

Adult learning during Recessions in Europe

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Do workers and firms take advantage of the lower opportunity cost of labour and invest in adult learning during recessions, in the hope of having higher skills when the economy will take up again? We investigate the relationship between adult learning and the business cycle in the EU-27 countries, using data from the European Labour Force Survey for the period 2005-2018. We define “training” as non-formal learning, and “adult learning” as a broader concept which includes both non-formal and formal learning.

We find that adult learning is not sensitive to the business cycle. Training, instead, is mildly counter-cyclical. There are important differences by employment status: for the employed, adult learning is a-cyclical, yet training is counter-cyclical. We estimate that a 1 percent decline in GDP per capita increases participation in training of the employed by 0.95 percent. For the not employed, both training and adult learning are pro-cyclical, and hence decrease in recessions. We find that a 1 percent decline in GDP per capita reduce training hours for the not employed by 1.47 percent. Counter-cyclical training of the employed is consistent with the view of recessions as times of firm re-organization. Pro-cyclical training and adult learning for the not employed suggests the presence of credit constraints preventing the investment in skills during recessions.

There are also important differences by country in how training varies with the business cycle: in only 12 countries out of 27, training is counter-cyclical. In the remaining countries, it either declines during recessions or is insensitive to the business cycle. We show that training is more likely to be counter-cyclical in countries where public expenditure in training, trade union density, employment protection and R&D expenditure are higher, and where product market regulation and firms' financial constraints are lower.

TRAINING DURING RECESSIONS

Recessions reduce productivity as output shrinks faster than employment. Since foregone production associated with training also declines, recessions are times for reorganization and for the production of organizational capital (Hall, 1991). One facet of reorganization is training: firms typically hoard temporarily idle employees and train them in the expectation that their productivity will be higher when the economy re-starts. Reorganization produces counter-cyclical employer-provided training.

Two other effects, however, push in the opposite direction. First, since unemployment rises in a recession, the cost of recruiting skilled labour declines, which might induce some firms to hire the required skills rather than train unskilled workers. Second, in a business downswing profits decline and firms (especially those financially-constrained) may be forced to cut or delay some expenses, including training. Because of these contrasting effects, it is difficult to establish a priori whether firm-provided training is counter or pro-cyclical.

During recessions, individual workers typically re-direct their activities away from production and toward leisure, home production and the production of human capital. By doing so,

they take advantage of the lower foregone costs of production. If investment in formal or non-formal learning requires resources, however, this shift into learning activities could be hampered by the presence of liquidity constraints, which are typically stronger during a recession. As in the case of firm-provided training, whether individual formal and non-formal learning is pro- or counter-cyclical cannot be established a priori.

TRAINING DOES NOT INCREASE FOR ALL DURING RECESSIONS

Using data from the European Labour Force Survey covering the 27 EU Member States from 2005 to 2018, we investigate the relationship between adult learning (the combination of formal and non-formal learning) and training (non-formal learning) and the business cycle.

We find that adult learning is not sensitive to the business cycle. Training, instead, is mildly counter-cyclical. There are important differences by employment status: for the employed, adult learning is a-cyclical, yet training is counter-cyclical. We estimate that a 1 percent decline in GDP per capita increases participation in training of the employed by 0.95 percent. For the not employed, both training and adult learning are pro-cyclical, and hence decrease in recessions.

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The response of training to business cycle fluctuations varies considerably within the EU-27 area. In particular, training increases with recessions in Spain, Portugal, France, the Netherlands, Denmark, Sweden, Estonia, Malta, Greece, Romania and Luxemburg; declines with recessions in Italy, Ireland, Poland, Slovakia, Latvia, Lithuania, Hungary, Bulgaria, Germany and Cyprus and is insensitive to recessions in Belgium, Austria, Finland, Slovenia, Croatia and the Czech Republic.

POLICY TAKEAWAYS

In an intertemporal perspective, it is socially optimal to invest more in adult learning during recessions, when the opportunity cost of investing is lower. Yet, investment is widely perceived to be lower than the social optimum (see Bassanini et al, 2007). In addition, in the majority of countries training does not increase during recessions.

We show that in the countries of Europe where training increases during recessions, governments spend more to encourage training, and have a higher share of training expenditure on GDP. Government expenditure includes co-financing schemes directed at firms (levy / grant programs and tax credits) and at individuals (vouchers, individual learning accounts). Although these schemes may induce deadweight losses (by funding training that would have been done anyway), they can increase adult learning by reducing the liquidity constraints faced by workers and firms, especially during recessions (see Costa et al, 2018).

Training investment during recessions can be stimulated by designing counter-cyclical subsidies, that increase in intensity when the economy is in dire straits and the likelihood that liquidity constraints bite is higher. Examples in this direction are the top-ups to individual learning accounts introduced by France and Singapore to promote training during the COVID-recession.

Long-term policies that affect product and labour market institutions could also affect training intensity during recessions. We find that training increases in recessions in the countries with a higher average R&D expenditure (on GDP) and lower product market regulation. This indicates that firms and individuals in economies that are both more innovative and more open to competition are more likely to take advantage of recessions to update their skills portfolios. Therefore, long-term policies that favour innovation and make economies more competitive may favour training investment during recessions.

Training increases in recessions also in countries with higher employment protection. In these countries, the dismissal of employees when the economy slows down is either costlier or more complicated, which favours training of redundant labour as an alternative viable option. Thus, long-term policies favouring the deregulation of labour markets may have the side effect of reducing the incentives that firms have to train labour during recessions.

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For more details see: Marco Bertoni and Giorgio Brunello, Human capital during recessions, EENEE Analytical Report 43, https://eenee.eu/wp-content/uploads/2021/05/EENEE_AR43.pdf.