Le Mouillour, I., Neff, D. & Klein, P. (2023). Comparing dualised forms of initial VET across countries: Insights from the IEM survey. In V. Tūtlys, L. Vaitkutė & C. Nägele (Eds.), *Vocational Education and Training Transformations for Digital, Sustainable and Socially Fair Future. Proceedings of the 5th Crossing Boundaries Conference in Vocational Education and Training, Kaunas, 25. – 26. May* (pp. 253–264). European Research Network on Vocational Education and Training, VETNET, Vytautas Magnus University Education Academy, Institute of Educational Science. https://doi.org/10.5281/zenodo.7821901

Comparing Dualised Forms of Initial VET across Countries: Insights from the IEM Survey

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Abstract

Worldwide, the importance of dualised forms of initial vocational education and training is increasing. Within the EU, in particular the high youth unemployment in parts of Europe has led to an increased interest in more practice-integrated initial VET. This has led to an introduction of new and expansion and/or modernization of existing apprenticeship schemes across the EU over the last decade (Cedefop und OECD 2021). Due to this relatively recent development, there are few systematic overviews of existing and new training programs with company-based components and only a few efforts to classify/typify this diversity (e.g. Markowitsch und Wittig 2020)[1]. The present paper aims to add to the literature through an exploratory analysis based on the BIBB International Expert Monitor survey on dualised forms of IVET firstly conducted in 2021/22. The expert survey was specifically designed to capture and monitor dualised forms of IVET over time. The analysis firstly provides an overview of dualised forms of IVET across the sampled countries based on a clear definition of dualised forms of IVET. It then moves on to explore similarities and differences between the countries on the basis of five selected indicators of attractiveness of dualised forms of IVET. Lastly, an analysis of the reported developments over time (in the past five years) is undertaken.

Keywords

work-based learning, apprenticeship, expert survey, trends, challenges

[1] One notable example is the Cedefop European database on apprenticeship schemes – see Cedefop European database on apprenticeship schemes | CEDEFOP (europa.eu).

1 Introduction

Worldwide, the importance of dualised forms of initial vocational education and training is increasing[2]. Within the EU, in particular the high youth unemployment in parts of Europe - as a result of the global financial crisis and the euro crisis - has led to an increased interest in more practice-integrated initial VET. This has led to an introduction of new and expansion and/or modernization of existing apprenticeship schemes across the EU over the last decade (Cedefop und OECD 2021, Markowitsch und Wittig 2020 and Grollmann und Markowitsch forthcoming). Due to this relatively recent development, there are few systematic overviews of existing and new training programs with company-based components and only a few efforts to classify/typify this diversity (e.g. (Markowitsch und Wittig 2020)[3].

The present paper aims to add to the literature through an exploratory analysis based on the BIBB International Expert Monitor survey on dualised forms of IVET firstly conducted in 2021/22 which was specifically designed to capture and monitor dualised forms of IVET over time. The analysis firstly provides an overview of dualised forms of IVET across the sampled countries. It then moves on to explore similarities and differences between the countries on the basis of five selected indicators. Thirdly, an analysis of the reported developments over time (in the past five years), in order to uncover dynamic changes. Lastly, the current challenges and current trends in dualised IVET are highlighted.

2 Varieties of dualised forms of IVET

There is a substantial literature on defining characteristics of VET systems trying to provide VET system typologies at country level (for more comprehensive overviews see (Pilz 2016; Bosch 2016) and (Busemeyer und Trampusch 2019). Early attempts in comparative VET research proposed different criteria for the classification of VET systems such as the dominant venue where training takes place (Lynch 1994) or the role the state plays in the process of skill formation (Greinert 1988) and sociologist like (Allmendinger 1989), Blossfeld (1992), and Müller and Shavit (1998) brought into play criteria such as standardization (i.e. nationwide-shared standards), certification of vocational skills (which reliably represent the qualification), stratification (i.e. the hierarchy of occupational positions as well as the process of distribution of each generation into stratified occupational levels), and vocational specificity (extent to which education and training system provides education programmes with a high share of vocational content) as relevant criteria for classification of different VET systems (Pilz 2016; Rageth 2018). Busemeyer and Trampusch (2012) develop a distinct typology of skill formation systems along two dimensions: the degree of firm involvement in (initial) VET and the degree of public commitment of the state towards the provision and financing of VET, which allows them to identify four ideal type skill formation systems: a statist system (such as in Sweden or France), a collective system (such as in Germany, Switzerland and Austria, a liberal system (such as in the US) and a segmentalist skill formation system (such as in Japan). By combining the approaches Pilz (2016, 2017) derives at a more comprehensive typology taking into account the macro- (skill formation and stratification), meso- (standardisation) as well as the micro-level (practice of learning) which seems to be better in classifying a more diverse set of countries (e.g. including countries like China or India) than earlier approaches.

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[2] We prefer using the phrase dualised forms of IVET instead of work-based learning in VET, as the latter seems to be used more broadly. We also refrain from using the term apprenticeship because the notion has changed in practice and now covers various training systems differing from the traditional understanding (Markowitsch and Wittig 2020: p.2).

[3] One notable example is the Cedefop European database on apprenticeship schemes – see Cedefop European database on apprenticeship schemes | CEDEFOP (europa.eu).

A peculiarity of this literature is that it tends to mainly include the same countries as examples and often lacks empirical verification at a broader level. Another problem of such country typologies is that they cannot capture the differences within skill formation systems in a country, as they inherently tend to focus on the dominant VET programme, thereby neglecting the often diverse VET landscapes within countries (Rageth 2018). In Germany for example, which is seen as one of the traditional dual VET systems, purely school-based VET exists (although at a lower level) alongside the dual VET schemes (Haasler 2020). Moreover, in some countries we might observe a shift towards more dual VET scheme/a dual VET system while in others, the importance of dualised forms of IVET might be diminishing, which implies that the VET systems in countries are (constantly) changing over time, some faster than others.

Within the European Union for example, apprenticeship schemes have been a policy priority from 2010 onwards with the Bruges communiqué (EU 2002) and the recent Osnabrück declaration (EU 2020) which led to an introduction of new and expansion and/or modernization of existing apprenticeship schemes across the EU over the last decade (Cedefop und OECD 2021). One approach to explain this development is the so-called feedback mechanism (see Markowitsch und Hefler 2018) which postulates, that a purposeful institutional procedure exists, which allows VET (sub-)systems to continuously renew themselves and adapt to emerging labour market needs (Markowitsch and Wittig 2020: 7). Another problem for comparisons are the often rather wide definitions of dualised forms of IVET which leads to the fact that often very different schemes and systems treated as similar are compared. Markowitsch and Wittig (2020: p. 19) for example point out, depending on the definition or sources between 30 to 80 different apprenticeship programmes can be identified in Europe[4].

There are only few systematic overviews[5] of existing and new training programs with company-based components and only a few efforts to classify/typify this diversity (Markowitsch und Wittig 2020). We aim to add to the literature through an exploratory analysis of novel expert survey data on work-based learning in VET from the BIBB International Expert Monitor. We do so through a four step-approach: Firstly, we introduce a clear definition of dualised form of IVET as a starting point to pre-select the programs/schemes we aim to compare. In a second step we identify relevant dimensions for a comparison of dualised forms of IVET in the sampled countries and explore the differences. Our guiding question thereby is: What are potential factors determining the attractiveness of dualised forms of IVET? Third and last, we explore the reported developments across the identified factors over time by analysing which countries report a positive or negative (or no change) across the selected indicators.

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[4] They themselves identify 37 apprenticeship programmes across 25 European countries. In an order to differentiate between the schemes (not countries) they suggest to focus on training logics and identify four of these: corporate training (specific skills training needed by enterprises), professional education (apprenticeships organised and structured by occupations, school or university education (strengthened work-based elements within upper-secondary or post-secondary VET), and public training schemes (active labour market policies to help the unemployed or other disadvantaged groups). They differentiate the schemes according to purpose of the training, ownership (who defines the content) and financing.

[5] One notable example is the Cedefop European database on apprenticeship schemes – see Cedefop European database on apprenticeship schemes | CEDEFOP (europa.eu).

3 Capturing and monitoring dualised forms of initial VET (IVET): The International Expert Monitor (IEM)

Comparative data on VET systems, VET schemes and their governance are difficult to obtain if existent. Moreover, although a number of studies and sources do exist, a systematic comparison of specific types of IVET programs is rather challenging (as will be laid out below). Against this backdrop, the International Expert Monitor has been developed by section 3.1 - Vocational Education and Training in International Comparison, Research and Monitoring - at the Federal Institute for Vocational Education and Training (BIBB[6]), Germany in order to try to capture and especially monitor, how dualised forms of initial VET evolve over time within selected countries. This paper is based on the results of the first round of the IEM survey which was conducted online in English using the software LimeSurvey and took place from December 2021 to April 2022.

At the beginning, selected expert in all EU-27 countries as well as other selected countries were contacted and asked to join the IEM. Where experts could not participate, either other pre-selected experts or recommended experts were asked and finally in total 36 countries/regions (24 EU-27 member states/regions[7] and 12 non-EU member states/regions) could be covered. On average the sample of VET experts has 18,2 years of work experience in the field.

At this stage, three potential caveats have to be pointed out regarding the survey: First, a major problem of international surveys on VET are the often different conceptions of dualised forms of IVET prevalent in the surveyed countries and the different definitions used in the international context (see for example Comyn und Brewer 2018: p.3). To avoid this problem, we started the survey with a clear definition of what we understand as dualised forms of initial VET in the context of our investigation. According to Markowitsch and Wittig (2020) – although the definitions vary - five characteristics of apprenticeship seem to be essential across all definitions. Apprenticeships are characterised as: (1) long-term; (2) alternating training at the workplace and in an educational institution or training centre; (3) nationally recognised qualification; (4) training or employment contract; and (5) remuneration/wage. Based on this observation, we define dualised forms of IVET as any type of systematically structured vocational training for young people that takes place in alternation between an educational institution or extra-company vocational training institution and a company and meets the following criteria:

(1) It is primarily aimed at young people before they enter the labour market;

(2) It contains an in-company training component of at least 40% (including practical training in schools);

(3) It is based on a written agreement between the trainee, the employer and/or the training institution;

(4) It includes a payment/financial compensation;

(5) It has a duration of at least 2 years;

(6) It is at ISCED level 3/EQF level 3 or higher; and

(7) It leads to a formal transferable educational qualification.

By defining a minimum threshold of in-company training/practical training in schools and minimum length of training we narrow the definition much stronger than others in comparison to the for example the apprenticeship toolbox[8].

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6 Bundesinstitut für Berufsbildung / Federal Institute for Vocational Education and Training (BIBB).

7 For Belgium two experts for the Flemish (Flandern) and French-speaking (Wallonia) regions were surveyed. Following Cedefop we refer to Flandern as Belgium-FL and the Wallonia region as Belgium-FR.

8 https://www.bibb.de/en/apprenticeshiptoolbox.php

A second potential caveat might be the reliance on a single expert per country which could imply that the answers to a country might biased towards personal/official views depending on the (position of the) respondent. We have tried to deal with this problem by focusing on institutions/experts with a distinct reputation in the field and with much experience in answering survey questionnaires on VET. We also believe that by extending the sample to more than one expert per country, the difficulty arises of identifying (a sufficient number of) such experts as often - especially in smaller countries - there are not many such experts who could be surveyed.

Thirdly, as a consequence of the first two caveats, our results should and cannot be understood as representative in a statistical sense, as they are based on individual subjective responses for each country. While this complicates the interpretation of the results, we believe that much can be learned and derived from this endeavour, especially in the rather complex field of work-based learning in VET. Hence, our aim is to start providing an overview of the distribution, differences and dynamics of dualised forms of IVET in the sampled countries, which we shall lay out in the following sections.

4 Results from an exploratory analysis

4.1 Dualised forms of IVET

In our sample of 36 countries/regions, 87.1% (N=31) report to have dualised forms of IVET which meet our definition laid out above while five experts report that such forms of IVET meeting our definition currently do not exist in their countries. These are Colombia, Cyprus, Finland, Lithuania, and Scotland; see Table A1 in the Appendix). All these five countries without dualised forms of IVET do have similar programs with work-based learning elements in place, that however do not fully meet our definition.

4.2 Differences between the countries – indicators of attractiveness

Next, we explore the differences between the countries regarding five indicators of attractiveness of dualised forms of VET. These are (1) the embeddedness of dualised forms of IVET in the VET system, (2) the regulation of dualised forms of IVET, (3) the involvement of key stakeholders/ownership, (4) the social standing of these forms of training and (5) employability chances of graduates of these forms of training on the labour market.

Embeddedness refers to the embeddedness of dualised forms of IVET within the existing system of vocational qualifications in the surveyed country and is captured in the survey through a question were the experts are asked to evaluate the embedding of dualised forms of IVET in the system of vocational qualifications (on a scale from 1 (very bad) to 5 (very good)). *Regulation* refers to the legal framework which regulates dualised forms of IVET and is proxied through a question were the experts were asked to evaluate the adequacy of the legal framework with regard to dualised forms of IVET (on a scale from 1 (very bad) to 5 (very good)). The *involvement of the stakeholders* refers to the degree to which important stakeholders are involved in the governance and shaping of dualised forms of IVET. This is captured as the involvement of employers and employee organizations/associations through two questions: first the experts' evaluation of the involvement of employers in the development and modernization of qualifications and second through the experts' evaluation of the involvement of employee organizations/associations in the development of regulations of dualised forms of IVET (both on a scale from 1 (very bad) to 5 (very good)). *Social standing* refers what reputation dualised forms of IVET enjoy in contrast to school-based or other type of VET programs. It is captured in the survey through a single question where the experts are asked to rate the social standing of dualised forms of IVET compared to school-based/other VET programs (on a scale from 1 (very bad) to 5 (very good)). Lastly, *employability* refers to the

labour market prospects of graduates of dualised forms of IVET and is measured by using the experts' rating of the degree of employability of graduates of dualised IVET.

It should be noted that we do not believe that these are the only indicators which affect attractiveness not that these are the most important ones. Furthermore, we do not believe these indicators to be independent from each other. Moreover, we do not aim to argue that a program, which performs "better" on any of these indicators is to be considered a better dualised program. Instead the sole aim is to identify a range of indicators, which help us to identify differences between similar types of programs across countries and to explore the different changes the programs experience in recent years.

Applying these five indicators we obtain the following picture: Only a small number of experts used the ratings "very bad" or "bad" (12.5%) across the five indicators, while over 60.3% of the ratings were in the categories "good" or "very good" and around one-third (27.2%) of all given ratings were in the 'neutral' category ("neither/nor") (see Table 1). Although this does not seem to be much variation, some important observations can be made.

As one might would expect, employability has the highest percentage of 'good' and 'very good' answers (87.1%) followed by embeddedness (63.3%) and regulation (60%). The lowest 'good' and 'very good' ratings are to be found for stakeholder involvement of employers (51.7%) and employees (53.5%) and social standing (37.7%). It shows that the dualised forms of IVET in the countries seem to meet the demand of industry and their graduates seem to be evaluated as positive regarding their employability. Similarly, the embeddedness of dualised forms of IVET is perceived as positive, which implies that the programmes/schemes are rather well integrated in the overall VET system and the involvement of employer associations/organizations is also rated positively. Less positively evaluated is the involvement of employee organisations/associations in dualised forms of IVET, which is often either lacking for a number of reasons.

Table 1

Summary of ratings across countries regarding the five indicators of attractiveness

	(1) Embedded-ness	(2) Regulation	(3) Stakeholder involvement		(4) Social standing	(5) Employ-ability	Total
			Emplo-yer	Emplo-yee			
Very Good	13 (43.3%)	5 (16.7%)	8 (25.8%)	6 (20%)	4 (12.9%)	15 (48.4%)	51 (28.0%)
Good	6 (20%)	13 (43.3%)	10 (33.3%)	10 (33.3%)	8 (25.8%)	12 (38.7%)	59 (32.4%)
Neither / Nor	9 (30%)	7 (23.3%)	9 (30%)	8 (25.8%)	12 (38.7%)	4 (12.9%)	49 (26.9%)
Bad	1 (3.3%)	4 (13.3%)	3 (10%)	5 (16.1%)	5 (16.1%)	0 (0%)	18 (9.9%)
Very Bad	1 (3.3%)	1 (3.3%)	0 (0%)	1 (3.3%)	2 (6.5%)	0 (0%)	5 (2.7%)
Total	30 (100%)	30 (100%)	30 (100%)	30 (100%)	31 (100%)	31 (100%)	182 (100%)

IEM survey 2021/22. Totals lower than 31 are due to missing values. *

In a next step we rank the countries according to their mean value across all five indicators (six items), whereby countries with missing values were not ranked. We find Switzerland (1), Latvia (2), Germany (3), Denmark (3), Belgium-FR (4), Iceland (5) and Spain (5) among the top-five countries/regions with the highest mean values across all five indicators, and Sweden (13), Ukraine (12) , South Korea (12), Greece (12), Italy (11), Israel (11), Slovakia (11), Slovenia (11) among the bottom-five countries/regions with the lowest mean values across all five indicators. Luxembourg (6), Romania (6), Belgium-FL (6), Ireland (7), Netherlands (7) and Austria (8) are on the middle ranks (see Table 2).

Again, as one might expect, countries like Switzerland, Germany, Denmark and Iceland[9] all with a long tradition and strong dual VET system are among the top-five countries, while countries/regions with a rather recent history of dualised programmes/schemes and or with a strong school-based VET system are to be found among the bottom-five countries / regions according to their mean ranking across the five indicators. More interestingly are countries like Latvia and Spain among the top-five countries/regions and Sweden and South Korea among the bottom-five countries / regions which one would not necessarily expect there.

Table 2
Summary of ratings on five indicators at country level

	Country	(1) Embedded-ness	(2) Regulation	(3) Stakeholder involvement		(4) Social standing	(5) Employ-ability	Mean	Rank
1	Australia	Very g.	Good	-	Good	Good	Very g.	-	-
2	Austria	Good	Good	Good	Good	Neutral	Good	3,8	8
3	Belgium-FL	Very g.	Good	Good	Good	Neutral	Very g.	4,2	6
4	Belgium-FR	Very g.	Good	Very g.	Very g.	Neutral	Very g.	4,5	4
5	Bulgaria	Neutral	Good	Good	Bad	Good	Very g.	3,7	9
6	Croatia	-	Good	Neutral	Very g.	Neutral	Good	-	
7	Denmark	Very g.	Very g.	Very g.	Very g.	Neutral	Very g.	4,7	3
8	France	Good	Good	Neutral	Neutral	Bad	Good	3,3	10
9	Germany	Very g.	Good	Very g.	Good	Very g.	Very g.	4,7	3
10	Greece	Neutral	Neutral	Bad	Neutral	Neutral	Neutral	2,8	12
11	Iceland	Good	Very g.	Good	Good	Good	Very g.	4,3	5
12	Ireland	Neutral	Good	Very g.	Good	Neutral	Very g.	4	7
13	Israel	Neutral	Bad	Neutral	Neutral	Neutral	Good	3	11
14	Italy	Good	Neutral	Good	Bad	Very bad	Good	3	11
15	Latvia	Very g.	Good	Very g.	Very g.	Very g.	Very g.	4,8	2
16	Luxembourg	Very g.	Good	Very g.	Good	Bad	Very g.	4,2	6
17	Netherlands	Very g.	Very g.	Good	Good	Bad	Good	4	7
18	Norway	Neutral	Neutral	Good	Very g.	Good	Neutral	3,7	9
19	Poland	Good	Neutral	Good	Good	Neutral	Good	3,7	9
20	Portugal	Very g.	Good	Bad	Neutral	Bad	Good	3,3	10
21	Québec (Canada)	Neutral	Neutral	Neutral	Neutral	Good	Good	3,3	10
22	Romania	Good	Good	Good	Good	Good	Very g.	4,2	6
23	Singapore	Very g.	-	Very g.	Bad	Good	Very g.	-	
24	Slovakia	Neutral	Bad	Neutral	Bad	Good	Good	3	11

[9] The VET system in Iceland goes back to the time when Iceland was part of the Danish kingdom (Cedefop 2021b: p. 40).

25	Slovenia	Very g.	Neutral	Bad	Bad	Very bad	Very g.	3	11
26	South Korea	Bad	Bad	Neutral	Neutral	Neutral	Good	2,8	12
27	Spain	Very g.	Very g.	Neutral	Neutral	Very g.	Very g.	4,3	5
28	Sweden	Very bad	Very bad	Neutral	Very bad	Bad	Neutral	1,8	13
29	Switzerland	Very g.	Very g.	Very g.	Very g.	Very g.	Very g.	5	1
30	Ukraine	Neutral	Bad	Neutral	Neutral	Neutral	Neutral	2,8	12
31	UK (excl. Scotl.)	Neutral	Neutral	4	-	Neutral	Good	-	

Source: IEM survey 2021/2022.

4.3 Developments in the past five years

A major part of the survey was dedicated to quantify the changes which have taken place regarding dualised forms of VET in the last five years. For this purpose, most questions with ratings - including the five indicator proxies - were followed by a question whether the aspect has improved or worsened in the last five years (on a scale from 1 “much worse” to 5 “much better”). For the analysis we categorize the values 4 “better” and 5 “much better” as positive changes, the value 3 “neither better nor worse” as no change (“neutral”) and the values 1 “much worse” and 2 “worse” as negative changes.

As will be laid out, the surveyed countries do not only differ with regard to central characteristics of the dualised form of IVET, but also with regard to their recent developments. In order to obtain an understanding of the dynamics and changes over the recent past, we first start with an analysis of the reported changes in the past five years regarding the five. For each of the questions which we use as proxies, a follow-up question asked the experts to rate whether the situation has change to be better or worse in the past five years. A country expert could report a positive (much better & better), negative (much worse & worse) or neither positive nor negative change (neither better nor worse) - which we refer to as ‘neutral’ in the following - for each of the five indicators. Table 3 lays out how many changes were reported by country and also displays a ranking regarding the mean value for the five variables as well as the grouping of the countries according to our four-fold categorization.

In total, more positive changes (74) than neutral changes (65) were reported across all sampled countries. Moreover, 14 countries reported more positive changes than no changes or negative changes and 12 countries reported more neither positive nor negative changes than positive or negative changes. And across all countries, only five negative developments were reported, out of which Sweden reported three. Sweden is thus the only country which reported more negative changes (3) than positive (2) or no changes (1). Five countries reported positive changes across all five indicators/six items (Greece, Latvia, Québec (Canada), Romania, and South Korea), while three countries reported only neutral changes (Denmark, Germany, and Luxembourg). As some questions were either not answered or answered with “don’t know”, there are altogether 13 missing values.

It seems that countries with strong and settled VET systems like Denmark and Germany are less dynamic than young or transforming VET systems like Greece, Latvia, and Québec (Canada) who display positive changes across all indicators. Other countries, like France, Israel, Italy, Norway, Slovenia, or Slovakia with stronger school-based VET systems who are at the lower end of the ranking of the mean value across the five indicators display more neither (positive)/nor (negative) changes and thus seem to be rather stagnant regarding the development of dualised forms of IVET.

Table 3
Changes in the past five years across five indicators of attractiveness

Country/Region	Positive	Neither / Nor	Negative	*Missings*
Australia	0	3	0	3
Austria	0	5	1	0
Belgium-FL	3	3	0	0
Belgium-FR	4	2	0	0
Bulgaria	5	1	0	0
Croatia	0	5	0	1
Denmark	0	6	0	0
France	3	3	0	0
Germany	0	6	0	0
Greece	6	0	0	0
Iceland	5	1	0	0
Ireland	4	2	0	0
Israel	0	5	1	0
Italy	2	4	0	0
Latvia	6	0	0	0
Luxembourg	0	6	0	0
Netherlands	1	4	0	1
Norway	1	5	0	0
Poland	4	2	0	0
Portugal	3	3	0	0
Québec (Canada)	6	0	0	0
Romania	6	0	0	0
Singapore	4	1	0	1
Slovakia	2	4	0	0
Slovenia	2	4	0	0
South Korea	6	0	0	0
Spain	5	1	0	0
Sweden	2	1	3	0
Switzerland	-	-	-	6
Ukraine	5	1	0	0
UK (excl. Scotl.)	5	0	0	1
Total Sum	***90***	***78***	***5***	***13***
Country Sum	***14***	***12***	***1***	

Source: IEM survey 2021/2022. Country sum refers to the number of countries with the majority of answers in the respective category (Positive, neutral or negative).

Next, in an attempt to further differentiate between the countries/regions we categorize them according to the highest number of ratings in one of the three categories (either positive, neutral or negative). For example, if a country expert rated at least **four** changes across the five indicators (six questions) as positive (in the sense that there has been a positive change on this indicator in the past five years), the respective country would be categorized as a rapid mover/as a dynamic country/region. Slow movers/stagnant are those with at least three ratings in the 'neutral category' and backward movers/deterioration are those countries/regions with at least three negative rated changes. Australia, Belgium-FL, France, Portugal, and Switzerland are not categorized due to missing values or because they did not reach four positive, neither positive nor negative or negative changes.

Following these steps, we can classify 14 countries/regions (Belgium-FR, Bulgaria, Greece, Iceland, Ireland, Latvia, Poland, Québec (Canada), Romania, Singapore, South Korea,

Spain, Ukraine, UK (excl. Scotland)) as rapid movers/dynamic, while 12 countries (Austria, Croatia, Denmark, Germany, Israel, Italy, Luxembourg, Netherlands, Norway, Slovenia, Slovakia) are slow movers/stagnant. Sweden is the only potential backward mover, however with only three negative changes reported (see Table 4).

What sticks out here is that among the slow movers/stagnant countries are overtly those countries with an established dual VET system like Austria, Denmark, and Germany, while the rapid movers/ more dynamic countries are Bulgaria, Latvia, Romania or Spain with WBL schemes that are school-based; and countries with apprenticeship programmes like the UK or Ireland, which seems to show that these countries are undergoing a vast transformation. In this respect the outlier Sweden sticks out and more in-depth information is needed to understand the reasons for the negative ratings.

Table 4

Summary majority changes across five indicators

Rapid movers / Dynamic	**Slow movers / Stagnant**	**Backward movers / Deterioration**
Belgium-FR, Bulgaria, Greece, Iceland, Ireland, Latvia, Poland, Québec (Canada), Romania, Singapore, South Korea, Spain, Ukraine, UK (excl. Scotland)	Austria, Croatia, Denmark, Germany, Israel, Italy, Luxembourg, Netherlands, Norway, Slovenia, Slovakia	*Sweden*

Source: IEM survey 2021/2022. Not classified: Australia, France, Belgium-FL, Portugal, and Switzerland.

5 Conclusion

The aim of this paper was to add to the literature on dualised forms of IVET by exploring a new data source: the BIBB International Expert Monitor survey on work-based learning in IVET, first conducted in 2021/22. The IEM captures dualised forms of IVET in the sampled countries. Although the explorative and descriptive analysis has been limited in terms of scope and depth, first initial results have shown some interesting results. With the next subsequent rounds, more insights can be gained and a more nuanced picture of dualised forms of IVET across countries in and outside the EU can be obtained.

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