



ELECTION BRIEF 19-05

WORKING GROUP ON YOUTH EMPLOYMENT

A SHIFTING LABOUR MARKET: POLARISATION OR UPGRADING?

KEY POINTS

- LABOUR MARKET POLARISATION IS A TREND OBSERVED IN EUROPE
- THE PREVALENCE OF POLARISATION SEEMS TO BE RELATED TO LABOUR MARKET AND GENERAL ECONOMIC AND POLITICAL INSTITUTIONS
- IMPROVED SKILL FORMATION IS NEEDED TO TURN POLARISATION INTO UPGRADING

GÖTZ SIEDLER
UNIVERSITY OF BONN

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The economists Goldin and Katz named their 2009 paper on the evolution of U.S. educational wage differentials between 1890 and 2005 ‘The Race between Education and Technology’¹. Their idea was that the development of the so-called skill premium, i.e. the wage differential between occupations requiring high and those requiring only low skill levels, was essentially determined by two factors: On the one hand, there was a strong secular growth in the relative demand for more educated/skilled workers, which tended to increase the skill premium. On the other hand, the relative skill supply (e.g. the share of workers with college degree) was usually increasing, however at fluctuating rates. The interaction between these two factors, basically supply for and demand of skill, could explain most of the long-run changes in the U.S. skill premium.

UPGRADING OR POLARISATION?

A refinement of their model is ‘skill-biased technological change’. The assumption here is that workers need intermediate goods and these are different for low and high skill workers, so there are two distinct intermediate good sectors. In this framework, firms choose their research and development (R&D) efforts for each of these sectors. Then, an increase in the education level of the workforce biases R&D efforts towards improving those intermediate goods which are used by high-skilled workers (as there are now more of these workers – and hence more users of these intermediate goods), making them more profitable. This would lead to labour market *upgrading*, i.e. lost jobs would be ‘replaced’ by those requiring higher skills. This model is used to explain the development of the skill premium of high-skilled workers during the 1970s and 1980s when the share of workers with a college degree was rising strongly in the US as the ‘baby boomer’ generation entered the labour market. This initially led to a decrease in the skill premium, as there was a higher supply of skilled workers while demand was constant. Later, however, demand for high skilled workers increased due to the mechanism explained above (intermediate goods R&D), causing a rise in the skill premium.

In recent years, however, such models, which only consider low and high skill levels, miss an important trend: Middle-class jobs – requiring a moderate level of skills and being paid with moderate wages – are disappearing relative to those at the bottom (requiring low skill levels) and those at the top (requiring high skill levels). This process is called (labour market) *polarisation* and was found to have been a significant trend in the US for some decades. The usual channel to explain this development is the routinisation hypothesis.

Its underlying assumption is that technological change is ‘routine-biased’, i.e. occupations in which employees mostly fulfil routine tasks are more prone to being replaced by new technologies in a process of automatisisation. This would cause labour market polarisation as routine jobs are lost and these tend to be in the medium range of skill and wage levels. The traditional example are manufacturing workers, but recently machines got more ‘intelligent’ and start replacing clerks, too. Simultaneously, the number of ‘non-routine’ jobs, which can hardly be automatized, is increasing at both ends of the skill spectrum; think for example of cleaning on the one and IT programming or management tasks on the other hand.

Previous research has found evidence for the routinisation hypothesis for 16 European countries, stating that it is the single most important factor behind polarisation². While this corroborates the transformative impact of technological change on skill-based polarisation, offshoring resulting from globalisation is also considered to play a role, although a smaller one. By contrast, shifts in product demand mitigate the polarising impact of routinisation. Changes in wage-setting institutions appear to play less of a role in explaining job polarisation in Europe. The idea behind the polarisation hypothesis is that routine-biased technological change causes polarisation, so policymakers can hardly fight this without banning technological improvements, which would obviously hinder productivity growth. Does this mean that polarising labour markets are a law of nature, which governments cannot prevent, and hence inevitably affect all nations? Here, recent analysis (1995 – 2007) rather finds a plurality of patterns with polarisation trends in the Netherlands, France and Germany, but stronger upgrading trends in Finland, Denmark and Sweden³.

It can be seen that skill upgrading has been strongest in the Nordic countries. Why is that? Note that these have a very special institutional setting, building on both their long-standing social democratic tradition as well as a commitment to continuous adaptation of this model to the modern world of work. In general, Nordic countries combine the provision of good public services with a high level of economic flexibility and entrepreneurial freedom, while taxes are not exceptionally high⁴. Concerning the labour market, especially the Danish government has promoted the idea of flexicurity, which combines generous unemployment benefit levels with low employment protection and active training for the unemployed. Moreover, Nordic countries have strong national unions and very centralised wage bargaining, but unions are usually quite cooperative when it comes to protecting competitiveness by modest wage claims. Investigating the impact of institutions on the development of polarisation and upgrading remains an important avenue to make sense of positive country cases.

During the economic crisis, which started in 2007/8, there was a clear upgrading trend in Europe. Note, however, that this is actually not a good thing, since the reason behind this development is the loss of low-skill jobs. Moreover, polarisation also increased in many countries. One can observe that there is a positive correlation between the increase in polarisation and the employment fall for European countries. This is because the crisis affected medium-paid jobs, especially those in manufacturing, most.

In the years 2011-2016, which one might describe as years of economic recovery, polarisation also increased.⁵ During these years, job growth mostly occurred in services (8 million new jobs, manufacturing: +1.5, agriculture: -1.5), i.e. in the sector with the strongest polarisation tendency. However, job polarisation in Europe after the Great Recession was not driven by occupational dynamics. Changes in the distribution of wages within occupations were much more consequential than changes in the wages paid by the different occupations or changes in the occupational structure. This contradicts the routinisation hypothesis. Moreover, while the aggregate EU pattern was upgrading with some polarisation, no single pattern of employment shifts was dominant in all countries.

THE EU AGENDA TODAY

Central to a response that turns polarisation into upgrading must be work-relevant skill formation, enabling people to work in better-paid jobs through a policy approach of social investment, which aims to equip the workforce with higher skill levels to keep up with increasingly demanding job profiles. Skill formation has been central to EU-level coordination of member states' employment and social policy since the inception of the European Employment Strategy in 1997 and its institutionalisation through the Lisbon strategy in 2000. It is still a central aim of the European Union's current long-term strategy, Europe 2020, for 'smart, sustainable and inclusive growth'⁶.

Within this framework, two of the nine targets focus on educational attainment until 2020, aiming to reduce the school drop-out rate (early leavers from education and training aged 18-24, with at most lower secondary education and not in further education or training) to 10% (from 15%) and to increase the share of the population aged 30-34 having completed tertiary education to at least 40% (from 31%). Several EU-level initiatives are aimed at improving skill formation. For example, the flagship initiative "An agenda for new skills and jobs" is an overarching initiative on employment, encompassing the issues of flexicurity, skills, working conditions and job creation. It aims at modernising labour markets and empowering people by developing their skills throughout the life-cycle. A goal is also to increase labour market participation and better match labour supply and demand, including through labour mobility. Another flagship initiative, entitled "Youth on the move", covers education and employment and intends to upgrade the performance of

education, address the challenges faced by young people on the labour market and facilitate school-to-work transition.

ENSURING SKILLS UPGRADING



From the analysis above, it becomes clear that a crucial role for today's labour market policy is to support young people through equipping them with work-relevant skills and capabilities. This is especially relevant in labour markets exhibiting a polarisation trend; skill formation might channel a polarisation tendency into upgrading. In order to widen access to such up-skilling opportunities, a successor to the Europe 2020 strategy should thus continue to promote an agenda of improved education and training through a policy approach of social investment. In this regard, there is still much to be done as the targets mentioned above are not yet fulfilled: The dropout rate is at 12.7% and hence still above 10%; the tertiary attainment rate is still clearly below 40%. Moreover, better skill formation should not just be understood as more years of schooling or university. Instead, skills have to be matched to the needs of the labour market.

Improving education systems requires significant investments and is thus inherently based at the national level, the EU can only coordinate and monitor. Governments should be encouraged to invest in skill formation, which is the base for future growth. A potential problem is that fiscal rules within the monetary union limit governments' ability to implement social investment when it would be needed most, namely in times of recessions, when potential skill mismatches become visible and many people lose their jobs and need retraining, assistance and support. Fiscal rules should take this into account and make a clear distinction between public investments and government 'consumption', social transfers and subsidies. Finally, effects of institutions should be considered, whereby the Nordic countries could serve as role models. The EU could support such a process by providing a forum for national government officials, allowing them to learn from best cases.

References

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