, however, clearly related to the Anglo-Saxon VET tradition. The major paradigmatic shift in VET, which informs most reform processes worldwide, has to do with making VET systems more demand-driven. Perceived supply-driven and school-based traditional VET systems are considered inadequate to deliver VET competences required by employers and labor markets.

On the level of governance, modifications of institutional settings are introduced in many places. Traditional VET systems as part of the formal education system are increasingly eroded to the benefit of diversified patterns of VET provision and providers. Among the most influential tools at this level are national qualifications frameworks (NQF). NQFs originated from England, but have spread rapidly around the globe. These frameworks are intended to organize all qualifications offered in a country according to level (King/Palmer 2010: 79). Their purpose is to enhance learners' employability by creating a framework of qualifications, whereby stakeholders (mostly employers) shall define competences or learning outcomes as the basis of qualifications (Allais 2011a: 8).

Also, private enterprises emerge increasingly as key players in VET on the level of governance as well as provision. This points to the growing importance of the concept of work-based learning. Not new to the German-speaking countries, it nonetheless introduces sub-

⁴ See http://ec.europa.eu/education/policy/vocational-policy/alliance_en.htm

⁵ For a more detailed account on European VET systems see Brockmann et al. 2011, for developing countries see Oketch 2007.

stantial conceptual shifts in many VET systems, which are traditionally based on full-time VET schooling. It is assumed that this will lead to increased productivity and job opportunities.

NQFs operate with the pedagogical notion of competences. Competency-based training (CBT) has become quite popular internationally. It gives more emphasis to the learner's ability to master specific tasks or competences than to formalized certifications (King/Palmer 2010: 135).

As for the academic discussion of the above outlined trends, critical approaches point to their theoretical underpinnings akin to neoclassical economics. In general, theoretical VET accounts are framed by orthodox economics rather than by education sciences (Allais 2011b; McGrath 2012b). But also heterodox economic approaches such as structuralist theoretical strands have little impact on the global VET debates. On the contrary, the influence of human capital theory (Schultz 1961; Becker 1964) on VET has already been mentioned. Its central premise is that education and training are crucial for personal income and economic growth. McGrath (2012b: 624), drawing on Giddens (1994), describes the dominant account of VET as 'productivism'. He outlines as its main features the separation of paid employment from other aspects of life and the cementation of economic development as the ultimate goal of society. As a consequence, an impoverished view of skills, work and life prevails in international VET discourse and practice.

Turning to current global VET trends, McGrath (2012: 625 b) summarizes these in what he calls an international VET tool kit. He identifies five principal tools:

- Systemic governance reforms intended to make VET more relevant and responsive
- Qualifications frameworks
- Quality assurance systems
- New funding mechanisms signaling a shift away from block funding of public providers
- Managed autonomy for public providers - introducing new governance structures designed to give a larger voice to stakeholders (especially industry).

He goes on to argue that the VET tool kit should be seen within the broader framework of neoliberal reforms of public sectors and governance linked to capitalist globalization. NQFs as probably the most prominent element of the tool kit were generated in the context of neoliberal public sector reforms. Avis (2012) and Allais (2011a) contend that NQFs are targeted to alter the role of the state in VET by replacing the public provision of VET with public regulation of mostly private VET services. On the one hand, this is believed to increase efficiency in VET. On the other hand, NQFs are supposed to break the state monopoly of VET in order to create a market for VET provision.

As to the level of impact on the ground, a study commissioned by ILO (Allais 2010) on the effects of NQFs in selected developed and developing countries states that the supply and demand structures between national VET systems and labor markets were hardly improved as a consequence of the introduction of NQFs. It also found that employer participation in VET had scarcely increased, neither as to the provision of learning opportunities in workplaces nor at the level of a definition of qualifications.

Notwithstanding their limited success rates, NQFs continue to proliferate globally. McGrath (2012a) stresses that here a model has been divorced from its original contexts (in this case the Anglo-Scottish ones) and applied to very different contexts worldwide with little evidence of success. Although this transfer process is highly complex, growing economic interests of

parastatal organizations such as accreditation agencies and VET service providers have to be included in the picture.

Maurer (2014) argues that the germanophone dual model of vocational training is becoming part of the international VET toolkit, although in no manner at the levels of NQFs. This will be discussed in more detail in the next section.

Another toolkit element is systemic and sector reforms targeted to make VET more relevant and efficient. These reforms often result in flexibilization and diversification of VET provision in an attempt to move VET closer to the needs of enterprises and workplaces. To date, there is little evidence of success, not least because of the reluctance of enterprises to engage in VET as pointed out by the ILO study on NQFs (Allais 2010, see above). There is, however, a more substantial consideration, in particular for developing countries. Allais (2011b) argues that what developing countries mostly lack in their VET sectors are extensive and institutionalized structures. Diversification processes, however, tend to trigger a further loosening of existing VET structures rather than their institutionalization.

Allais (2011a) points to the general risks of defining VET competences based on the immediate and short term needs of enterprises. This neither serves the learning needs of young people nor does it help to consolidate economic development in the medium and long-term perspective. In a study on CBT in Australia, Wheelahan (2009) argues that CBT acts as a mechanism for social power by privileging employer perspectives while learners are denied access to the theoretical knowledge that underpins vocational practice.

In contrast, long-term qualification processes require the integration of theoretical knowledge and practical competences, as Allais (2011a) claims. This calls for a strengthening of general educational components in VET.

This general criticism of the concept of competency-based VET refers to a theoretical approach, which is critical of the dominant paradigm of neoclassic economics, namely the new political economy of skills (Brown et al. 2011; Lauder et al. 2012; Green 2013). Interestingly, some concepts of this approach have begun to influence the international VET debate, as Valiente (2014) describes for the OECD skills strategy. Contrary to the dominant discourse on the knowledge economy, political economists of skills contend that there is a growing gap between the increased availability of highly skilled people and scarcity of knowledge-dependent jobs. They doubt that ever growing learning efforts can protect individuals from the precarization of their work. Avis (2012), drawing on Brown et al. (2011), describes a polarization between knowledge workers experiencing digital taylorism (i.e. a process of standardization and de-skilling due to the application of ICTs) and a highly skilled, highly paid elite.

Following Valiente (2014), the OECD skills strategy introduces the paradigm of skills utilization, thereby recognizing that whether and how skills can contribute to growth is also a problem of the economic structure and not only of the education and training system. The OECD's recommendation to adopt national skills strategies points to the failing automatism of markets in creating highly skilled employment, even if these skills are available. Although Valiente recognizes the significance of the OECD's policy innovations in their recent skills strategy, he is critical of the OECD's growing aspiration to influence VET policies in developing countries. He argues that a too straightforward application of OECD country strategies on the developing world could lead to a replication of old mistakes committed by a wide range of development actors.

Against the background of the new development agenda to be adopted in September 2015, academic debate on the future of VET in international development intensifies. The main concerns as to the inclusion of VET in SDGs have already been touched upon. The wider

academic discussion identifies this as a moment to open up and further elaborate also on a theoretical level, which is perceived to be traditionally weak (McGrath 2012a).

Here, an interesting account is the emerging debate on a more human-centered notion of VET opposed to the 'productivist' orthodoxy (McGrath 2012b; Tikly 2013; Powell/McGrath 2014). This account draws on a number of approaches including the human rights perspective, the capabilities approach, and, as McGrath (2012b) suggests, Catholic social teaching. Although the debate is only incipient, some promising aspects are emerging. Powell and McGrath (2014) for instance elaborate on how the capabilities approach could methodologically improve VET evaluations. In contrast to the 'productivist' perspective, the capability approach makes those opportunities and capabilities visible that are required to ensure that skills can make a difference in peoples' lives. In this perspective, agency and learners' rights acquire centrality.

2.3. The transfer of the dual system of apprenticeship in the context of international development

Policy transfer in education has a long tradition. This is also true for VET, although the foreign influence might seem less strong in these systems compared to general education (Gonon 2012; Maurer/Gonon 2014). Likewise, research on educational policy transfer has a long-standing tradition in comparative education with substantially increased interest in the past 20 or 30 years (Steiner-Khamsi 2012).

2.3.1 The academic debate

Policy transfer research in education is a rather diversified field with manifold theoretical and methodological approaches that cannot be depicted here⁶. One quite influential approach is the neo-institutionalist account of an assumed world culture (Meyer et al. 1992; Meyer/Ramirez 2009), which is based on the notion of convergence. Neo-institutionalist approaches usually conceptualize the expansion of the Western model of formal schooling as a global diffusion process. As opposed to this paradigm, another strand of policy transfer research focuses more on the local context as a starting point for analysis (Steiner-Khamsi 2004; Schriewer 2012). These researchers are more interested in how local contexts react to traveling policies and how they transform them. Some of this work is also linked to the critical analysis of the impact of globalization on (local) education policies and systems (Dale 1999, 2000; Robertson/Dale 2008).

The germanophone discussion of policy transfer in education and more specifically, in VET seems only scarcely receptive of the anglophone academic debate (Wolf 2011). Recently, however, attention has been growing (Maurer/Gonon 2014; Wolf/Barabasch 2009, 2011; Wolf 2011). For instance, Wolf and Barabasch (2011, see also Wolf 2011) use the concepts of Philipps and Ochs (2003) as a starting point to develop a model of a culture of work as a basic paradigm for the transfer of the dual model of VET. This will be discussed in more detail below.

There is a rather rich German discussion on the theoretical and conceptual foundations of policy transfer in relation to the dual model (Deißinger 2001; Greinert 2001; Mayer 2001; Barabasch/Wolf 2011). Much of it draws on the lessons of experience by (German) development cooperation, which generally point to the rather limited success of transfer attempts (see next chapter).

⁶ For a more in depth-discussion see Steiner-Khamsi 2012.

While Stockmann (2014) seems to reserve a certain caution in generalizing his findings on the limited success of transferring the dual system, other German academics are more explicit. Greinert (2001: 55), also drawing on lessons of experience from German development cooperation, states that the transfer of national VET systems and structures to other countries is faced by almost insurmountable barriers. He quotes Georg (1997: 83) to explain that the specific patterns of systems of vocational qualifications are not, or at least not entirely, the result of conscious planning and decision making, but of complex historical processes. Patterns and mechanisms of single VET systems are therefore specific societal and cultural reactions to historical problems.

Deißinger (2001) claims it is paramount to distinguish 'the organizing principle' of each VET system from its outward appearances, i.e. the specific way in which work is organized as well as how education and work relate to each other in a given societal context. Describing failed attempts to reform the English and the French VET systems drawing on the German dual model, he points to the fact that the organizing principle of the German dual system is not, as commonly assumed, the duality of learning sites, i.e. work-based and formal learning in schools. Rather, it is the core element of the German dual system, the concept of '*Beruf*', a term difficult to translate. A *Beruf* means something between job, profession and vocation. It designates a set of operations for which a range of specific knowledge and abilities are required, whose execution encompasses self-reliance and autonomy and which comprise multidimensional labor processes (Paul-Kohlhoff 1997). In this holistic understanding of the labor process and the required qualifications to respond to it, *Beruf* is sometimes seen as opposed to the Anglo-Saxon model of work, processes fragmented into narrowly defined tasks, for which a restricted set of skills without prior qualifications are sufficient (Allais 2012; Brockmann et al. 2011).

In a societal perspective, a *Beruf* is a formally recognized social category which structures the VET system and the labor market and is in turn structured by them. *Beruf* is a decisive category for the allocation of individuals in society and the employment system (Beck et al. 1980; Mayer 2001; Ribolits 1998). *Berufe* are strongly linked to a specific institutional pattern in German-speaking countries, i.e. a system of institutionalized bargaining between public administrations, employers' and workers' representatives as well as other relevant interest groups. This corporatist form of social contract between what are referred to as social partners does not only frame the VET system and its complex governance structures. It shapes all aspects of public life, work and political representation. It is considered – rightly or wrongly – a major factor of socioeconomic stability.

In order to understand the specificity of the dual system, it is helpful to have a look at its origins. Mayer (2001) summarizes the genesis of the German dual system in times of accelerated industrialization in the 1860s and 1870s as a paradoxical recourse on the medieval educative principle of apprenticeship. She stresses that the driving force for the establishment of the modern German VET system and the dual model at its core were not the requirements of expanding industry, but political reasons, above all the social integration of working class youth against the background of emerging social democracy.

Atzmüller (2011) analyses the germanophone dual system of VET from a perspective of political and cultural hegemony in a Gramscian sense. In his view, the dual system helps to allocate working class youth in a socially stratified system by offering a socially recognized identity (a *Beruf*), entitlement to a certain level of remuneration, promotion prospects, long-term job perspectives and social benefits (pension, health insurance etc.). Hence, the principle of *Beruf* as the specific shape of the workforce in germanophone countries and its reproduction by means of the dual system constitute a pedagogical relationship between the workforce and employers which helps stabilize the employers' political and cultural hegemony well beyond their immediate interests. In this perspective, the above-mentioned social

contract does not only grant a certain extent of economic and social wellbeing to the workforce, but also their political consensus around social stratification. Hence, as Ribolits (1998: 9) points out, *Beruf* also serves as a legitimating instrument of social inequality.

In terms of transferability, it appears plausible that the historical and societal entrenchment of the *Berufskonzept* places limits on any easy transmission into different social contexts. With a focus on gender relations, Mayer (2001), drawing on an analysis of German development cooperation in the VET sector, delineates some problematic results of transfer activities due to scarce awareness of its cultural embeddedness. She shows how patterns of gender segregation in the German VET system were passed on in development cooperation. In fact, German development cooperation in the VET sector, at least until the turn towards the informal economy, reflected the central structural elements of the German VET system, i.e. strong orientation towards the modern economic sector, technical-industrial training and apprenticeship training, which excluded women as beneficiaries and left gender-biased work relations unattended for a long time. She concludes that not only German but international development cooperation in the VET sector appears to be based on assumptions of a cultural independence of VET, which has proved erroneous.

In an attempt to make underlying cultural settings tangible and comparable, Wolf and Barabasch (Wolf 2011; Barabasch/Wolf 2011) adapt the concepts of policy transfer by Philips and Ochs (2003) to the culture of work. This responds to the commonly shared lesson of experience that context has not been taken into account sufficiently in past transfer activities. For VET and in particular for the dual system with its main learning site in companies, work culture is a core element of context. Based on an understanding of culture as a dynamic expression of human sociality, the authors' assumption is that cultural systems of meanings and symbolic orders have significantly impacted VET. On the other hand, VET systems have shaped interaction processes in workplaces.

Wolf (2011) summarizes six dimensions of work culture. It is worth quoting them here since they illustrate the importance of cultural context in a perspective of policy transfer in VET. (i) The work regime: In-company structures of who works together with whom and under what form of work organization are inter-related with the existing education and VET system. The way in which in-company interactions take place has an important impact on the patterns of work organization. For instance, while in Germany work organization is rather flat and targeted, in France it is highly hierarchical and follows detailed job descriptions. (ii) Labor law: There is a strong interrelation between cultural systems of meaning and labor law, impacting understandings of social security and of how to guarantee it. While these systems are mainly market-regulated in Britain, in Germany they are the result of corporatist negotiations and arrangements. (iii) Technological development and application processes: Unlike commonly assumed, technological development and application processes respond not only to rational choices, but to a high degree to cultural systems of meaning. (iv) Constitution of social actors in the production relations and in the related training structures: In Germany, these are mainly corporatist settings comprising workers' and employers' representatives. (v) Social security: In Germany, the social security systems are still framed by an employment system based on the *Beruf* with long-term and full-time employment. This is an important factor in explaining the dual system's high degree of attractiveness, which might be absent in other contexts. (vi) Administrative-institutional order: It is important to understand the governance system of VET. While in France, the Ministry of Education is the determining institution, in Germany, VET governance is very complex, including regional and federal governing bodies, employers' and workers' representatives and others.

2.3.2. Lessons of experience

Unlike Switzerland and Austria, the German Development Cooperation has relied substantially on the transfer of the dual model over decades. Austria, as will be discussed below, has only recently started to support the transfer of the dual system as part of its development cooperation strategy, while Switzerland has had a more nuanced approach.

The Swiss Development Cooperation has never relied on the dual system to the same extent as the German Development Cooperation. Maurer (2012) outlines that until the first years of the 1990s, VET efforts concentrated on technical schools. International priority setting on poverty reduction led to a general decline in VET spending and to a refocus on smaller projects in rural settings linked to the informal economy. Paradoxically, it was in these settings and not in the formal economy that the concept of the dual model gained importance, in terms of work-based training and a combination of theoretical and practical learning. However, a recent evaluation (Swiss Agency for Development Cooperation 2011) showed mixed success rates for these projects, which cast some doubt on the intended employment and poverty impact. Recently, growing international demand for the dual system might lead to a resumption of transfer activities.

While in the 1950s and 1960s German development cooperation mostly supported technical schools, in what Mayer (2001) calls the second phase of German development aid in VET from the 1970s onwards the number of projects with components of the dual system increased substantially. It peaked at the beginning of the 1990s, when the focus was on system reforms shaped on the dual model. In 1992, a new sector concept (BMZ 1992) introduced a shift towards the informal sector. However, the transfer of forms of dual training remained in force. The influence of the international poverty and primary education agenda as well as growing awareness of the limited transferability of the dual system almost put an end to Germany's transfer attempts in the first decade of the new millennium. Only recently is the German Development Cooperation taking up transfer activities again (Stockman 2014, Mayer 2001, Greinert 2001). Among other factors, this has to be seen in the context of growing international demand as well as the economic interest of German industry and VET providers.

Stockman (2014) drawing on a number of major evaluations of German development cooperation in the VET sector summarizes that transfer activities have had diverse, but generally rather limited success. The main findings are set out in the table next page.

Drawing on these findings, Stockmann (2014) identifies the following success factors for transfer projects in development cooperation: (i) Careful planning, (ii) Attention to framework conditions, (iii) Flexible management, (iv) Manageable, results-oriented monitoring and evaluation system, (v) Efficiency of the provider, (vi) Ownership, (vii) Qualified and committed personnel.

Main findings on dual system transfer activities drawn from evaluations commissioned by German development cooperation⁷			
Evaluation report	Stockmann, R. (1996): Die Wirksamkeit der Entwicklungshilfe. Eine Evaluation der Nachhaltigkeit von Programmen und Projekten	Stockmann, R. et al (2000): Wirksamkeit deutscher Berufsbildungszusammenarbeit. Ein Vergleich zwischen staatlichen und nicht-staatlichen Programmen in der Volksrepublik China.	Stockmann, R/Silvestrini, S. (2013): Synthese und Meta-evaluierung Berufsbildung. Ziele, Wirkungen und Erfolgsfaktoren der deutschen Berufsbildungszusammenarbeit.
Countries covered	Honduras, Guatemala, Ecuador (9 projects out of 15 related to dual system)	China	Macedonia, Uzbekistan, Kazakhstan, Burkina Faso, Philippines (5 out of 12 evaluations related to the dual system)
Project aims	Projects aimed at reforming the existing VET system on the basis of the dual model	Projects aimed at introducing a dual model type VET system. Multi-level approach at political, multiplier and operational level	Projects aim at systemic changes through introduction of dual system elements. Multi-level approach, focus on results in the wider context
Aims of evaluation	Measuring internal and external sustainability	A) evaluate success of multi-level approach B) evaluate achievement of specific aims	A) Assessment of methodological quality of the studies B) Assessment of results against selected criteria
Findings	Sustainable impact in all three countries, but restricted to institutions. Little impact in a wider context.	Limited success. Dual model was accepted in participating schools. High-level qualifications of involved learners. Insight into the significance of practical training was not converted into ownership resulting in the introduction of the dual system. Companies had difficulties with dual training, certification of new occupations was refused by the state.	In some countries (Kazakhstan, Macedonia, Uzbekistan) impact at the institutional level was assessed, but no impact at wider level. Failure was assessed for the projects in Burkina Faso and Philippines, which most directly targeted the introduction of the dual system.
Conclusions	Local context had not been taken into account	Dual system consisting not only of two learning sites, but including active company involvement has little chance of being achieved. Main reasons: lack of ownership, inadequate conditions, inflexible project management	Dual system type projects after the millennium do not enjoy a higher success rate than those in earlier decades. Reason of failures (Burkina Faso, Philippines): lack of ownership, weakness of planning, lack of context sensitivity

⁷ Since not all of the discussed evaluations focus on the dual system this table follows Stockmann 2014. In this article, he examines the transferability of the German dual system in the context of development cooperation drawing on the above evaluations.

As a result of the above outlined lessons of experience as well as an intense academic debate, the limited transferability of the dual model appears to be common sense in German-speaking countries today, at least among academics and practitioners. Context has become a leading category for transfer activities in development cooperation. Consequently, there is a somewhat shared understanding that the system cannot or should not be transferred in its entirety, but only certain elements in accordance with the existing contextual settings in recipient countries.

A number of recent studies have set out basic dimensions or functions of the dual system in German-speaking countries which, in their view, have to be met and re-contextualized in the respective local setting in order to facilitate a successful transfer. Gonon (2014) describes seven criteria. These are (i) Readiness of companies to train; (ii) Duality of learning sites (work place and school); (iii) Formalization of the dual model; (iv) Access to codified scientific knowledge; (v) Cooperative model of governance including social partners; (vi) Vocational practice as main learning activity; (vii) Career relevance. Similarly, Bliem et al. (2014) define seven core dimensions of the Austrian dual model which they consider crucial for successful implementation elsewhere.

In the less academic field of development cooperation, the main guiding principles include close cooperation between the state and the business sector, work-based learning and the engagement of involved parties among others (BMZ 2012). Interestingly, these principles match the main criteria of the global VET tool kit as set out in the previous section. This and the increased hybridization of education systems due to globalization processes (Gonon 2014: 243) facilitate the compatibility of the germanophone VET experience with global VET dynamics, despite the fact that the latter is mainly shaped by the Anglo-Saxon VET tradition. The high reputation of both the business sector in German-speaking countries and their VET systems turns into a comparative advantage in global VET business. This is also due to a certain disenchantment with NQFs due to their limited effectiveness in creating additional VET services of high quality. The crucial point here is the often-experienced reluctance of enterprises to engage in VET. The germanophone VET tradition seems to offer solutions to this structural problem. However, germanophone VET expertise is not seen as opposed to NQFs, but rather as a way to strengthen them (for Germany cf. Clement 2012: 103).

A relatively new pattern in VET support, at least in German (Clement 2012: 104) and Austrian development cooperation, is an explicit shift to cooperate with private business facilitating their VET activities in developing and transition countries. For Austria, this will be discussed in more detail in the following chapter as well as in chapter 4.

2.4. VET in the Austrian Development Cooperation

Although VET has a longstanding tradition and caters for a high share of the Austrian education system, academic research on VET is limited, in particular in relation to international development⁸. As a consequence, there is little if any theoretical and conceptual debate on the role of VET in development cooperation. Policies intend to align with dominant international development paradigms such as the poverty agenda on the one hand. On the other, they are framed by Austrian VET culture and appear to have evolved historically based on individual efforts or single occasions, rather than being the result of strategic planning and decision-making.

As in Germany and Switzerland, VET has always assumed a key role in Austrian development cooperation. Austria has maintained this strategic focus also during the period of inter-

⁸ This chapter mainly draws on interviews with ADC and NGO staff and former staff, besides the documents listed.

national priority-setting on primary education (BMAA 2000). In accordance with a restricted amount of ODA in comparison with germanophone neighbors, ADC's VET budget is considerably smaller as well. According to the annual ODA report by the ADC (Federal Ministry for European and International Affairs 2014: 46), in 2012 €6.5 million were dedicated to the education sector, which is 9.81% of the ADC's bilateral funds. €1.86 million were dedicated to VET (ADA: ADC statistics, own calculations).

Historically, Austrian VET support has generally focused on technical schools in recipient countries and on VET training at the post-secondary level, mostly through scholarships. In Burkina Faso, a longstanding ADC priority country, efforts have been made to support the formalization of VET as a national VET system linked to the general education system (Guigma Ouedraogo/Risler 2008). In the last decade, VET support in non-formal or mixed education settings has assumed increased importance. In Eastern and South-Eastern Europe, VET has been supported through a variety of ways, e.g. formal education at the secondary and post-secondary level and capacity enhancement at the administrative level for governing bodies, education providers and related institutions for quality assurance or certification (Evaluation of the Education Sector of Austrian Development Cooperation and Cooperation with South-East Europe 2007).

Throughout the decades, the dual system of apprenticeship has had less of a material than conceptual impact on the Austrian Development Cooperation. The idea of work-based learning and close cooperation with enterprises has always been a conceptual guideline. However, support on the ground appears to have been more inspired by technical schools at the upper secondary level, a specificity of the Austrian VET system (cf. the following chapter). Only recently has support for transfer activities of the dual system assumed increased importance. This is mainly due to a shift towards private sector development as a strategic priority. Also, the establishment of a new budget line focusing on cooperation with private business has increased interest in dual system interventions. In the context of 'business partnerships', private enterprises can apply for funding of their activities if their projects comply with ADA criteria. Frequently, these projects include VET activities in developing or transition countries based on the dual model. However, the ADC has a broad spectrum of dual system inspired interventions as described in more detail below.

Currently, the ADC's VET support intends to comply with the international guidelines of partner country ownership and alignment. Further guiding principles are a commitment to poverty reduction, inclusive education, gender equality, a holistic approach across levels and forms of provision, relevance for and alignments with local needs as well as quality and sustainability of interventions (Austrian Development Agency 2013).

Besides the ADC's official development assistance, Austrian development NGOs have traditionally seen VET as an important field of intervention both in targeted programs and through components in other programs. NGO activities focus on non-formal education settings rather than the formal sector. However, some organizations have a highly diversified portfolio ranging from small-scale projects in the informal economy through support of post-secondary VET institutions. A number of organizations also undertake VET projects with Austrian enterprises and are interested in increasing this type of cooperation.

NGO support to the VET sector has been doubtlessly inspired by the Austrian VET system and culture. This is reflected in a high level of trust in the effectiveness of VET interventions in terms of employment creation and income increase. As for the dual system, there is limited experience in direct transfer of the model, with the exception of those NGOs working with Austrian enterprises. Rather, NGO support has been framed by the general Austrian VET culture, as mentioned above.

3. VET and the dual system in Austria

3.1. Historical outline⁹

The roots of systematic VET in Austria reach back to the Middle Ages when alongside academic schooling, offered to a small minority by church institutions, apprenticeships were organized by guilds of craftsmen. This highly structured form of training began to lose its regulatory framework in the late 18th century. But only in the late 19th century, after the dissolution of the guilds through the establishment of a liberal trade regulation act in 1859 and a new trade law in 1892, were conditions set for the establishment of a modern capitalist economic order. The former Sunday classes for apprentices were transformed into the continuation school, which was declared obligatory in 1897 through an amendment of the Trade Regulation Act. Trade law remained the main regulatory framework for apprenticeships until as late as 1969, when the Vocational Training Act was adopted. Continuation schools were considered to have a complementary function to training in workplaces. It is this tradition of the workplace as the major site of learning that has characterized the dual system of apprenticeship until today.

Armand Freiherr von Dumreicher, a liberal educationalist at the Ministry of Education in the late 19th century, substantially shaped vocational education in Austria. Inspired by the French system of vocational schools, his reforms resulted in a tightly organized and centralized system of vocational education comprising higher and medium vocational schools, schools for master craftsmen as well as schools for apprentices (the continuation schools).

Social democratic efforts to reform the education system in the 1920s remained largely without success, except for minor protective regulations for apprentices. Under National Socialist rule between 1938 and 1945, the VET system was massively funded and supported in order to train the workforce required for military armament. After the end of World War II, a discussion about a basic reorientation of the Austrian education system began while the existing system of apprenticeships remained largely unquestioned. However, in 1969 its legal basis was renewed and the Vocational Training Act was adopted. This act is in its basic principles still valid today. It has established the complex system of governance of VET in Austria, which will be explained in the following chapter.

On the side of formal schooling, a new school act adopted in 1962 established a tripartite system of vocational schools, the vocational schools for apprentices (former continuation schools), the middle vocational schools and the vocational colleges (see below). In 1994, Universities of Applied Sciences were introduced to offer additional educational opportunities at the tertiary level.

3.2. The dual system of apprenticeship in Austria¹⁰

In Austria, after eight years of schooling, pupils can choose between a general education track and vocational education. About 80 % of the age group are trained in initial vocational education (IVET), 40 % in a VET school or college, another 40 % in an apprenticeship¹¹. VET schools comprise a three-year term, while VET colleges comprise a five-year term and lead to an advanced level exam allowing entrance to tertiary education.

⁹ This chapter draws on Gruber 2001 and 2004 as well as Gruber/Ribolits 1997.

¹⁰ This chapter draws on Federal Ministry of Economy, Family and Youth 2012.

¹¹ Adolescents can start an apprenticeship only after nine years of schooling. A one year course at so called polytechnic schools is intended to fill the gap between lower secondary education and the apprenticeship.

Training in an apprenticeship program has the following characteristics.

- Two learning sites, the company (80 % of learning time), and vocational school (20 % of learning time).
- The apprentice has a training relationship (a special employee status) with his or her company and is concomitantly a student at a vocational school. He/she receives remuneration by the company.
- After usually three years of apprenticeship, the leaving examination is taken in front of professional experts. The exam focuses on competences required for the respective profession.

Currently, there are 204 legally recognized apprenticeship occupations (*Lehrberufe*) in trade, commerce and industry, as well as 14 in agriculture and forestry (as of 2012). Their legal bases are set out in the Vocational Training Act (*Berufsausbildungsgesetz – BAG*). For each apprenticeship occupation, the Ministry of Economics issues a training regulation, which is binding for the training provided in companies. Training regulations stipulate a job profile, which constitutes the curriculum for the in-company training.

Companies interested in training apprentices have to submit applications to the competent apprenticeship office at the Austrian Economic Chamber. One condition is the availability of qualified trainers (proved through an IVET trainer exam) at the company. If a company is not able to fully impart the knowledge and skills necessary for the apprenticeship occupation, it can form a training alliance with other companies that are suited for the purpose.

Besides in-company training, an apprenticeship comprises education at the vocational school. Sixty-five per cent of instruction time at vocational schools is dedicated to occupation-oriented specialist subjects, while general subjects make up 35 % of instruction time. Attendance at a vocational school is compulsory.

While vocational schools are publicly financed, companies bear the costs of in-company training. They receive, however, financial support by the state through tax reduction and a number of subsidies.

The governance structure of the dual system of apprenticeship is complex since it is based on close cooperation between different institutions and interest groups. It is generally perceived as one of the factors ensuring the system's success.

At the federal level, the Federal Ministry of Economics is in charge of the company-based part of apprenticeship training. It issues the training regulation for each apprenticeship occupation. The Federal Advisory Board on Apprenticeships (*Berufsbildungsbeirat*) is set up by the Ministry of Economics upon proposal by the social partners (Austrian Economic Chamber, Austrian Chamber of Labor). It submits statements and concepts to the Ministry of Economics, which need to be considered when adopting regulations. The Federal Ministry for Education is in charge of the school-based part of apprenticeship training. It issues framework curricula for each apprenticeship occupation.

At the provincial level, apprenticeship offices are located at the provincial branches of the Economic Chamber. They examine the training companies' suitability, handle the leaving exams and provide wide-ranging counseling to apprentices and training companies. They are supported by the regional branches of the Chamber of Labor, provincial governors, regional advisory boards on apprenticeship and regional school inspectors.

Training regulations are subject to continuous modernization mostly initiated by the affected sectors, but also by social partners and the responsible ministries.

In response to particular challenges (see next section), a number of innovations have been introduced during recent years. In order to allow for more flexibility and increase the attractiveness of apprenticeship training, modularization was introduced in 2006. Since 2008, apprentices have the possibility of taking the *Berufsmatura*, an exam qualifying them for entrance to tertiary education. This is supposed to increase the permeability of the dual system of apprenticeship towards the general education system. In response to an impending increase of youth unemployment, in 2009 the federal government passed a training guarantee (*Ausbildungsgarantie*) for young people until the age of 18. To make up for decreasing apprenticeship positions at companies, the supra-company apprenticeship training (*Überbetriebliche Lehrausbildung*) was introduced. This addresses mainly young people unable to find a suitable apprenticeship position or drop-outs from such. Supra-company training is mostly provided by authorized IVET institutions. Another innovation addressing young people who are disadvantaged in the labor market is the inclusive IVET scheme (*Integrative Berufsausbildung*) introduced in 2003. It is aimed at individuals with special educational needs or those who did not acquire any qualification at lower secondary level.

3.3. Strengths and weaknesses of the Austrian dual system

In general, low youth unemployment rates and a smooth school-to-work transition as well as a strong social partner involvement are considered the main strengths of the Austrian dual system of apprenticeship as part of the general VET system. The main weaknesses are seen as a low level of general competences and a high level of segregation. This common view is reflected in the recent OECD review of Austrian VET (Hoeckel 2010).

The following chapter critically discusses these assumed strengths and weaknesses, drawing in particular on sociological as well as educational analytical approaches (cf. Atzmüller 2012; Ribolits 1998; Gruber 2001, 2004; Lassnigg 2012, 2013; Lassnigg/Laimer 2013)¹². Despite what is commonly claimed, critical approaches detect a crisis in the Austrian system of apprenticeship. Some of which even assert the system to be under erosion (Atzmüller 2012 and for Germany 2011). Although not all of the critical academics would agree to this, many see the system's continuation and claimed success more as the result of political will than of its inherent strengths.

Ribolits (1998) refers to a threefold crisis of the dual system on a traditional, current and incipient level. Traditional or structural shortcomings are seen firstly in a strong variation of quality. Since companies bear the major part of training, quality differs according to a range of factors, which include the sector and size of the respective company. Apprenticeship training can range between high-level standards in well-equipped facilities and rather exploitative jobs involving little learning.

In the same vein, despite what is commonly claimed, there is no connection between the offer of apprenticeship positions and the request for qualified labor in the foreseeable future. As a consequence, many graduates from the dual system are unable to find jobs for which they have acquired qualifications. This is most visible in many of the typical female apprenticeships such as hairdressing.

Lassnigg (2012, 2013) generally questions the direct causal relationship between low youth unemployment rates and the dual system of apprenticeship. He points to a more complex set of reasons within which the dual system may be one factor helping to keep youth unemployment rates low. Other factors are a generally good level of economic performance resulting in a relatively good range of jobs, the strong system of full-time vocational schools and

¹² This chapter points out only main aspects, which are of interest in this paper. For a more in-depth discussion refer to the cited literature.

an active labor market policy for the 15-19 age group. Interestingly, unemployment rates significantly increase among the 20 year olds and above (Lassnigg 2013: 2 % for the 15-19 year age group versus 6 % for the 20-24 year age group). In this perspective, the dual system rather helps to shift the school to job transition problem to a higher age group than to solve it.

Another structural problem of the dual system is the low level of basic competences of apprentices (Hoeckel 2010; Lassnigg/Laimer 2013). The reason for this is located at an earlier level of the education system. The very early point of segregation of children after four years of primary school into two branches of lower secondary education results in children of lower social strata as well as of marginalized and migrant groups often lacking basic competences. Apprenticeship training often appears to be the only possibility to receive education at the upper secondary level for adolescents with weak basic competences. This leads to a twofold problem. On the one hand, the lack of competences might lead to company reluctance in accepting apprentices. On the other hand, the dual system is not able to make up for the missing competences due to the low share of general education in vocational school curricula. Moreover, this scenario points to a more structural challenge. The dual system proves to be part and parcel of a highly segregating education system in which social origin is still a determining factor in educational success.

Strong gender segregation is perceived as another weakness of the dual system. Female apprentices have been concentrated in a few apprenticeship occupations with little structural change over time. In 2013 almost 50 % of female apprentices were trained in only three occupations, i.e. hairdresser, office clerk and retail (Dornmeyer/Nowak 2014: 29). Typically, these occupations offer neither lucrative job opportunities nor possibilities of social ascension.

As for the level of current challenges, the main problem is seen in a constant decline of apprenticeship positions in companies. Ribolits (1998) refers here to a structural change in the economy with a shrinking production sector. Until now, services have not offered apprenticeship positions to the same extent. Government initiatives (see above) have helped to mitigate, but not to counter this phenomenon.

Statistics confirm this trend. According to the annual report on apprenticeship training in Austria (Dornmeyer/Nowak 2014), in 2013 the number of apprentices amounted to 120,579. This is a loss of more than 11,000 since 2009, which is attributed to demographic development as well as to the impact of the financial crisis. The loss was even more significant for apprentices in companies since a significant number of trainees are registered in supra-company structures.

Ribolits' (1998) perceived challenge at an incipient level, which is, however, already quite tangible at the time of writing, is a structural change in the labor market. As Atzmüller (2011) states, requirements of constant flexibility and adaption to new technologies are turning the concept of *Beruf* into a burden for enterprises. *Beruf* is increasingly losing ground against the anglophone concept of employability requiring constant re-qualification throughout a lifetime. It is questionable whether government initiatives to modularize the dual system in order to allow for wider and more flexible qualifications will be able to solve the tensions arising from growing conceptual contradictions.

Summing up, the dual system of apprenticeship shows a number of weaknesses that arise mainly from the highly segregating character of the Austrian education system. From an educational and sociological perspective, it represents and reproduces the lower levels of this hierarchical system with only slowly increasing permeability. Only superficially might it appear as a paradox that the dual system allows for a relatively high level of social and eco-

conomic welfare for its beneficiaries, compared to international standards. This has to do with its underlying social contract, which ensures relative social security on the one hand, but also acceptance of hierarchical social stratification on the other.

Whatever its weaknesses the strengths of the dual system should not be underestimated. With all due limitations discussed above, these are firstly its contribution to low youth unemployment rates. In times of accelerated structural change of the labor market following patterns of liberalization and flexibilization, continuing to uphold the dual system by political will is clearly an advantage for the affected adolescents.

The second strength as pointed out by Ribolits (1998: 4) can be seen on a pedagogical level. The dual system contains in its nucleus the pedagogical concept of polytechnic education, i.e. the unity of general and vocational education, of theory and practice. It is thanks to this concept that the dual system constitutes a particular form of education that allows for low social class adolescents to stay within a hierarchical education system, which they would otherwise be excluded from. What is missing is increased permeability with the general education system. This, however, calls for a wider reform of the education system as well as for a general strengthening of the perspective of learners' rights.

In a transfer context, key players should be aware of both strengths and weaknesses of the Austrian dual system. All too often, however, a reductionist view prevails overlooking the system's educational weaknesses and restricting the underlying social contract to the involvement of enterprises in VET.

4. Transfer of the Austrian dual system to developing and transition countries

The transfer of the Austrian dual system is a rather recent and incipient phenomenon. Consequently, research and documentation are scarce. The following chapters primarily draw on expert interviews with Austrian key players in this field undertaken between November 2014 and May 2015 (see list of interviewees in annex). Due to the limited scope of the present study, findings have to be considered as preliminary and further research is recommendable.

4.1. The status quo

Background

In reflecting on the reasons for the current trend to transfer the Austrian dual model an Austrian perspective can be distinguished from the perspective of target countries. To start with the latter, most, though not all, interviewees report increasing demand from partner country governments and other players. The main driver for demand is seen in growing (youth) unemployment rates to which the dual model of apprenticeship appears to be an effective remedy. This assumption is based on the good employment performance of the German-speaking countries. Interestingly, a high proportion of interviewees question this assumption, describing it as too simplistic. Another relevant factor is the demand for qualified labor in target countries, which their traditional VET systems seem unable to satisfy. Also, the OECD's renewed interest in skills development as opposed to its former focus on tertiary education has to be seen as a driving factor.

From the Austrian perspective, the demand for qualified labor by Austrian enterprises at their foreign establishments is seen as the predominant driver for transfer activities. Often, dissatisfaction with the local training systems as well as the desire to operate with qualifications of perceived Austrian standards make companies choose to establish similar training systems to those they have at their Austrian headquarters. Finally, Austrian political interests have to

be considered. Growing international enthusiasm for the dual system appears to make it an adequate vehicle to enhance the international reputation of Austrian business and Austrian (vocational) education services. In this vein, sometimes companies' motivations to engage in (dual) training activities in developing and transition countries are related to corporate social responsibility (CSR) rather than skill demands. Due to the high social reputation of the Austrian dual system and to a general trust in VET as a remedy to unemployment, the social and developmental value of VET is hardly questioned. Consequently, companies in their search for CSR activities in developing and transition countries often choose (dual) vocational training.

The main target countries of transfer activities are located in Central and Eastern as well as South Eastern Europe (CEE and SEE), as this is traditionally the central region of Austrian influence and economic investment. However, there is also increasing transfer to Turkey, Asian countries, mainly China, North Africa and Latin America. Hardly any transfer projects are implemented in Sub-Saharan Africa or in the least developed countries (LDCs).

Background conditions in all target countries are described as essentially different from Austria. The dual model of apprenticeship is unfamiliar to the local economic and educational culture. Even though a kind of dual model was part of the VET system in the times of socialist regimes in the CEE and SEE region, these structures have been entirely dismantled. The typical Austrian institutional setting of stakeholder dialogue based on an underlying social contract is absent in the target countries. Even more, the main stakeholders as similar to those in Austria (employers' associations, trade unions and workers' representation bodies, employment and labor market services) are either missing or too weak to possibly fulfill a governance role as they do in Austria. In general, frequent personnel change in the institutions involved, combined with political interest in educational reform, is described as an obstacle. VET systems in the target countries are primarily school-based, considered as lacking relevant links with enterprises and labor markets. Vocational education suffers from low social reputation. In some countries, though not in all, low levels of general educational qualifications are reported as a problem.

Key players

Key players in the current trend to transfer the dual system to developing and transition countries can be grouped as follows: a) donors and public administration, b) implementers (companies, NGOs) and c) supporting organizations.

Key players at the level of donors and public administration include the Austrian Economic Chamber (WKÖ), the Austrian Development Agency (ADA), as well as the Ministries of Science, Research and Economy (BMWFW), of Education and Women's Affairs (BMBWF), of European Integration and Foreign Affairs (BMEIA) and, to a minor extent, of Labor, Social Affairs and Consumer Protection.

The WKÖ may be considered one of the main proactive players at the system's level due to its mandate to promote the interests and activities of Austrian private enterprises. Through its international network of 110 offices in 70 countries it is in a key position to support Austrian companies abroad, in particular at the level of negotiations with ministries and other governing bodies in target countries. As the public administration body in charge of key issues related to the dual system of apprenticeship in Austria, it acts as a consultant and proactive marketer of the dual system towards partner country governments or ministries.

The WKÖ published a strategy paper in 2014 on the internationalization of VET and education export (WKÖ 2014). This paper set out WKÖ's three main goals in this area as follows: the struggle against youth unemployment in Europe and beyond, support for Austrian companies in securing qualified labor, securing the WKÖ's role as a competent body for appren-

iceship education. Counseling on the system level and support for companies involved in pilot projects are stated as major activities.

Through the Institute of Economic Promotion (WIFI) and its international branch (WIFI International), the WKÖ provides adult and further education. WIFI International plays an active role in many target countries both as a provider of educational services and as a supporting organization for companies intending to set up (dual) training facilities.

The WKÖ administers the BMWFW-owned fund Go International, which offers financial support to exporting companies (see below).

Pursuant to their shared competence for the dual system in Austria, the BMWFW and the BMBWF act as consulting counterparts for ministries and other governing bodies in target countries. The BMEIA is in charge of the Austrian Development Cooperation (ADC). Its role in the transfer of the dual model is mainly seen in informing the ADC strategy in the education and economic sector in accordance with other competent ministries. The Ministry of Social Affairs is involved in issues of transfer of the dual model mainly in EU and European countries. It plays only a minor role in developing and transfer to target countries.

As the implementing agency of the Austrian Development Cooperation, the ADA plays a key role in current transfer activities related to the dual system. This is mainly due to the fact that the ADA offers the major funding possibility for private companies available in Austria (see below). As outlined in chapter 2.3 the ADC has only recently embarked on activities related to the dual system. The ADA does not have a particular strategy for dual system interventions. In its focal paper on VET (Austrian Development Agency 2013), dual system interventions are mentioned as one instrument besides others. ADA's approach stresses demand orientation and context sensitivity among its main principles for VET programs including dual system interventions.

Although not prominently mentioned in ADA documents, there is reason to believe that dual system interventions will increase in the coming years, particularly in the framework of private sector development. The main share of ADA VET operations are implemented as country programs in ADA priority countries, which are designed in coordination with partner country governments. Here, dual system activities are part of these programs and comprise a continuum of interventions. These range from activities at the system's level targeting the establishment of stakeholder dialogue or the introduction of dual system type reforms in the school-based VET system, through locally adapted dual system type projects to dual system training in the strict sense implemented by companies and partially financed by the ADA. Beyond country programs, dual system interventions are supported by ADA through their business partnerships in non ADA priority countries. These are mostly training projects by Austrian companies at their foreign establishments. In these cases, projects are not aligned with ADA country programs, but have to comply with ADA funding criteria.

As for the second group of key players, implementers of training arrangements inspired by the Austrian dual system are mainly Austrian private companies, which have establishments in developing or transition countries. They range from major international enterprises with Austrian headquarters to medium and small businesses. Most of the companies belong to the sector of manufacturing industry, while services are hardly involved. Increasingly, some development NGOs show an interest in cooperating with private business in developing countries including vocational training both with and without relation to the Austrian dual system. Yet, it has to be said that other NGOs remain quite critical of the involvement of private business in development cooperation.

In some cases, NGOs are implementers for VET projects entirely financed by private business without ADA support.

The third group of key players can be summarized as supporting organizations. Providers of adult and further education services have already been mentioned. Other supporters are institutes of applied research and NGOs in the field of development cooperation. The role of these supporting organizations differs according to their respective mandate. Often it includes analysis and preparation of the context in target countries, support during the application and administrative processes with the donors in Austria (mainly ADA) and the negotiations with partners in the target countries. In some cases, the mandate includes an implementing role to differing degrees. Some organizations act as platforms for information and expertise sharing at various levels, e.g. for educational institutions and ministries or for Austrian companies.

For some NGOs, cooperation with companies in the field of VET in developing countries is part of their mandate. Others seek to do so since they have experienced greater efficiency and flexibility in these partnerships in comparison to bilateral donor organizations. Another motivation is seen in the need to open up new financial sources. Finally, the assumed higher quality of VET provision and related equipment has been mentioned as a reason.

Dialogue between players

To date, there has been no form of institutionalized dialogue between key players, not even at ministerial level. Informal and project-related dialogue is reported to be vivid and constructive. Some interviewees point out that thanks to this informal dialogue over recent years it has been possible to achieve a kind of common understanding on many crucial aspects. However, many interviewees express the desire of closer cooperation between key players in the group of donors and public administration, including between Austrian players and those in the other German-speaking countries. Dialogue between the ADA and companies will be discussed below.

Funding possibilities

As mentioned before, the main funding possibility for the transfer of the dual system into developing and transition countries is the ADA budget line for business partnerships. Enterprises intending to invest in developing or transition countries that comply with ADA funding criteria are provided with a grant of a maximum 50% of project costs (up to €200,000, in some cases €500,000). Feasibility studies may also be financed from these funds.

The BMFWF has endowed the Go International fund, which is administered by the WKÖ and open to pilot projects aiming at the transfer of the dual system. In contrast to the ADA business partnerships, this fund is intended to support expertise transfer as well as conceptual and start-up activities rather than business investments themselves.

The BMBF has a rather small budget for bilateral cooperation, visits of delegations and experts or activities at school level. The Ministry of Social Affairs occasionally also provides funding for transfer activities; however, these are mainly confined to EU member or pre-accession countries.

EU funds open to cover transfer activities are currently perceived as scarce, but may increase in the near future.

Types of projects and approaches

There is a wide range of training arrangements being set up in developing and transition countries, which refer in one aspect or another to the Austrian dual model. Only very few of these closely correspond to the dual model while the major part implements some aspects or concepts related to it.

Showcase examples of dual training arrangements are established by the Austrian packaging producing company Alpla in Mexico¹³ and by the same company in partnership with the machine building company Engel in Shanghai, China¹⁴. In both cases, the Austrian companies have started in-house apprenticeship training at their local establishments. Apprentices are concomitantly trained at local VET schools with which the companies have entered into strategic partnerships in order to provide for official recognition of their apprenticeship training. Job profiles responding to the qualifications required by the companies were developed, supported by Austrian institutions and in cooperation with local government, business representatives and educational bodies. Trainer training according to Austrian standards is also of key importance. Both projects are partially financed by the ADA through the business partnership budget line.

In some cases, conditions for setting up dual system training in the strict sense are considered to be insufficiently in place. Consequently, training arrangements try to implement dual system elements as appropriate under given circumstances. One example is a training arrangement established by the Austrian company Naber in the Albanian textile sector in cooperation with local authorities, involved schools and local Albanian companies¹⁵. Stakeholder dialogue has resulted in a modernized curriculum, reflecting the requirements of business, corresponding teacher training and the introduction of periodic in-company training, while the major part of instruction continues to take place at schools.

Other types of training arrangements set up by Austrian companies in developing and transition countries are inspired by the Austrian dual system, but do not closely correspond to it. Training itself takes place at preexisting local VET schools. Sometimes, specific training centers are set up. Trainees are sometimes adolescents at the age of 15 and above. Often, however, adults receive further training of their preexisting qualifications. In the latter case, these training arrangements are not to be classified as initial VET in a strict sense, but rather as further or adult VET. However, many of these training arrangements are strongly inspired by the Austrian dual system in terms of curricula being directly informed by the needs of business, trainers being either brought from Austria or trained to Austrian standards and training being more practical than theoretical. Moreover, often the Austrian players involved in cooperation with local and national governing bodies attempt to create an institutional setting similar to that in Austria by involving all relevant stakeholders.

In other cases, the spirit of the dual system is being introduced to varying degrees into the local VET school systems. In these cases, driving Austrian players are not so much private companies, but interventions are implemented as part of the ADA country programs or as a consequence of policy transfer dialogue at the level of public administration. In response to the respective demand by partner countries and in close cooperation with the respective local institutions, ways and means are identified to reform existing school-based VET in terms of enhancing its relevance for the companies and labor markets. Often this materializes in an increasing number of internships in companies or in introducing regular in-company training in the curriculum of schools. Another example is the establishment of training firms in order to support practice-oriented education¹⁶. As a basis of such reforms, incipient institutional arrangements of stakeholder involvement are established. Since existing institutional

¹³ See: [http://www.entwicklung.at/zahlen-daten-und-fakten/projektliste/?tx_sysfirecdlist_pi1\[showUid\]=520&cHash=eac0bd8248bcc3c0f6b82e09df7d67c1](http://www.entwicklung.at/zahlen-daten-und-fakten/projektliste/?tx_sysfirecdlist_pi1[showUid]=520&cHash=eac0bd8248bcc3c0f6b82e09df7d67c1)

¹⁴ See: [http://www.entwicklung.at/zahlen-daten-und-fakten/projektliste/?tx_sysfirecdlist_pi1\[showUid\]=903&cHash=b4f9f8c7e8a8fe08577ab030e42bca71](http://www.entwicklung.at/zahlen-daten-und-fakten/projektliste/?tx_sysfirecdlist_pi1[showUid]=903&cHash=b4f9f8c7e8a8fe08577ab030e42bca71)

¹⁵ See: [http://www.entwicklung.at/zahlen-daten-und-fakten/projektliste/?tx_sysfirecdlist_pi1\[showUid\]=899&cHash=21b31c235ca47cbe9439ae64767dcefb](http://www.entwicklung.at/zahlen-daten-und-fakten/projektliste/?tx_sysfirecdlist_pi1[showUid]=899&cHash=21b31c235ca47cbe9439ae64767dcefb)

¹⁶ See for instance the ECO NET project run by Kulturkontakt Austria between 2001 and 2013 in the SEE region http://www.kulturkontakt.or.at/html/E/wp.asp?pass=x&p_lcd=en&p_title=5044&rn=123587

settings are rather fragmented, often such arrangements are initially confined to particular sectors or regions.

Austrian development NGOs have a long tradition in VET provision. Projects involve a wide range of VET types according to the mandate and possibilities of the respective organization. Some organizations primarily work with small-scale projects often located in the informal and rural sectors, where VET is one project component. Other organizations operate on many scales from the informal sector to high-technology VET schools. While VET cooperation with local companies at varying degrees has always been a topic for NGOs, business partnerships with developed country-based firms are increasingly of interest to many, though not all NGOs. VET projects by Austrian development NGOs are strongly inspired by the dual model, even though they rarely involve dual model apprenticeship training in the strict sense. This inspiration is reflected in VET conceptions including a combination of theoretical and practical training as well as strong labor market and business orientation.

Success factors

In their study on success factors of the dual system and possibilities of expertise transfer, Bliem et al (2014) describe seven core dimensions of the Austrian dual model, which they consider crucial for successful implementation elsewhere. This study has become a point of reference for the main players in Austria. The seven factors for success set out below are widely shared by interviewees.

1. 'Governance and financing: social partners, especially companies, are the carriers of apprenticeship
2. Vocational concept: vocations are more than jobs
3. Benefits for the factories: an apprenticeship is also beneficial for the training company
4. Mechanisms of quality assurance: quality is the responsibility of all stakeholders
5. Mechanisms for customization and innovation: an apprenticeship adjusts to changing qualification requirements
6. Demand for young people: an apprenticeship as an attractive training path for young people
7. Administration and implementation: lean administration and clear, transparent processes.' (Bliem et al. 2014: 11).

Besides these dimensions, interviewees reported factors of success specific to their involvement.

From the perspective of donors and implementing organizations, flexibility, context sensitivity, local ownership and strong stakeholder involvement are named. As for Austrian companies, commitment at the highest level to engage in developmental activities is seen as crucial, as well as the willingness to provide qualified personnel for the project, not only at the local establishments, but also at the headquarters.

Political will by the involved parties, above all in the target country, is singled out as one of the main success factors. General support for the introduction of dual system type reforms by national and regional government are considered as important as the readiness of directly involved players to engage in a medium to long-term process. Also, the readiness of involved ministries and schools to refrain from traditional competences appears crucial. Last but not least, the level of personal commitment by key stakeholders, including trainers and the apprentices' families, proves to be an important factor.

Interviewees active at the system level point to the often neglected fact that the combination of in-company and school-based training is crucial for the dual system's success in Austria. This should also be considered in a transfer context, which is often framed by a high degree of depreciation of local school-based VET systems.

Lessons of experience

Interviews held in the context of the present study mainly refer to a kind of new generation of recent dual system interventions. Due to the ADA's key role but also thanks to influential studies like Bliem et al. (2014 cf. 29), concepts such as context sensitivity, alignment to local needs and linkages with the local systems appear to be almost state of the art. Given the rather short duration of most projects, it is difficult to generalize lessons of experience. However, there may be some initial findings worth describing at that point. Moreover, in some cases, in particular in the SEE region, dual system type activities involving Austrian, but also other (mainly German) stakeholders are dating back longer, offering some interesting insights. Well-evaluated lessons of experience by German development cooperation of dual system interventions in the last century are outlined in chapter 2.3 and not considered here.

Generally, for most of the projects, which recently began as part of an ADA financed business partnership, first results are described as good in terms of attained levels of qualifications, engagement of stakeholders, assumed sustainability and broad impact. In some cases, difficult institutional environments and political interest are reported to cause setbacks. ADA support is seen as crucial for the success of the projects, in particular in terms of their developmental value. In Mexico, where several ADA-backed dual system type projects are running or in the process of being set up, their broad impact at the system level is reported. This is attributed to the government's strong political backing, but also to the groundwork and continuing influence of German players, above all the Chambers of Commerce and Industry (IHK). German groundwork has led to a high level of awareness of crucial requirements by involved local bodies. The role of German players, is, however, not uncontested among interviewees due to a perceived lack of context sensitivity.

Projects motivated by workforce requirements seem to have better results than those implemented as part of CSR programs. In the same vein, where companies directly engage in the project and in the negotiation processes with the ADA, the processes might be more complex, but they lead to a higher level of company ownership crucial for success.

In the SEE region, little sustainability for a number of dual system interventions (by Austrian or other, mainly German companies) is reported by some interviewees. The reason for that is seen in the lack of institutional support structures and a stand-alone type of engagement without sufficient consideration of the given context. In some cases, in-company training was closed down after the companies had satisfied their workforce requirements. In other cases, little local ownership caused problems at the level of qualification and at the level of stakeholder dialogue, which was subject to clientism. Generally, scarce results were reported wherever interventions were not context-sensitive.

Challenges, risks and shortcomings

Loss of a trained workforce is perceived as one of the main challenges. In CEE and SEE, emigration of skilled workers to the EU area is a problem. In general, the loss of a workforce to other companies is reported as a major risk, which may discourage companies from engaging in dual system training or deter them from being involved in networking.

In general, the reluctance of companies, which do in-house training, to engage at the system level may emerge as part of their very business interests. This might either be out of fear of losing trained workers or due to a general lack of conviction that linking up with the system could be useful to the company.

Quality assurance is seen as another major challenge, both in companies and in schools as well as at the level of their interaction. It seems most difficult to establish appropriate mechanisms in order to ensure that qualifications are up to date in terms of company requirements.

From the Austrian companies' perspective, low levels of general qualifications of apprentices as well as diverging work cultures are reported to be a challenge in some countries.

Sometimes, local companies receive financial incentives to help them get involved in dual system training. Such incentives, however, are reported to be a risk both at the level of sustainability of company involvement and at the level of labor rights. Cases are reported where incentives were the only motivation of companies to do in-house training resulting in low levels of qualification and leading to a hire-and-fire policy of apprentices.

In the context of a sometimes polemic juxtaposition of school and work-based VET, which is reported mainly for the CEE and SEE regions, withdrawal of funds is perceived as a potential risk by some interviewees. While classic dual system interventions have proven difficult to make a difference at the system level so far, depreciation of the school-based VET-system may lead to disinvestment in this already underfunded sector, causing further loss in quality and putting satisfaction of learners' needs at risk.

Company-ADC relations

Given the key role of the ADA in the trend to transfer the Austrian dual system so far, the relations and negotiation processes between the ADA and involved companies are worth looking at.

The ADA has a short catalog of criteria for VET projects, which applying companies are required to comply with. This includes among others embedment in local structures, national recognition of certificates as well as systemic and broad-based impact. It emerges from the interviews that through these criteria, as well as through the negotiation process with the ADA itself, there is a high level of awareness of key issues such as sustainability and context sensitivity among the Austrian companies involved.

Interviewees from donors, company and supporting organizations reported that negotiation processes were very constructive even though respective imaginaries are different and it takes time to build a common understanding. Some interviewees stressed ADA's accommodating role in terms of high levels of financial support and flexibility in complying with the otherwise binding list of ADC priority countries.

The ADA's administrative requirements were reported to be a burden for companies and to sometimes lack sufficient clarity. Many interviewees expressed the desire for better levels of cooperation and alignment between Austrian key players, including coordination with the other German-speaking countries active in dual system transfer. Some interviewees claimed that the ADA should strengthen its role in the field of dual system transfer in terms of strategy and funds. The ADA's interventions should increasingly aim at building structures.

4.2. Compliance with ADC principles

In this section, the findings are examined as to their compliance with main ADC principles and criteria of developmental impact as set out in the focal paper on VET (Austrian Development Agency 2013) and as they emerge from interviews with ADC staff.

Context sensitivity

Practically all interviewees are convinced that the Austrian dual system as such cannot be transferred to other contexts and that context sensitivity is a prerequisite for any transfer activity. Obviously, while those interviewees working at the system level have a more differentiated notion of context sensitivity, implementing companies tend to conceptualize context as a factor subordinated to their business interests. However, analyzing given contexts through feasibility studies and linking up with given structures (see below) are principles of all interviewees. It is beyond the scope of the present study to examine whether and if these conceptual principles have been translated on the ground.

Sustainability

As a major criterion for ADA, sustainability measures have to be included in all ADA-financed projects. This is mainly reflected in requirements to embed projects in the national education system (recognition of certificates, cooperation with local schools) and to link up with local stakeholders. So far, reported results are mainly positive. An unanswered question, however, emerges from the interviews. No clear strategy is available to key players either in the ADC or in the implementing organizations to ensure sustainability if the respective companies close down their local establishments or refrain from further training.

Generally speaking, pursuance of training arrangements is more likely in those contexts where projects are located in broader structures of training alliances involving a substantial number of companies. In these cases, newly developed apprenticeship occupations are more likely to be applicable regionally or nationally. Decisive factors for a sustainable institutional setting to evolve out of the respective project are the number of companies involved, the level of government backing and successful integration with the education system. Consequently, sustainability is more questionable where projects are confined to one or two implementing companies.

In the few projects without ADA support, sustainability of VET arrangements seems less likely than for ADA-funded projects. Interviews suggest the reason for this to be that strong ADA requirements in terms of connectivity with local education systems are of less importance in non-ADA-financed projects.

Broad impact and systemic effect

At the outset it has to be mentioned that given the overall modest financial volume of ADA budgets the systemic effect is by definition limited. However, it is an ADA criterion for all VET projects to seek maximum systemic impact. This is valid also for business partnerships with VET components. The important question to ask is whether interventions are structurally embedded at the best possible rate in order to allow for potential impact at the system level. This is particularly valid for business partnerships with VET components which are not located in an ADA priority country. For interventions implemented under ADA country programs structural embedment is less of a problem since country programs are elaborated in coordination with partner country governments. Where interviews touch upon the issue of structural embeddedness, results are reported here. However, more research is needed to answer this question satisfactorily.

So far, compliance with the ADA criterion of systemic impact is reported to be satisfactory for ADA-financed business partnerships. However, a number of contradictions have emerged in the interviews pointing to open questions, which are worth describing here. While impact at the system level is of utmost importance to donors, some interviewees soberly question the possibility of such an impact for projects aimed at company involvement. Firstly, these projects are intended to act as role models for decision makers to undertake reforms rather than to have a systemic effect themselves. A second point to be considered is that in-company

training is rarely classic apprenticeship training corresponding to initial VET at upper secondary level. Mostly, interventions are part of adult and further VET, which is in itself a highly fragmented and little structured field making systemic impact difficult.

In order to allow for systemic impact, companies applying for ADC funding are required to link up with local enterprises. Interviews give little and a rather contradictory insight as to whether the involvement of local companies is successful, pointing also to a high level of regional diversity. While some interviewees state a satisfactory degree of company involvement, others suggest that Austrian companies seek cooperation with OECD-based enterprises rather than with locals. For the CEE and SEE regions, some interviewees report that Austrian and international companies actively request cooperation with local enterprises. It is expected that this will lead to an increase in the local companies' involvement in dual system type training in order to comply with qualification requirements. In the present study it was not possible to examine the extent of local company involvement on the ground. This, however, seems highly relevant to evaluate the systemic impact of interventions.

Generally, the remarks on sustainability made above apply also to this ADC criterion. Projects involving a limited number of companies and training a limited number of adolescents risk acting more like an isolated foreign object in an otherwise totally school-based VET system. Broad effect, systemic impact and sustainability appear unlikely.

There is, however, another level of debate on systemic impact, which is rarely touched upon. Even in the case that dual system type training offered by Austrian companies in developing and transition countries can be successfully integrated in local VET systems, this does not ensure a systemic effect in terms of making local VET systems change into dual systems. Structures introduced by Austrian interventions may persist as integrated but isolated islands in traditional school-based VET systems.

In this regard, further research on the systemic impact of different dual system inspired interventions as set out in the preceding chapter is recommendable.

Poverty reduction

Poverty reduction is a basic principle of ADC. As for the poverty impact of dual system interventions a structural contradiction becomes apparent. Interviewees broadly agree that dual system projects are an instrument for middle-income countries rather than for LDCs. They necessitate embedment in existing structures, both educational, economic and of stakeholder dialogue. These requirements are rarely met by LDCs. Moreover, classic dual system training targets adolescents having at least lower secondary education. Consequently, trainees seldom belong to the poorest and underprivileged sections of society.

ADA as major catalyst

The ADA's key role in current Austrian transfer activities emerges as a major result of the present study. This is mainly due to the fact that the ADA's budget line for business partnerships is at present the by far major funding possibility Austrian companies can apply to for their VET activities in developing and transition countries. It appears that through its precise funding criteria, constructive negotiation processes and continued informal dialogue the ADA has helped to establish a quite nuanced and sophisticated level of awareness about transferability of the dual system.

However, it is obvious that some projects seem more questionable than others in terms of developmental impact, sustainability and systemic effect. Consequently, the question arises as to why ADA funds should be the major financing source for company training activities in developing and transition countries. If, as seems the case for some projects, eventually ben-

efits are mainly those of the company, then financing should be provided by Austrian business promotion sources rather than by ADA funds.

4.3. Open questions on wider development impact

This section attempts to analyze and interpret the study's findings applying a development lens that goes beyond ADC's perspective, but which is informed by the critical theoretical approaches discussed in chapter 2.3. The main dimensions are political economy approaches asking whose interests are served by the respective processes as well as the incipient discussion on a more human-centered notion of VET in contrast to its traditional embeddedness in a 'productivist' worldview.

Dominance of economic considerations

In most, though not all interviews, an 'economized' perspective prevails. At the level of practice, the underlying rationale of most key players to engage in dual system transfer activities is connected to economic, not educational considerations. While for the involved companies and the WKÖ this arises from their mandate, it should be less obvious for the ADC. However, the ADC's engagement with dual sector interventions has to be seen in connection with the prioritization of private sector development and the promotion of private business cooperation. A coherent strategy for dual sector interventions combining perspectives from the economic and the education sectors is lacking. Consequently, there is reason to suspect that the high degree of compliance with the ADC's criteria is primarily the result of the involved staff's personal commitment rather than the outflow of an informed and evidence-based strategy.

At the conceptual level, the dominance of an 'economized' approach is visible in an often, though not always, present underestimation of the strong role of school-based VET and full-time VET schools for the Austrian system's overall success. The dual system is lauded for its high share of in-company training and its responsiveness to the needs of enterprises. Rarely are its educational weaknesses given sufficient attention in terms of neglecting general competences and lack of social permeability. As a third aspect the underlying social contract is frequently reduced to the involvement of employers in VET. In a transfer context this may lead to an economically biased view of the dual system.

Exaggerated faith in VET

Most interviewees show a firm belief in VET as a major instrument for development both in Austria and in the developing world. To a certain extent, awareness is lacking that VET, as any other educational intervention, may have little to detrimental effects in adverse circumstances. This exaggerated faith in VET may be attributable to the generally high social recognition of VET and the dual system in Austria. It does have a number of implications at various levels.

At the level of economic development, exaggerated faith in VET may lead to an insufficiently sophisticated concept of the developmental role of private business. This refers to a more general debate on private sector development. As pointed out by Küblböck and Staritz (2015), interests of international enterprises do not necessarily correspond to those of the local private sector, not to mention national development strategies. While there are indeed a number of associated potential win-win-situations, e.g. knowledge transfer and local spillovers, conflicts of interest may arise as to the distribution of gains along the chain, tax issues, social security and the facilitation of local spillovers, among others. Another important issue is that according to analyses of PSD-flows a major share of funds goes to companies in developed countries (Küblböck/Staritz 2015:16). Likewise, research findings point to the fact

that a high number of projects involving international companies would have been carried out without public funding (see above).

It is obviously beyond the scope of the present study to assess the projects involving Austrian enterprises in developing countries as to the above-mentioned potentials and risks. But the point here is to draw attention to the necessity of a highly differentiating discussion on private sector development and the role of international enterprises. In terms of the current study, a risk emerges from some interviews. Since the positive development impact of VET, in particular dual system inspired VET, is taken for granted there seems to be no need to consider potential detrimental effects at other levels. If the assumed higher quality of VET provision by international enterprises is the main factor of consideration, shortcomings at the level of tax policies, for example, labor rights, local structures and distribution of gains could become aspects of secondary importance.

Secondly, exaggerated faith in VET may again lead to a distorted conception at an educational level. As set out in chapter 2.3, it seems questionable that VET alone can lead to more employment and better productivity of local economies in the absence of appropriate economic, industrial, social and labor market strategies. In the interviews, awareness that VET needs to be embedded in a wider development strategy clearly emerged at the level of projects and programs. However, what is referred to as the supply and demand side of skills in the academic debate (cf. chapter 2.3.) may not have sufficiently impacted at the conceptual level. Among others, this is reflected in the fact that many interviewees conceptualize the main flaws of VET systems in developing countries as lacking labor market connectivity and as being too theoretical. While these may indeed be shortcomings of local VET systems, it would be simplistic to attribute to them a general failure of these systems in delivering employment and productivity gains. In this context, the risk is twofold. On the one hand, it may lead to neglecting appropriate support for the above-mentioned strategies. On the other hand, 'blaming the schools' for wider systemic dysfunctions could entail further withdrawal of public funds from an already underfunded sector.

A third level of concern is culture. There is little awareness among Austrian players that VET systems are culturally not neutral and that consequently VET transfer may include the transfer of social and cultural patterns. Mayer (2001) elaborates on how German VET support in developing countries has for decades transported a Western concept of modernization and the gender stereotypes inherent in the German VET system (see page 15). Austrian organizations with a long history in VET provision report similar facts insofar as training in technical and industrial occupations was for a long time the most valued type of VET support for developing countries. While donors and private players in development cooperation seem to have generated culturally much more sensitive approaches to date, in particular at the level of gender, this does not seem applicable to all players. For instance, some interviewees report the different work culture in target countries to be a problem. Training of locals in Austrian standard soft skills is often recommended as part of the solution; rarely, however, Austrians working in target countries receive any form of introduction to local work culture.

From a more general perspective, the questions raised by Mayer (2001) seem to be valid even today. International development cooperation has adopted concepts such as country ownership and alignment with national policies, which appear to strongly inform ADA VET practices. Consequently, interventions are supposedly much more context-sensitive than in earlier periods. However, this does not compensate for the transfer of underlying concepts of economic development, which are still prevalently those of Western modernization. Against the background of globally growing concerns of ecological sustainability and social equity, to name but a few, this appears to be problematic.

Biased conception of the *Berufskonzept* and the underlying social contract

Last and most importantly, most interviews show a somewhat biased conception of the *Berufskonzept* and its underlying social contract, as elaborated in previous chapters. In some interviews, the dual system is equated with its strong component of work-based and practical training. In contrast, in most interviews, there is indeed awareness that beyond the duality of training sites the institutional setting of stakeholder dialogue is crucial for the functioning of any dual system approach. However, the societal implications of this institutionalized stakeholder dialogue is hardly conceptualized. As set out in chapter 3, the Austrian dual system of apprenticeship is part of a much wider system of social contract between key players including employers' as well as workers' representatives and government bodies. This system frames all key aspects of Austrian society and can be interpreted as a major factor of social and economic stability. Yet, in the practice of dual system transfer the social contract's complexity is commonly reduced to a stakeholder dialogue, which seeks the involvement of employers in VET. Hence, labor market connectivity seems to have become the ultimate rationale of the stakeholder dialogue, while the employees' (or the learners') interests are often overlooked. This may also be due to the lack of strong representative bodies. It has, however, also become a conceptual flaw of the current discussion accompanying dual system transfer.

While it goes without saying that the Austrian model of the above-described social contract cannot be transferred as such, it is recommendable that its centrality be considered in dual model transfer activities. Active integration of the employees' interests in stakeholder dialogue should be part of transfer activities as well as support for the establishment of adequate representational structures. From an educational point of view this means strengthening the learners' perspective. Participants in dual system training arrangements have to be considered not only as trainees, but as learners whose rights to receive an education that goes beyond immediate employability on the labor market should not be forgotten. While important in terms of a general rights-based approach, this perspective is obviously crucial for adolescent learners at the level of upper secondary education.

4.4. Recommendations

In a view of enhancing the developmental impact of transfer activities related to the dual system, the following recommendations emerge.

Strengthen research and a culture of discussion

Further research on the trend to transfer the Austrian dual system is highly recommended. As to the ADC, it is recommended to evaluate dual system and other VET interventions as part of business partnerships with a particular focus on sustainability and systemic impact. In addition, a general evaluation of the ADC's activities in the VET sector is advisable.

Beyond the realm of development cooperation, strengthened academic research on VET is desirable, both applied, but even more so basic research. This might help to balance the at present prevailing economic and utilitarian VET conceptions in the public discussion.

More generally, it would be desirable to invigorate a culture of discussion and reflection on VET in development cooperation and beyond. In particular, lessons learnt from German development cooperation on the transferability of the dual system should be discussed among Austrian key players. In the perspective of strengthening a human centered and rights-based notion of VET, a more theoretically informed public discussion reflecting on underlying VET conceptions would be valuable as well as a critical discussion of the Austrian dual system.

Establish structured stakeholder dialogue in Austria

Findings from this study indicate a constructive, but informal and unstructured dialogue among Austrian players. As the transfer of the dual system is likely to gain both economic and political weight in the near future, a more formalized and structured stakeholder dialogue appears to be in the interest of all Austrian key players.

As to ADC, there is obviously an important role to play in this dialogue thanks to its long-standing experience in the VET subsector in developing countries. Lessons learnt in national and international development cooperation, above all the importance of context sensitivity and local ownership, are important messages to be shared with other Austrian players.

In order to strengthen the perspective of learners' rights it might be advisable to seek dialogue with the Chamber of Labor and trade unions, even though at present these organizations are not involved in transfer activities. Also, NGOs traditionally focusing on VET activities in developing countries should be integrated in the dialogue.

ADC should develop a coherent strategy for dual system interventions

The likelihood of increasing volumes in dual system export activities calls for a more strategic approach by the ADC. In order to ensure developmental impact, a coherent strategy combining both economic and educational perspectives is recommended. Following the principle of Policy Coherence for Development, an overall Austrian strategy appears desirable.

Diversify funding opportunities

Against the background of probably rising volumes of transfer activities mostly in transition countries, the diversification of funding sources is advisable. Here, those Austrian key players charged with business promotion, such as the BMWFW and WKÖ, are particularly called upon to react to the increasing demand for financial support by companies willing to establish dual system type training facilities in transition countries.

ADC should strengthen its focus on structural interventions and policy dialogue

Given the imminent risk of company interests outweighing developmental impact in a number of business partnerships with dual system training, it appears advisable for ADC to enhance its focus on the structural level through country programs. Where Austrian companies' VET projects can be aligned with ADA country programs funding through business partnerships appears appropriate, while standalone projects in non ADA priority countries call for critical examination. Support for Austrian companies should be enhanced at the policy and technical level, while other Austrian players should be encouraged to offer funding sources.

Enhance dialogue and coordination between German-speaking countries

Against the background of similar VET traditions and a similar focus within development cooperation in the VET sector, enhanced dialogue and coordination between German-speaking countries is advisable. Lessons learned from others, in particular German development cooperation, should be shared, current trends in VET and education export discussed as to their implications for development cooperation and current activities in partner countries better coordinated.

5. Conclusions

This study represents the attempt to analyze the developmental impact of the current trend to transfer the Austrian dual system of apprenticeship to developing and transition countries. Since the trend is only incipient and research is scarce, the findings of the present study have to be considered as preliminary. Further research is highly recommended.

The main findings of the study include the key role of the ADA as the main donor of present Austrian dual system activities in developing and transition countries. Thanks to this central role the ADA has contributed to a quite sophisticated conceptualization of dual system transfer among Austrian key players based on the centrality of context sensitivity. Interventions cover a broad range from measures at the structural level as part of ADA country programs through dual system type training facilities implemented by private enterprises in developing and transition countries. It is the ADA's perceived role to act as a catalyst in order to embed current projects in existing structures, thereby enhancing their systemic impact. To date, it seems that in some cases systemic impact is more likely than in others. This requires, however, more in-depth evaluation. Although a major goal for the ADA, sustainability appears to be an open question. In general, the risk of developmental impacts being outweighed by the economic interests of involved companies is omnipresent.

Economic considerations prevail at the conceptual level, while the educational perspective tends to be subordinated. Among other aspects, this is reflected in an 'economized' perception of the Austrian dual system with the strong contribution of full-time VET schools to the system's overall success often being overlooked. Another dimension is a reduced conceptualization of the social contract underlying the Austrian dual system. Involvement of private enterprises is perceived as a main criterion, while much less emphasis is put on the other social partners representing the interests of learners and future workers.

There is reason to believe that the trend to transfer the Austrian dual system to developing and transition countries will increase in the near future both within development cooperation and beyond. Consequently, from a developmental perspective strengthening the strategic and systemic dimension is recommended in order to prevent business interests from outweighing developmental considerations. Against the background of the international debate calling for a more human-centered notion of VET it is advisable to invigorate educational considerations in order to balance the current economic bias at the conceptual level.

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Annex

List of interviewees

Bachinger, Richard, OMV Aktiengesellschaft

Borufka, Nina, Hilfswerk Austria

Fässler, Julian, ALPLA Werke Alwin Lehner GmbH & CO KG

Findl, Gertraud, Austrian Development Agency

Grininger, Michael, ENGEL Austria GmbH

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Heiserer, Reinhard and Velik, Hannes, Jugend eine Welt

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