

Dissertation Project – Milan Stocker

This dissertation is part of the SNF financed research project “Short- and long-term impacts of Covid-19 on vocational education and training: Strengthening VET in times of crises” and focuses on different aspects of the impact of the coronavirus pandemic on the Swiss vocational education and training system. The first part of the thesis examines the impact of the pandemic on the apprenticeship market. In Switzerland about two-thirds of compulsory school leavers complete a dual apprenticeship, spending most of their time in a training firm (BFS 2024). As training companies operate in the regular labor market, the Swiss vocational education and training system (VET) is closely linked to the economy and therefore vulnerable to economic fluctuations. In this paper, our research question is on whether the economic instability during the Covid-19 pandemic has impacted the apprenticeship market’s supply and demand in Switzerland and if there are differences between the fields of work based on how they were affected by the pandemic. In contrast to Germany, where fewer apprenticeship contracts were signed during the pandemic, the apprenticeship market in Switzerland has remained relatively stable (Golder et al. 2024; Christ et al. 2021). Nevertheless, studies in both countries indicate that young people have changed their occupational preferences due to the pandemic (Barlovic 2021; Golder et al. 2022). However, it remains unclear which fields and occupations were more frequently abandoned, and which gained interest. Further, it remains unclear whether the changes in preferences are temporary or will persist over time, and how these changes are related to the affectedness of specific occupational fields. This paper aims at closing this gap by analysing the relationship between the pandemic related affectedness of an occupation and its change in demand for apprenticeship positions. Gottfredson’s (1981) “Circumscription and Compromise” theory states that occupational preferences are formed during childhood and adolescence and that this is a dynamic process. Intrinsic factors such as self-concept, gender, and interests (Gottfredson 1981) as well as extrinsic factors such as the number of jobs advertised, the image of a profession, career prospects, working conditions and job security influence young people’s preferences (Schels et al. 2022; Hofmann und Neuenschwander 2023). Such extrinsic factors were influenced by the pandemic and may have led to changes in the occupational preferences of young people searching for an apprenticeship position. Occupations in the “Hospitality & Gastronomy” sector have been severely affected by the pandemic, with a high short-time work figures and company closures, while occupations in the “Construction” or “IT” sector have been less affected by these measures (König et al. 2022). Other sectors, such as healthcare, were also

affected, but by increased workloads and strict regulations alongside a high media profile and social recognition. These factors have affected the apprenticeship market and led to uncertainty for both companies and apprenticeship seekers (Muehlemann 2021) and may have caused young people to adjust their occupational preferences. To measure the impact of the pandemic on different occupations, an affectedness-indicator was created using administrative data on short-time work to calculate the share of short-time work in different sectors. High rates of short-time work are assumed to influence the image of an occupation, as well as perceived job security and working conditions. In addition, we use the number of open apprenticeship positions in the different occupations, as the supply of apprenticeships is also likely to influence the training preferences of young people. Lastly, we use data from a survey conducted by our research team among training firms in which firms are asked to assess how the firm has been affected during the pandemic. By analysing these factors, we developed a proxy that indicates differences in the level of affectedness during the pandemic within the different fields of work.

Changes in young people's preferences for specific vocational training are examined through their search queries on a Swiss online apprenticeship portal (yousty.ch) before, during, and after the pandemic. The data contains information on over 14 million search queries made by apprenticeship seekers between 2018 and 2023. In our contribution, we present panel regression models and analyse the impact of the pandemic on occupational preferences and search patterns. The analysis is based on the number of monthly search queries for different vocational programs, which allows us to disentangle trends within and between occupational fields, and to determine whether the affectedness of occupational fields during the pandemic had led to changes in the search patterns and changes in occupational preferences over time. Our results indicate that Covid-19's impact on the search queries varies across occupational fields. The occupational field of "Hospitality & Gastronomy" has been strongly impacted by the pandemic, with a decline in search queries during and after the pandemic. In contrast, fields such as "Pharmaceuticals" or "IT" have demonstrated relative resilience, with either stable or even increased interest among young people. By analyzing the changes of specific occupations in detail, our findings highlight the impact of crises on the Swiss apprenticeship market. Working with query data offers new opportunities and can provide important information to better understand changes in the apprenticeship market. The results of this paper will help the VET-system to better cope with future challenges and crises such as technological change, the shortage of skilled labor or the mismatch between supply and demand for certain training programs.

The information obtained in the first article, particularly on the effects of the sector's involvement, forms the basis for the next two articles. Exciting results, which are more likely to be classified here at the meso-level (see Figure 1), can be explored in greater depth at the micro level in the subsequent articles. In particular, information obtained on a specific sector or occupation can be included and analyzed in greater depth in the next two articles.

In the second part of the thesis, the focus will lay on the educational trajectories of young people affected by the pandemic. This is done based on official data on the training and career paths of young people from Switzerland (LABB Data). The uncertain situation on the labour market could theoretically have an impact on the educational decisions of young people. Two aspects will be investigated here. On the one hand, whether the pandemic has had an impact on the entry into vocational baccalaureate 2 (Berufsmaturität 2) and thus delayed the entry into the labour market. Here, too, the impact on the sector will be tested. Interesting results from the first article can be used here. Are occupational sectors that were severely affected by the pandemic also affected by a decrease in direct entrants in the labour market in addition to a decrease in interest? If this is the case, firms in these sectors would have difficulties finding apprentices as well as hiring trained apprentices. Furthermore, in addition to these transfer rates to vocational baccalaureate 2, the dropout rates, repetitions and failures should also be investigated to identify pandemic-related changes here as well. As with the first paper, in addition to this information, possible effects of the pandemic on the profiles of the young people will also be analysed. The socio-economic background and gender are intended to indicate potential changes in the profile of vocational baccalaureate 2 students and possible inequalities. The third article goes one step further and will focus on the further education behaviour of young people at the tertiary level after a vocational baccalaureate. Here, too, the educational decisions of young people will be analysed on the one hand based on the affectedness of the different sectors and on the other hand on the basis of information on their social background, gender and region.

The three articles are integrated into the multi-level model (Figure 1) according to Coleman as follows: The first paper on the apprenticeship market is included at the meso-level in the yellow circle. The two articles on training trajectories are located at the micro level in the red circle. These three articles each fit well into our overall project, which is represented by the upper dashed arrow: The impact of the COVID-19 pandemic on the Swiss VET system.

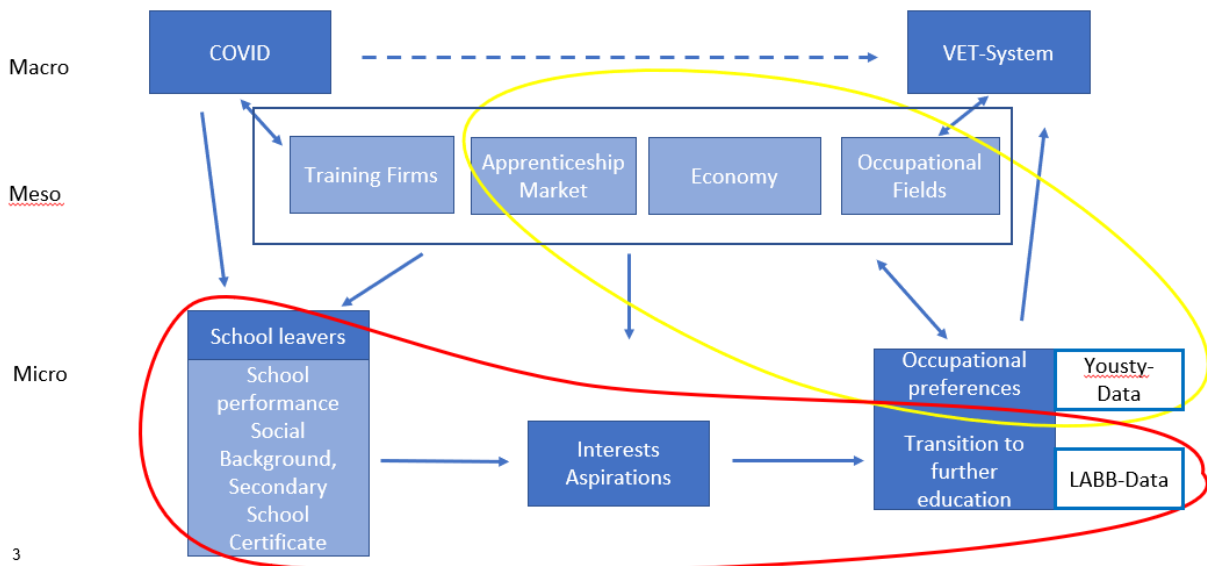


Figure 1 Multi-level model, based on Coleman (1990), Hadjar and Becker (2006) and Becker (2017), own illustration

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