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Companies Engaging in Dual VET: Do Financial Incentives Matter?

Approaches in Austria, Germany, Liechtenstein and Switzerland Options, Pros and Cons for Reform Processes

Discussion Note

ibw Austria –
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Editor:
Donor Committee for Dual Vocational Education and Training (DC dVET)
Hardturmstrasse 123, 8005 Zurich
www.dcduvalvet.org

Author: ibw Austria – Research & Development in VET, Kurt Schmid

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Gender-specific terms and formulations apply in principle to both genders.

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1. Introduction

During recent years dual vocational education and training (VET) has gained broad international interest for a number of reasons. One of these reasons and a main feature of dual VET systems is the fine-tuned cooperation between the public and business sector in particular areas. One area is funding, where costs are typically shared between both sides; companies bear the cost of practical (company-based) training and the public sector funds public VET schools and the overall administration of a dual VET system. As companies typically pay the largest part of the total training costs in dual systems, this leads to the question, "why are companies willing to incur these costs, i.e. why do they engage in dual VET?"

It is generally assumed that companies benefit from their engagement in dual VET for different reasons[1]. They benefit, for example, from the productive work of apprentices (which in many cases even exceeds the total costs of training) or by saving hiring costs because of having well-trained future staff in-house. Such advantages would suggest that the provision of incentives for companies to engage in dual VET (financial and in-kind) is unnecessary.

However, there are at least two reasons that call for further discussion on this topic in the context of development cooperation. Firstly, frame conditions and general understanding of private and public stakeholders in partner countries are often very different from those in countries with existing dual systems. Secondly, a closer look at existing dual systems reveals that even these systems contain specific financial mechanisms (such as subsidies and training funds) that support companies in their engagement in VET.

Against this background the following questions arise:

- Economically speaking, are incentives necessary or do they cause unwelcomed distortions?
- Are incentives reasonable in specific cases?
- What kind of incentive schemes already exist?
- To what extent are the conclusions drawn about the existing incentive schemes of DC dVET member countries transferable to partner countries of development cooperation?

This discussion note aims to foster a well-informed and differentiated discussion of the topic. It offers basic information and outlines a set of key questions in order to help structure the analysis of each specific country case. This paper predominantly deals with the supply side of apprenticeship training and comprises the following three chapters:

- ✓ Chapter 2 outlines basic design options for financial subsidies (without assessing their potential advantages and drawbacks).
- ✓ Chapter 3 reflects on the pros and cons of providing financial support for training companies and summarises the key questions to be taken into consideration when making an assessment.
- ✓ Chapter 4 presents the current situation in selected countries; more specifically, on the one hand, it provides an overview of the approaches that are applied in the dual VET systems of the DC dVET member countries (i.e. Austria, Germany, Liechtenstein and Switzerland) and on the other, it briefly describes the experiences and approaches of two countries that have recently introduced dual elements or dual sub-systems.

In this discussion note the following definitions apply:

- *Incentives:* Any kind of stimuli intended to foster the engagement of the business sector in VET.
- *Grants:* Financial means used for defined purposes which do not have to be reimbursed.
- *Subsidies:* Many forms of funding including direct payments, tax breaks, tax abatements etc., which are usually provided to (partially) offset costs over a longer period of time.
- *Levies:* (Usually compulsory) financial contributions by a company (e.g. to a training fund or a public body, such as an employer organisation).

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[1] Euler (2018, p.33) outlines a list of arguments highlighting the reasons why companies engage in dual VET. These are arguments on cost-benefit, productivity, investment, screening, relevance, employee retention, reputation, social responsibility and stability.

2. Design Options for Financial Subsidies

Chapter 2 outlines the possible basic features of financial subsidies[2] (without discussing their potential advantages or drawbacks).

2.1. Direct Subsidies

For Training Companies

- *Basic subsidies*: Training companies receive a sum of money per apprentice or per completed training/certification. The amount may differ depending on training duration (i.e. falling with years/months of training) and/or the apprentices' contribution to productive work.
- *Criteria-based subsidies*: Training companies receive subsidies if they meet specific criteria; they are (partially) reimbursed for their investments. The basic aim is to foster training quality or address target groups.

For Apprentices

Public money paid to apprentices to cover, for example, living and transport costs or to attract certain target groups to start an apprenticeship (girls in "non-traditional" female occupations etc.).

2.2. Indirect Subsidies

Possibilities for indirect subsidies include:

- *Costs for training* activities are *treated as expenses* that reduce the company's taxable profit. Additional tax exemptions can be offered for certain investments.
- *Waivers* regarding non-labour wage costs, such as sickness, unemployment and accident insurance for apprentices.
- Conceding *preferential treatment in public tenders* to companies offering apprenticeship training.
- Financing activities that do not directly accrue to training companies but *foster initial VET* in a broader sense (incl. promotion of VET, organising VET fairs or developing occupational profiles).

2.3. Elements of Training Funds

Financing

Funds have to be financed either by taxpayers and/or via other contributions:

- *Funds with employer contributions:* Companies with at least one employee may or are obliged to pay a certain amount into the fund;
- *Tax-based funds:* Funds are financed by taxpayers' money. Those companies who train receive a subsidy;
- *Mixed funds:* A combination of contributions by employers and public funding.

Status

Funds can be either compulsory or voluntary:

- *Compulsory:* All companies (of a sector and/or region) are obliged to make a financial contribution;
- *Voluntary:* Companies are free to join the fund.

In both options, usually only those companies which train young people are subsidised. Some funds are earmarked to finance activities like governance, development and promotion of VET or apprenticeship training in a broader sense, as is the case in Switzerland. Overall, voluntary funding is often preferred, as it is based on the self-interest of the companies involved. Compulsory funds can create the impression of a penalty for companies. However, in some situations compulsory contributions may make sense, especially if they have been negotiated by employer representative bodies.

[2] For additional information about basic design options see Kuczera (2017) or Dorléans (2018).

Coverage

Funds can cover either the whole economy, specific regions and/or sectors:

- *Overall funds:* Companies from all sectors may or are obliged to contribute to the fund.
- *Regional funds:* Companies from all sectors in a specific region (federal state, canton etc.) may or are obliged to contribute to the fund.
- *Sector-specific funds:* Only companies of a specific sector may or are obliged to contribute to the fund.

3. Pros and Cons of Providing Financial Incentives to Training Companies

Chapter 3 presents some basic considerations on the pros and cons of providing financial incentives to training companies and outlines a set of key questions.

3.1. General Considerations

Experience gained in Austria, Germany, Liechtenstein and Switzerland[3] shows that company self-interest is the fundamental motive for their engagement in training schemes and that financial subsidies offer marginal benefits and only have a marginal influence on the decision whether to offer training. However, limited financial subsidies may occasionally be justified.

Market Failure

From an economic perspective, financial subsidies are justified if there is a market failure, i.e. if training companies cannot recoup their investment[4]. Market failures and their resulting underinvestment in training at macro level may emerge due to poaching, the provision of general skills (in addition to company specific skills), information asymmetries and uncertainty of outcomes. Empirical research for Switzerland, Germany and Austria provides evidence that many companies breakeven by the end of the apprenticeship (e.g. Schoenfeld et al. 2016; Strupler & Wolter 2012, Moretti et al. 2017). However, there are also others who do not; for them, retaining staff they have trained for a certain period of time after they have completed their training is essential. According to Wenzelmann (2012, p. 127) companies from the first group (break-even during training) can be characterised as having a production motive to offer training and those from the second (no break-even during training) as having an investment motive. Financial incentives may help to favourably change the cost-benefit ratio for some companies. Therefore, from an economic point of view, financial subsidies are only justified for training companies that have an investment motive and are unable to retain their apprentices after training. Obviously, it is almost impossible to find suitable ex-ante indicators as to which type of motive is central for a company and therefore which company should be subsidised.

Cost-Benefit Considerations

It has to be kept in mind that financial subsidies to companies should not undermine the basic cost-benefit considerations of companies[5]. Companies should train young people mainly because of their self-interest in future skilled workers/employees. However, if subsidies are so high that they cover a high share of or indeed all training expenses, companies will primarily train because of the subsidies available and not because of their self-interest. This undermines the link between qualification demand and supply, and risks creating considerable problems regarding the quality of work-based

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[3] Moreover, OECD (2018) reviewed relevant research on an international perspective.

[4] For a brief list of expenses (cost) and benefit factors see Euler (2018), p. 31.

[5] Empirical research for Germany, Switzerland and Austria shows the positive net benefits of these investments for training companies. With respect to non-training companies, one must distinguish between those who are aware of potential positive effects of training but due to company-specific situations, training is too expensive and those who under-estimate positive effects of training because of inadequate information.

training. Obviously, there is an in-built dilemma as subsidies should actually induce a change in behaviour (i.e. induce companies to train), but at the same time, they should not distort the general training motive of companies (i.e. companies should train for the sake of self-interest and not because of public money). These contradictory effects need to be carefully balanced.

Training Quality and Possible Trade-Offs

Limited and carefully designed financial subsidies (preferably criteria-based) may be justified if they foster training quality[6]. Co-financing high start-up costs (including training of instructors, building-up training setting/equipment etc.) might induce companies to enter dual VET. However, the following shortcomings of subsidies (even the most well-designed) still have to be considered:

- They entail windfall gains (i.e. a company would have trained young people irrespective of any subsidies, therefore public money is "wasted");
- There is a trade-off between accuracy, criteria complexity (and therefore information and/or transparency) and administrative costs: i.e. the more accurate a subsidy scheme is designed, the higher the information and administrative costs;
- Once established and broadly used, subsidies are politically very hard to overcome and to phase out (even if only designed for temporary phases, e.g. for a 5-year transition period).

Due to these many potential pitfalls, Austria and Switzerland have only limited direct financial subsidies for training companies; Germany and Liechtenstein almost none.

Key questions to be considered:

- How are costs and benefits distributed between the state, the business sector and the training companies?
- How severe are market failures (such as poaching) and uncertainties in your context?
- How, if at all, can financial incentives be designed so as not to distort the fundamental investment motives for training companies?
- How can design complexity (needed for accuracy) and potential countereffects (administrative and information costs) be balanced?
- If any, what share of windfall gains will be socially and budgetarily acceptable in your context?

3.2. Effects of Financial Incentives on the Engagement of Companies in VET

General Effects

One of the key challenges in a reform process is how to motivate companies to engage in VET by providing company-based training. A recent OECD report (OECD 2018, p. 47ff) states that although financial incentives have been used in many countries to encourage employers to start apprenticeship training or to offer more apprenticeship positions, the overall effects are either marginal (in case of universal incentives such as offering all companies a fixed sum for taking an apprentice) or very much depend on the design of the incentive. Using financial incentives to trigger companies to initiate apprenticeship training raises the conceptual questions as to what defines a "first-time training company"? Is it a company that offers training for the first time ever or a company that offers training in an occupation not previously offered? How long does a company have to be a non-training company to again be considered as a first-time training company? How to deal with company mergers where at least one of the companies has already offered training in the past? Similar reasoning applies for subsidising "additional" training places, i.e. how are they defined? Moreover, financial incentives may have unintended effects, e.g. a re-distribution of training offers for certain groups whilst leaving the overall training volume unchanged or by being more advantageous for larger companies than for smaller ones. Another important issue for the effect of incentives (particularly universal levy schemes)

[6] As argued later, another, and often more suitable way to foster training quality, is to provide direct local support by providing information, consultation and/or other instruments supporting training companies in their training efforts.

is whether they are perceived by companies as a tax (with no company control over how the money is used) or as a fair re-distribution scheme.

Evidence concerning the problems of subsidising "additional training" can be derived from the Austrian system; from 2004 - 2008, each Austrian training company received €8.400 per additional training place (the so-called "Blum Bonus"). However, this high financial incentive yielded considerable windfall gains as more than 70% of the additional apprenticeship places would most probably have been offered anyway[7] (Wacker 2007).

Financial Incentives as a Measure to offset Financial Losses Caused by Poaching

A second topic always relevant in reform discussions is poaching, i.e. trained skilled workers leaving the training company for employment at a non-training company. This free-rider problem may discourage companies to offer apprenticeship training and at a macro-level may result in an underinvestment in training. Research into the German system shows that the risk of poaching is negligible, as it affects only a small portion of companies and does not deter training companies from offering apprenticeship positions in the long run, even if they have been subject to poaching in the past (Mohrenweiser et al. 2018). Yet, this may only be a typical outcome in a system like the German system, where many companies already train young people. Whether this result still holds true for countries with no such training tradition is yet to be investigated. Moreover, if poaching is a relevant phenomenon, there are at least two ways to dampen its negative effect. One option is to provide financial incentives to training companies by establishing training funds[8] to compensate them, at least partly, for their investments. A second option is to impose binding labour-law clauses in work contracts to ensure that trained workers are obliged to stay for an agreed period of time at the company where they received their training. If they do not stay, they will be obliged to reimburse the company for part of their training costs. The effectiveness of the last-mentioned measure has been confirmed by simulation models for England, Italy and Spain (Muehlemann et. al 2018, Wolter & Joho 2018, Wolter & Muehlemann 2015). These models have shown that the positive net-effects of training very much depend on three factors: the wage paid to apprentices during training, the length and quality of training,[9] and the probability that a trained person will remain at the training company afterwards. The authors conclude that "… incorporating potential benefits to firms after training has ended would make the training models viable in most cases and for most occupations."

Non-Financial Aspects

Most of the arguments discussed so far have been concerned with the financial aspects of subsidies. Apart from these aspects, there may be other important reasons why financial subsidies (if well-designed) make sense. They could be a signal that training activities are socially preferable, particularly as training has positive social externalities. Additionally, a sense of fairness may be perceived in a redistribution of the costs, or at least some of the costs, between training and non-training companies. Although the focus of this note is on financial incentives, the issue of non-participation of companies in training should be further considered from a broader perspective. Are really a lack of financial means or a non-favourable cost-benefit situation the only reasons why so many companies in certain countries choose not to train? Fact is that non-financial arrangements or the general design of VET can often be obstacles which influence the decision to offer training even more (see e.g., Schmid 2018 for Bosnia and Herzegovina). Such obstacles, for example, are bureaucratic procedures; inflexible time-arrangements for training between schools and companies; student placement-regimes that give

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[7] Due to high windfall gains, effective costs for subsidising real additional training places rise to about 28.000-38.000 €. I.e. about 4 times the amount earmarked for subsiding a new apprenticeship position. Therefore: the higher the windfall gains, the higher the actual effective costs for subsidising a new apprenticeship position.

[8] Redistributive approaches (such as training funds or levy grant systems) are suitable options for the formal economy, but probably not for the informal economy (see Euler 2018, p. 32).

[9] The effect of raising training quality on cost-benefit ratio is ambiguous: On the one hand, higher training quality raises the productivity of the apprentice and therefore the share and amount of their productive work. However, often higher training quality means longer learning phases off the workplace (and higher investment into training e.g. in qualification of instructors and/or learning material/equipment) which clearly increases training costs.

companies no option to choose among candidates; lack of suitable candidates; too much interference from schools in company training (as they often still carry the overall responsibility for VET programmes); excessive supervision roles/power given to schools; occupational profiles and curricula that do not match with the qualification needs of companies. Wolter (2016) sheds further light on the systemic aspects that influence whether a company decides to offer training, such as minimum wage settings or the general structure of education systems (e.g., the number of graduates from other tracks, such as universities, who are available on the labour market "free of charge", when seen from a company's perspective).

In summary, the success of financial incentives to encourage companies to engage in training will be limited if other non-financial reasons are present which discourage them from doing so.

Key questions to be considered:

- Does money matter? What are the fundamental reasons why companies in your country do not train? Would financial incentives address these reasons?
- Is poaching really undermining the business sector's interest in dual VET? Would the establishment of training funds be a solution?
- Is it possible to design financial incentives in such a way that they result in the creation of additional training places?

3.3. In-Kind Incentives

As described, financial (preferably criteria based) subsidies can, to a certain extent, be used as an incentive when trying to encourage companies to start training and/or to foster quality in work-based training. Moreover, in-kind incentives can also be provided in form of centralised content development and distribution, through which companies can save training costs. This being said, financial or in-kind incentives have to be designed carefully and should not be so high that they distort the self-interest of companies to offer training.

The majority of incentives should preferably be provided in-kind, i.e. by building up support structures for companies to provide help and concrete assistance, to enable them to deliver high quality work-based learning (see also OECD 2018, p. 51f). Examples for this type of in-kind incentive are local offices ("apprenticeship offices") providing information regarding regulations and procedures; support for companies in finding the most suitable candidate for a particular apprenticeship position; creating an infrastructure to train the trainers/instructors; organising final exams and the like. Of course, these activities have to be financed; interestingly, in Austria and Germany employer representative bodies provide this in-kind support (financed by a training fund). In Switzerland these activities are organised either in a sectoral setting (financed by voluntary or obligatory sectoral levy grant systems) or in a cantonal setting (financed by a cantonal training fund).

Finally, it is important to keep in mind that not every company is ideally suited to train apprentices! In short, only companies that meet the following criteria should train; they should

- have a genuine interest in doing so (i.e., future skilled workers);
- have the means to do so (i.e., can fulfil the training content of the occupational profile, have qualified instructors and a have sound financial base);
- have either a production or investment motive.

Key questions to be considered:

- Which kind of concrete support and assistance is needed for training companies in your context?
- How and by whom will this support be organised, provided and financed?
- How much funding is required to ensure sustainable funding of these in-kind activities?

4. Examples of Financial Incentive Approaches

In the following, we briefly outline the financial incentive concepts that exist in Austria, Germany, Liechtenstein and Switzerland. All four countries have well established dual systems with a substantial number of companies providing training (between 12% and 30%) and a high proportion of adolescents in a dual apprenticeship (35% to 60% of an age cohort) at upper-secondary level. The fundamental financing structure is characterised by co-financing; companies finance the training[10] and wage of the apprentices, whereas public authorities finance the part-time vocational schools. Additionally, in all four countries favourable financial framework conditions and other incentives exist to support training companies (and apprentices). However, the method of financing (levy or funds), the applied mode and criteria (general or criteria-based), the rationale for providing the incentives (e.g. inducing companies to train, raising training quality, addressing target groups etc.) as well as the scope of their application (to all training companies, to sectors, to companies that fulfil certain criteria) differ to a certain extent in each country. Some current examples of financial incentive concepts are outlined below[11]. During the last decade, several countries made efforts to introduce apprenticeships, apprenticeship-type elements or even dual sub-systems into their VET systems; insights show that different approaches as regards to financial incentives for training companies were followed.

4.1. Austria

Direct Subsidies

Since 2016, every training company receives a *direct public subsidy for each apprentice*. This basic subsidisation is linked to the apprenticeship wage and is regressive over the training period; training companies are reimbursed three monthly apprenticeship wages in the first training year, two during the second year and one in the third (and fourth) training year. The basic rationale behind this design is to compensate training companies for the low productivity of apprentices in their initial training years.

Additionally, training companies may be eligible for *criteria-based subsidies* in the form of grants[12]. These incentives are earmarked to:

- *foster quality* e.g. through coaching, building training alliances, providing extra preparation for the final apprenticeship examination (FAE) or the qualification of trainers, and/or
- *address specific target groups* and/or occupations e.g. by employing apprentices from inter-company vocational training centres, giving equal access to girls or providing training for inclusive/integrative programmes etc.

Both types of incentives are financed by the Austrian Insolvency Remuneration Fund. Traditionally, this fund pays outstanding wages in the case of company insolvency; consequently, it is financed entirely by companies themselves (0.35% of the total sum of wages; 0.2% of which is earmarked for direct subsidisation of training companies). In essence, it is a compulsory training fund which redistributes part of the levies received from all companies to those companies that train apprentices.

Indirect Subsidies

Additionally, training companies get *indirect financial subsidies* by:

- *waivers* in the area of non-labour costs, i.e. employers do not have to pay their part of social security contributions for sickness, unemployment and accident insurance for apprentices.
- *tax deduction,* i.e. setting off training expenditure against revenue, which leads to a reduction of the company's taxable profit.

[10] This includes in-company instructors and often additional sector-specific courses (e.g. at inter-company training centres).
[11] The examples have been selected based on insights of the author himself.
[12] Companies have to apply for these criteria-based subsidies at the local apprenticeship offices. They have to prove their actual expenditure in order to receive partial reimbursement, up to a limited amount. https://www.wko.at/service/bildung-lehre/Gesamtuebersicht_Foerderarten_lehre.html.

Sector/Region Specific Training Funds

In some sectors and/or regions *additional training funds* exist:

- Since 1982, in the construction sector a third learning site, the so-called inter-company learning centres (BAUAkademien), is financed by compulsory levies for all companies in this sector.
- In western Austria (Bundesland Vorarlberg), a voluntary training fund exists in the electro- and metal industry (VEM). All participating companies voluntarily pay in a levy of 0.24% of the total sum of wages. Training companies get a one-off bonus for each of their apprentices who are successful in a skills competition.

Apprentices

In Austria, apprentices may also be eligible for *personal subsidies*. These are financed by funds from the labour market policy budget.[13]

Austria's Subsidisation Approach in Brief: Compulsory levy-based training fund: A combination of a basic subsidisation scheme (regressive over the training period) and additional criteria-based subsidisation (partial reimbursement of extra costs for training). Sector based training funds: Rare and diverse.

4.2. Germany

Due to the federal structure of Germany, financial incentives for training companies vary considerably at national level and between the individual federal states (*Bundesländer*) and chambers[14]. Basically, most of the financial incentives are paid by employment agencies or job centres to educational institutions. The aim of these services, which are free of charge, is to offer support to training companies to enable them to assist apprentices, those having difficulties finding an apprenticeship and young people with special learning needs (e.g. *Ausbildungsbegleitende Hilfen (abH)*[15]or *Assistierte Ausbildung (AsA)*)[16].

Nationwide Incentives

There are only *two nationwide financial incentives* for companies[17]. Both are in the frame of active labour market policies for specific target groups and are financed by the Federal Employment Agency (*Bundesagentur für Arbeit - BA*[18]):

- *On-the-Job Entry Qualification* (*"Betriebliche Einstiegsqualifizierung"*), this is a kind of internship (duration between 6 and 12 months) for young people without any apprenticeship position. The BA pays a grant contribution (max. €231/month) to the internship wage and part of the social security contributions (about €120/month).
- The second nationwide incentive is geared towards supporting companies that *train people with special needs* (reimbursement of investments in handicapped-accessible training and workplaces as well as the cost for an up to 3-month probation period[19]).

Public-Private Schemes

In Germany, two "hybrid" subsidisation schemes combining public and private funds exist - one for inter-company vocational training centres and one for training alliances:

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[13] For details see https://www.ams.at/unternehmen/service-zur-personalsuche/foerderungen/foerderung-der-lehrausbildung.

[14] The „apprenticeship toolbox" – an online tool comparing the apprenticeship systems of Denmark, Austria, Luxembourg, Switzerland and Germany – provides more information on stakeholders and organisational aspects of apprenticeship training https://www.apprenticeship-toolbox.eu/social-partners-companies/involvement-of-social-partners.

[15] See https://con.arbeitsagentur.de/prod/apok/ct/dam/download/documents/dok_ba012995.pdf (in German).

[16] See https://con.arbeitsagentur.de/prod/apok/ct/dam/download/documents/AssistierteAusbildung-Betrieb_ba014812.pdf (in German).

[17] These incentives are offered for apprenticeships as well as, generally, for "regular" employment.

[18] The BA itself is financed out of the social security contributions for unemployment, both from employees and employers as well as with a certain amount of federal funds.

[19] https://con.arbeitsagentur.de/prod/apok/ct/dam/download/documents/dok_ba014698.pdf

- The first scheme is earmarked for the so-called third learning site in apprenticeship training, *the inter-company vocational training centres* (*überbetriebliche Berufsbildungsstätten - ÜBS*). Their goals (and sometimes criteria) are defined at a national level, although subsidies do differ according to the institution giving the subsidy. Training companies have to pay for these practical-oriented courses and training programmes, but receive grants from the state, the federal state, and/or the chambers.
- The second scheme is for *training alliances* (*Verbundausbildung, Ausbildungspartnerschaft*). Companies are partly financially compensated for the additional costs of such training alliances due to the increased organisational and administrative workload. The subsidy is a one-off payment per training place in a training alliance.

Sector Specific Training Funds

Some sectors have their *own training funds*; for example, SOKA-Bau in the construction industry, where all companies have to pay in a fixed amount and all expenses for the ÜBS as well as a high proportion of the expenses of training companies are re-financed. In principle, the subsidy is similar to Austria's general subsidisation, i.e. linked to the apprentices' wages and regressive over the training period, however the amounts are much higher and more front-loaded: usually ten monthly apprenticeship wages for the first training year, four to six monthly wages for the second year and approximately one monthly wage for the third year.
There are a number of *financial subsidies at a national level*, usually geared towards training for specific groups, including:

- Training credits for weak learners or adolescents with a problematic social background;
- Fixed grants for training costs of weak learners;
- Partial reimbursement of apprenticeship wages for mature applicants;
- Time-limited absorption of costs for apprentices taken over from bankrupt companies.

Unfortunately, there is no nationwide information platform in Germany with a comprehensive list of all financial subsidisation options for training companies.[20]

Indirect Subsidies

Additionally, training companies receive indirect financial subsidies by being able to *set off training expenditure* against revenue, thereby reducing their taxable profit.

Germany's Subsidisation Approach in Brief:
Broad variety and heterogeneous approaches in schemes provided at national, federal state and chamber level. The only nationwide financial subsidy is for inter-company vocational training centres (*überbetriebliche Berufsbildungsstätten ÜBS*), although grants differ according to subsidy providers. In summary, financial subsidisation seems to be of minor relevance for training companies in Germany.

4.3. Liechtenstein

Liechtenstein's Subsidisation Approach in Brief:
No financial subsidies exist. Training companies are supported by the initiative "100pro! berufsbildung liechtenstein" that provides support in-kind (e.g. information, training alliances, coaching, see https://www.100pro.li).

[20] For the demand (i.e. apprentice) side, a useful overview can be found on the following webpage: https://www.bmas.de/DE/Themen/Aus-und-Weiterbildung/Ausbildungsfoerderung/foerderung-jugendliche.htm (in German)l; furthermore, the following website offers an overview on the different incentive instrument for companies and apprentices: https://www.aus-und-weiterbildungsallianz.de/AAW/Redaktion/DE/Downloads/uebersicht-ueber-foerderinstrumente-und-unterstuetzungsmassnahmen.pdf?__blob=publicationFile&v=2

4.4. Switzerland

Training Funds

In Switzerland, there is no compulsory nationwide general training fund, but there is a legal base for the establishment of either sectoral or cantonal training funds. There are basically three types of such funds:

Sectoral Training Funds: The professional associations (Organisationen der Arbeitswelt) may choose to create their own training funds to foster VET and these funds may be declared as generally binding. Companies decide voluntarily whether to become a member of the relevant professional association. However, if a professional association applies at national level to change voluntary membership into mandatory membership, all companies belonging to that sector are then legally obligated to contribute to this sectoral training fund. There are three prerequisites that need to be fulfilled in order to proceed to mandatory membership:

- a minimum number of companies already financially contributing to the fund: this number must represent a minimum of 30% of all companies and cover at least 30% of the employees and apprentices in the sector.
- the sector's professional association has a specific (inter-company) training institution.
- contributions are only raised for sector-specific occupations and for activities that are beneficial to all companies.

Currently, there are 29 sectoral training funds that are declared as generally binding and approximately 140,000 companies belong to these sectoral training funds[21]. Typically, the contributions are composed of a fixed amount (per company and year) and a variable component per employee (or a certain percentage of the total wages; e.g. between 0.4% and 0.8%). For each training fund there is a defined list of benefits for which the financial means are used. Interestingly, these benefits are earmarked to be beneficial to all companies, i.e. they finance the development of occupational profiles, the organisation of courses and exams, the reimbursement of course costs and supra-company courses, sectoral PR-activities for initial VET, VET fairs, the development of learning materials, the qualification of instructors, etc.

Cantonal Training Funds: Cantons have the possibility to establish training funds which cover all companies in all sectors. The goal of these funds is to create a redistribution mechanism ("solidarity financing") by moving money from non-training to training companies in order to foster future skilled workers and to support innovative activities in initial VET. Similar to the sectoral training funds, these funds are basically financed by employers (a certain percentage of the total wages). There are currently eight cantonal funds - interestingly most of them in non-German speaking cantons (except Zurich), i.e. in cantons where apprenticeship training is not as deeply rooted and widespread as in the German-speaking regions of Switzerland.

Training Funds of Social Partners: In the frame of "collective labour agreements" (*Gesamtarbeitsvertrag - GAV*[22]), there is the possibility to include contributions for a training fund, usually with employers and employees paying about the same share. There are currently 10 GAVs with training funds.

National Start-up Financing for Training Alliances

National start-up financing for training alliances is another option of financial subsidisation; this includes a grant (max. 50.000 CHF) for setting up the alliance and subsequently, another 5.000 CHF for each newly created training position.

[21] These companies are not necessarily members of either the professional organisation of labour or of the sector training fund as such, but from a legal point of view they are subject to the conditions of the sector training fund.

[22] Collective Labour Agreements are agreements between trade unions and employer organisations that regulate working conditions, wages, dismissals, etc.

Indirect Subsidies

Additionally, training companies get *indirect financial subsidies* by:

- being able to *set off training expenditure* against revenue, thereby reducing their taxable profit.
- *Preferential treatment in public tenders* if the offer is equivalent to tenders made by non-training companies.

Swiss Subsidisation Approach in Brief:

Training funds exist at sectoral and cantonal level. Sectoral funds may be voluntary or compulsory. Once established, cantonal funds are compulsory. These funds are mainly financed by company contributions, although cantonal funds may have additional public financing. These funds are not only designed to support training companies, they are also intended to foster apprenticeship training in general by financing activities like the development of occupational profiles, the organisation of courses and exams, the organisation of sectoral PR-activities for initial VET and VET fairs, the development of learning materials, the training and qualification of instructors, etc.

4.5. Slovak Republic

Employers[23] are motivated to take part in VET by *fiscal incentives* in form of tax exemptions. These are calculated per apprentice and fixed according to the extent of the provided work-based training. Most of the expenses are compensated by tax incentives (reduced tax base by €3.200 per apprentice for 200 - 400 hours of work-based learning per year or €1.600 EUR for less than 200 hours). The *training of instructors* is provided without cost to companies and financed by the public budget and European funds (see www.minedu.sk/data/att/8959.pdf; p. 12). Additionally, since 2018, direct payments to employers providing practical training for students were introduced. Besides the tax exemptions, companies now get *direct cash payments per student/year* (€1.000 for SMEs, €700 for larger companies which provide more than 400 hours of practical training per year or €300 for companies which provide more than 200 hours and less than 400 hours of practical training per year). In case of SMEs, direct payments can effectively complement the tax exemptions, as SMEs often cannot make use of exemptions (e.g. due to an already low tax base).

4.6. Hungary

Hungary's financial incentive model is based on normative subsidies[24].

Basic Scheme

Every company is obliged to pay a training contribution[25] (1.5% of its total payroll) to the training sub-fund of the National Employment Fund (Nemzeti Foglalkoztatási Alap, NFA) which is part of the national budget. Every training company then receives a *normative subsidy*[26] (the amount is occupation-specific and should mirror real cost levels; it is determined by the state, based on monitoring actual training expenses of companies). The following rules apply:

- If the training contribution is lower than the received normative subsidy, the training company is free to use the difference as they wish.
- If the training contribution is higher than the normative subsidy, the difference is paid (as a kind of penalty) into the training sub-fund (state budget), thus increasing the incentive to train.

This mechanism favours training companies that have relatively few employees and a relatively high number of apprentices (as total labour costs will be relatively low and normative subsidies relatively

[23] Employer associations will certify employers in the dual system. Employers will be also subject to external control from the State School Inspection, as they will be responsible for the practical training of students.

[24] Some general information: http://www.cedefop.europa.eu/en/news-and-press/news/hungary-encouraging-apprenticeship-take-initial-vocational-education-and-training; http://observatory.org.hu/wp-content/uploads/2015/04/ReferNet_Apprentice%20ship_EN.pdf; p. 5.

[25] szakképzési hozzájárulás, SZH.

[26] Basically, the state considers the amount of the normative subsidy to be the amount of money actually spent on the organisation of VET training in the given occupation.

high). Therefore, a limit of 12 apprentices at any one time has been introduced for micro and small enterprises.

Extended Scheme

Since the beginning of 2016, some training companies may be eligible for *additional funding* (i.e., extra normative subsidies) for:

- *Instructors:* This subsidy is only available for SMEs and linked to the number of apprentices (21% of the basic normative subsidy of each apprentice).[27]
- *Workshop maintenance:* Available for all training companies if they train 9th graders and if the workshop is exclusively for training purposes.
- *Investments:* Available for all training companies according to the formula: average number of apprentices during a given year multiplied by the basic normative subsidy (the basic normative subsidy differs according to company size: 38% for micro companies [1-10 employees], 18% for small-sized companies [11-50 employees] and 9% for companies with more than 50 employees).

Basically, the same redistributive procedure as in the basic scheme from before 2016 applies; but for the extended scheme the sum of all normative subsidies is considered.

Tax Allowances

Companies providing practical training in VET can *reduce* their *tax liability* by the following formula: tax liability = (tax base – number of apprentices x 24% of minimum wage) x company tax-rate[28].

4.7. Comparison of the Presented Subsidisation Schemes

Apart from Liechtenstein, in one way or another, the member countries of the DC dVET provide financial incentives to training companies. They also have one thing in common - in none of the countries, are the incentives high enough to cover all or most of a company's training costs, even if they have been designed as basic subsidisation. Whereas, the main purpose of Austria's approach is to give basic subsidisation to training companies as well as to foster specific goals within companies (for example, encouraging the training of specific target groups and enhancing the quality of training activities), most of the Swiss schemes concentrate on fostering apprenticeship training on a general level. The activities in Austria and Germany are the responsibility of and financed by employer organisations (such as chambers of commerce - IHKs) and therefore mostly financed by the general fees paid by the companies to their respective organisations. Germany's financial incentives are directed much more to the demand side (i.e. apprentices), whereas on the supply side (i.e. companies), incentives concentrate on fostering training alliances and sector-specific additional inter-company vocational training centres.

Newly established incentive schemes such as those in Hungary and the Slovak Republic differ significantly from those in the DC dVET countries. Generally, in both countries the financial subsidisation component is high (covering most of company training expenses). The Slovakian approach grants considerable tax exemptions to training companies (financed out of national and EU budgets), whilst Hungary provides direct financial subsidies through a complex training fund scheme (with compulsory employer levies). Both schemes try to provide additional direct support for SMEs.

[27] In general: normative for an occupation = basic normative x occupation-specific factor. Basic normative subsidies are defined in the budgetary act, while specific factors are defined in decrees. Therefore, the latter mentioned are far easier to modify.

[28] For companies who provide practice for students within the framework of the so-called cooperative agreement, the reduction factor is 12% (instead of 24% as for apprentices).

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