

EUROPEAN POLICYBRIEF

INTRODUCTION



ENCOURAGING LIFELONG LEARNING FOR AN
INCLUSIVE & VIBRANT EUROPE

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Good access to adult education and training accelerates economic growth

ENLIVEN Policy Brief No. 2

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This is the second of two ENLIVEN Policy Briefs which explore the connections between ‘system characteristics’ – relatively fixed features that derive from the institutions that structure particular societies – and adults’ participation in lifelong learning. They are based on two analytical reports we have prepared on these associations, focussing particularly on disadvantaged social groups. This Policy Brief examines the consequences for the economy of barriers to participation in lifelong learning.¹

The research reported in this policy brief was undertaken as part of ENLIVEN’s Work Package 4, coordinated by the University of Leuven.

¹ This Policy Brief is based on S.J. Cabus & M. Stefanik (2018), *Good Access to Lifelong Learning for the Low-Educated Accelerates Growth: Evidence from 23 European Countries* (available at <https://h2020enliven.org>). The other report, on the factors that hinder disadvantaged adults from engaging in lifelong learning, is summarised in ENLIVEN Policy Brief No. 1.

What benefits do inclusive lifelong learning policies for adults have for the economy as a whole? We investigated how accessible lifelong learning is for adults, and the impact of more inclusive participation on economic growth. Education and training are widely recognized as important determinants of national wealth, and it seems likely that if access to them is limited or unequal, economic growth will suffer. If so, fairness in adult lifelong learning matters not only for disadvantaged individuals and groups, but also for society as a whole: policies that improve educational prospects for disadvantaged people also improve the wealth of society as a whole.

We looked in particular at differences in access to adult lifelong learning between rich and poor, and between the lower and more highly educated. The focus is here on two disadvantaged groups, the poor and the low-educated. These are increasingly at risk of exclusion from the effects of 'skill-biased' innovation: as jobs and skills become obsolete, redundancy, dismissal, long-term unemployment and social exclusion threaten. Their learning opportunities are also limited because it is through work that many formal and non-formal learning activities become available. Employees mostly get opportunities for lifelong learning in or through the workplace.

Our main data source is the European Union Labour Force Survey (EU LFS). We processed data for six separate years: 2011 to 2016. Because EU LFS provides information about regions within countries, we can examine the administrative level where regional policies are applied.² In addition to the EU LFS data, we collected variables from Eurostat, the World Bank, UNESCO, and other reliable sources (e.g., Hofstede's work on cultural dimensions on the value attached to learning). All variables have been gathered in one large database with over 80 variables.³

The main results are:

1. Inequality in access to adult lifelong learning between high- and low-educated adults significantly decreases economic growth (-0.42 percentage points, significant at 1 percent level). Inequality in access to lifelong learning between rich and poor adults decreases economic growth (-0.20 percentage points; though this estimate is not significant).

Social inequalities reflect unequal power relations within societies. These power relations influence how people interact with each other in the workplace, and they may lead to polarization over working conditions and methods of production. Polarization promotes routinized work, especially for the low-educated, and impedes the development of production methods based on trust, knowledge and innovation. High levels of inequality therefore tend to reduce the added value that employees contribute in the production process, and also to reduce their openness to innovation. This, in turn, can have a negative impact on economic growth.

2. Skills-biased technological change, which implies that technological progress only benefits the highly-educated, is not good for economic growth as a whole.

In highly competitive labour markets, capital-intensive firms have accelerated their investments in research and development (R&D) since the 2008 financial crisis. R&D generates technological

² EU LFS provides information about NUTS-2 regions (typically smaller than countries, though in the case of a few small member states, national and NUTS-2 boundaries coincide). E.g., Estonia comprises a single NUTS-2 region; Germany contains 38). NUTS is the acronym for Nomenclature of Territorial Units for Statistics (French: *Nomenclature des unités territoriales statistiques*).

³ The database is available from the author on request. Panel data estimation techniques require the full dataset for the years 2011-2016.

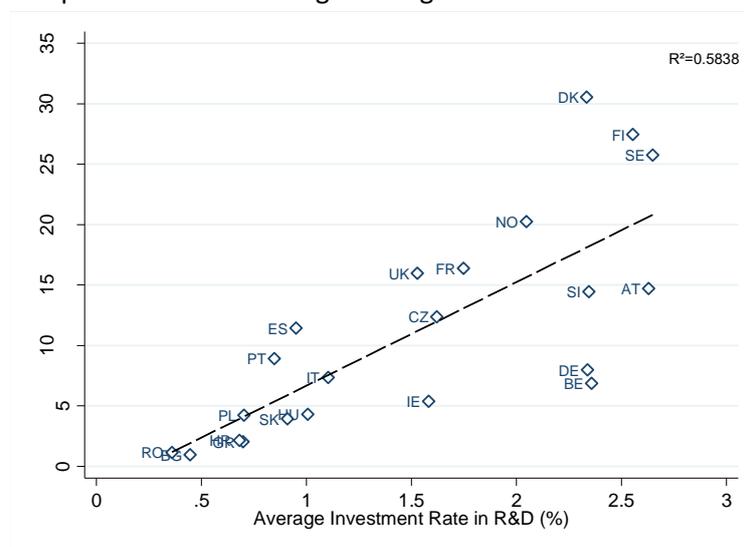
change, and technological change increases demand for highly-educated workers. The way technological change increases demand for highly-skilled employees has been called *skill-biased technological change*. Technological change is an important driver for highly-educated employees to engage in lifelong learning and thus keep abreast of new technologies. However, because technological change is not inclusive, this can have a negative impact on the economy as a whole.

3. The level of educational attainment in the population as a whole cannot explain why some countries excel – and others underperform – in adult lifelong learning participation.

In some European countries (such as Belgium and Germany) adult lifelong learning participation rates are much lower than their investment in R&D would lead us to expect (Figure 1). On the same basis, however, participation rates in Denmark, Finland, Sweden and some other countries are higher than would be expected. If lower-educated adults have more limited access to lifelong learning, we might expect societies with higher proportions of poorly-educated people also to have lower adult lifelong learning participation rates.

We found no direct support for this hypothesis. For example, Belgium’s average adult lifelong learning participation rate during 2011-2016 was 6.86 per cent, while Finland’s was 27.46 per cent. Based on the countries’ levels of educational attainment, these rates are predicted to be 16.00 and 17.14 per cent respectively. As such, Finland outperforms its starting position by over 10 percentage points, while Belgium underperforms by almost 10 percentage points. These differences between predicted and observed participation rates cannot be explained by Belgium’s lower overall level of educational attainment.

Figure 1: Relationship between R&D(1) and adult participation rates in lifelong learning



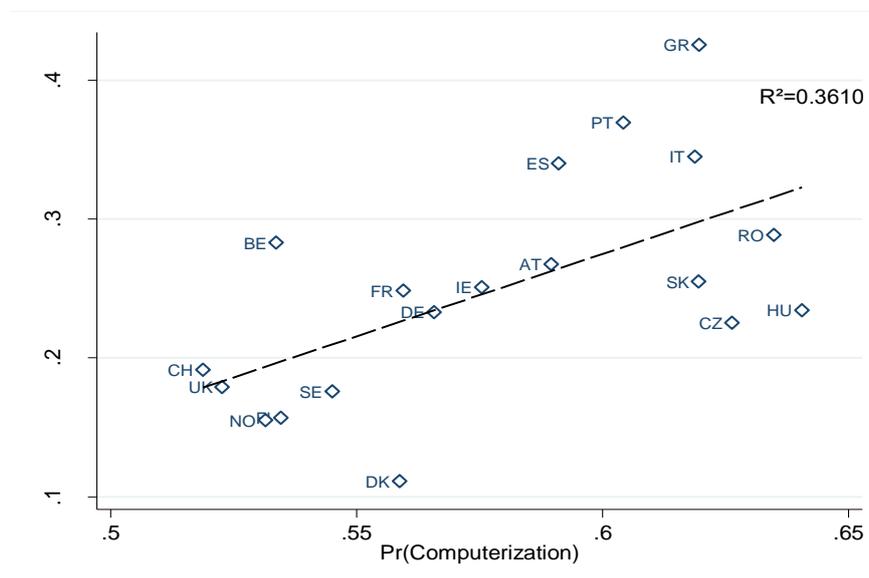
Source: Own computations based on EU LFS 2011-2016. The line (- -) presents a linear trend of the relationship between R&D and adult lifelong learning participation rates. Note 1: R&D denotes intramural R&D expenditure (GERD) as a percentage of GDP.

4. Unequal access to lifelong learning between low- and high-educated is worse in societies with a high proportion of routinized jobs.

Polarization between social groups – such as between rich and poor, or lower and more highly educated – promotes routinized work and a low-skill, low-trust production model. These in turn harm working conditions and reduce the value that employees add during production processes. On this assumption, we might expect societies with more routinized jobs also to show greater inequality in access to adult lifelong learning. We found this to be the case (Figure 2). In particular,

we found that the proportion of routinized jobs is an important predictor of inequality in access to lifelong learning between low- and high-educated adults.

Figure 2: Relationship between the probability of computerization of jobs within a country and inequality in access to adult lifelong



learning between lower and more highly educated (HCI-index)

Source: Own computation of probability of computerization of jobs (Pr(Computerization)) based on Frey and Osborne (2017) and using pooled EU LFS data 2011-2016.

5. The costs of adult lifelong learning explain about 0.1 percentage point of the total negative impact on growth of unequal access to adult lifelong learning.

Theories of human capital investment suggest that disadvantaged groups will be deterred from undertaking lifelong learning when course fees are higher, or when they lose income (e.g., because they lose their job). The costs of adult lifelong learning are also higher for employers when what they lose from an employee's time studying exceeds the benefits gained from the learning activity. In general, in countries where costs are an important barrier to participation in learning, inequality in access to lifelong learning between highly- and low-educated adults is also high. (Denmark, the UK and Switzerland, which combine high perceived costs of adult lifelong learning with low inequality, are notable exceptions.)

POLICY IMPLICATIONS AND RECOMMENDATIONS

On the basis of this research we point to four policy implications:

1. Policies on lifelong learning should be more inclusive.

Low-educated adults are generally more sensitive to the costs associated with lifelong learning than the more highly-educated. At the same time, they perform relatively more routinized jobs, and are paid less: relative to their earnings, therefore, learning activities are more expensive for the poorly-educated than for the highly-educated. Low-educated employees are most in need of

financial support from employers – although they receive it least. In addition, the low-educated are generally more likely to drop out of lifelong learning as adults, in part because of their poor memories of school.

Low-educated adults therefore need more encouragement and emotional support from colleagues at work, and from friends and family members. The negative feelings they associate with education may mean the costs they face in undertaking continuing education or workplace learning are significantly higher. In line with previous literature, we found that low-educated (young) adults, with the pressure of lower incomes, tend not to try to increase their earnings through taking up formal learning opportunities and improving their qualifications – in contrast to the better-educated. This calls for policies on adult lifelong learning to be more inclusive.

2. How the labour market is organised influences inequality in access to lifelong learning.

Routinized jobs contribute to inequalities of power between the lower- and the more highly-educated, and tend to lower the quality of working conditions. Societies with high shares of routinized jobs suffer more from inequality between social groups in access to lifelong learning opportunities at the workplace. This has direct consequences for the economy as a whole. Unequal access to adult lifelong learning between the low- and the highly-educated reduces economic growth. Research and policy should focus on encouraging innovative modes of production that facilitate a more equal society, and on greater security for those at risk in the labour market.

3. Financial instruments can flatten the impact of inequality in learning on growth.

A well-developed system for subsidizing the financial costs of lifelong learning can flatten the impact of inequality in learning on economic growth. However, it will not overcome poor access for the poorly-educated. Financial costs are only a small part of the barriers to participation in lifelong learning, especially when employees expect their employer to pay. Policy should focus on the interaction between methods of production, which are associated with labour costs, and workers' educational attainment: employers invest less in employees who are poorly-educated and perform routinized jobs - and when they find investment in education relatively expensive.

4. Tackle early school leaving.

It is better to prevent school leavers from being poorly-educated than to try to remedy the influence of low attainment in initial education on access to adult lifelong learning (and on economic growth). Policy should tackle inequality in lifelong educational opportunity at an early phase in people's education. This implies continuing efforts to tackle early school leaving. It also implies policy measures to facilitate the transition from secondary to higher education among disadvantaged groups.

RESEARCH PARAMETERS

The ENLIVEN research models how policy interventions in adult education can become more effective. Different work packages focus on the role of governance and policy, participation, workplace learning and adults' well-being. It implements and evaluates an innovative Intelligent Decision Support System to provide a new and more scientific underpinning for policy debate and decision-making on adult learning, especially for young adults. The project investigate these lifelong learning aspects through quantitative and qualitative analyses.

PROJECT IDENTITY

PROJECT NAME	Encouraging Lifelong learning for an Inclusive & Vibrant Europe (ENLIVEN)
COORDINATOR	Professor John Holford University of Nottingham, Nottingham, England, United Kingdom john.holford@nottingham.ac.uk
CONSORTIUM	3s Unternehmensberatung GmbH –Vienna, Austria Bulgarian Academy of Sciences – Institute for the Study of Societies and Knowledge – Sofia, Bulgaria KU Leuven/University of Leuven, Leuven - Belgium Slovak Academy of Sciences/ Slovenskej akadémie vied – Institute for Forecasting/Prognostický ústav – Bratislava, Slovakia Tallinn University/Tallinna Ülikool –Tallinn, Estonia Universidad de Deusto – Bilbao, Spain University of Edinburgh – Edinburgh, Scotland, United Kingdom University of Melbourne – Melbourne, Australia University of Nottingham – Nottingham, England, United Kingdom University of Verona/Università degli Studi di Verona – Verona, Italy
FUNDING SCHEME	European Union Horizon 2020 Framework Programme for Research and Innovation (2014-2020) – Societal Challenge 6 – Europe in a changing world: inclusive, innovative and reflective societies", call YOUNG-3-2015, topic "Encouraging Lifelong learning for an Inclusive and Vibrant Europe (ENLIVEN)" Grant Agreement No 693989
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WEBSITE	https://h2020enliven.org/
FOR MORE INFORMATION	Contact: Professor John Holford, john.holford@nottingham.ac.uk Contact: Ruth Elmer, ruth.elmer@nottingham.ac.uk
FURTHER READING	<i>Related ENLIVEN publications:</i> <ul style="list-style-type: none">Boeren, E. (2017). Understanding adult lifelong learning participation as a layered problem. <i>Studies in Continuing Education</i> 39(2), pp. 161-175. https://www.tandfonline.com/doi/abs/10.1080/0158037X.2017.1310096Bojadjeva, P., & Ilieva-Trichkova, P. (published online, 11 Jan 2017). Between Inclusion and Fairness: Social Justice Perspective to Participation in Adult Education. <i>Adult Education Quarterly</i>, 67(2), pp. 91-117. https://doi.org/10.1177/0741713616685398Cabus, S.J. & Stefanik, M. (2018). Good Access to Lifelong Learning for the Low-Educated Accelerates Growth: Evidence from 23 European Countries. Available on ENLIVEN website: https://h2020enliven.org and at https://hiva.kuleuven.be/nl/nieuws/docs/hiva-wp2019-01-sofie-cabus.pdfCabus, S.J., Ilieva-Trichkova, P. & Stefanik, M. (2018). On the Barriers to Participation of Disadvantaged Adults in Lifelong Learning across 28 European countries. ENLIVEN Available on ENLIVEN website: https://h2020enliven.org.Räis, M.-L., & Saar, E. (2017). Participation in job-related training in European countries: The impact of skill supply and demand characteristics. <i>Journal of Education and Work</i>, 30(5), 531–551. doi: 10.1080/13639080.2016.1243229