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Save workers, not jobs

Lifelong learning for a long life of employment

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Summary

The time when humans invested in education solely at the beginning of their careers is over. Workers will need to constantly develop their skills in order to keep up with rapid technological change. To encourage lifelong learning we propose two policies to provide workers with the time needed to upgrade their skills or to comprehensively retrain. We recommend giving workers the right to an annual study leave of five to ten days, as well as the right to one-semester sabbaticals every five to ten years. Only if governments, employers, and employees develop new solutions together will workers – both human and computerized – have fair opportunities to flourish in the labour market of tomorrow.

Jobs lost, jobs created

Technological progress is constantly revolutionising labour markets, creating new industries and professions, while rendering existing ones obsolete. The first and the second industrial revolutions, driven by the newly discovered power of the steam engine, of electricity, and of the combustion engine enabled the mechanisation of production. Workers were driven from agricultural life into giant factories in sprawling cities. The most recent industrial revolution has seen production and administration automate as information technology advances. Coupled with the increasing interconnection of global markets, supply chains have extended over many continents and have allowed for production and consumption to take place in different geographic locations. By allowing a shift towards more productive activities, technological progress has made societies richer, and has increased incomes and living standards steadily since the onset of the first industrial revolution.

In the more recent past, technological progress has even led to the creation of jobs in occupations that are based on routine tasks. Between 1999 and 2010, an estimated 21 million routine-task jobs were created in the EU alone.¹ In the wake of the on-going digital revolution, new jobs are mainly expected to emerge in fields related to programming, mathematics, and engineering.² Those equipped with the right skills will flourish in the future.

However, despite the creation of jobs in new industries, some occupations will experience declines in demand for labour. For example, between 2000 and 2010, an approximate 5.6 million manufacturing jobs disappeared in the US. It is estimated that 85 percent of these job losses can be traced back to advances in productivity, while the remaining 15 percent can be attributed to the effects of imports.³ With the steadily increasing sophistication of computing systems and robots, an apparent acceleration rate of progress means that up to half of all jobs may be subject to automation in forthcoming decades, especially in routine physical work and office jobs.⁴ While some

¹ Gregory et al. "Racing With or Against the Machine? Evidence from Europe." ZEW - Centre for European Economic Research Discussion Paper No. 16-053 (2016)

² World Economic Forum. "The Future of Jobs. Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution." (2016)

³ Hicks et al. "The Myth and the Reality of Manufacturing in America." (2015)

⁴ Manyika et al. (2017) find that about 5% of occupations could already be fully replaced by technology. The World Economic Forum warns that 7.1 million jobs worldwide are predicted to disappear between now and

jobs may be preserved, all occupations contain a level of routine-based tasks which can be automated or offshored.⁵

The race between technology and education

The majority of pupils currently in primary school will work in jobs that do not yet exist and that we potentially cannot even envision.⁶ While it is impossible to anticipate the exact skills that will be in demand twenty or thirty years from now, the labour market of the future is likely to evolve more rapidly and require workers to be more flexible, resilient and willing to adapt their skill-sets.

Workers will therefore have to invest more resources and energy in differentiating themselves from other workers - either human or computerized. Nobel laureate Robert Solow has noted that the digital age can be characterized as “a race between technology and education.” This highlights that focusing on education is vital for employment. We argue that the best way to stay ahead of technology is through lifelong learning.

Obstacles to lifelong learning

Continued education throughout the course of an entire career has been found to increase the probability of having a job.⁷ Nevertheless, there are a number of disincentives that may keep people from investing in lifelong learning. Some might simply lack the financial means or be unable to find the time to study on top of working a full-time job. Moreover, investing in new skills can be risky, as it is hard to predict which skills will be in demand one or two decades into the future. Consequently, the additional future income that can be attained thanks to educational investment might not even cover the costs. Investing in very job specific skills could also potentially render workers less employable for other parts of the job market. At

2020, mainly in routine physical work based on predictable office jobs (WEF, 2016). And according to calculations by Frey and Osborne (2013), almost half of current jobs in the US are at risk of being computerized in the upcoming two decades.

⁵ Chui, Manyika, and Miremadi. “Four fundamentals of workplace automation.” McKinsey Quarterly (2015)

⁶ World Economic Forum. “The Future of Jobs. Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution.” (2016)

⁷ Jenkins et al. “The determinants and labour market effects of lifelong learning”. Applied Economics Vol. 35 (2003)

the same time, employers may be reluctant to invest in the education of their employees if it increases their overall employability, which in turn would strengthen the bargaining power of employees in their current job. Finally, people tend to underinvest in education is because they are prone to “hyperbolic discounting”. This means that people tend to prefer smaller payoffs that materialise quickly as opposed to larger payoffs later in life. But lifelong learning is an investment in the future. The preference to work and earn money in current jobs, instead of investing in employability in the long run, forms an obstacle for lifelong learning.

According to the 2011 Adult Education Survey, a household survey which is one of the main sources for the European Union lifelong learning statistics, the most commonly cited obstacles for people to invest in lifelong learning consisted in (1) people not perceiving a need for training or (2) a lack of time due to family responsibilities, and (3) clashes with work schedules. For some occupations, such as doctors and academics, it is quite common or even required for workers to follow seminars or study programmes periodically. Their employers give them time off from work to invest in their own skills. But this is not common practice in all professions. It will be crucial to define a way to make lifelong learning the rule, not the exception, especially for those workers that are most likely to be replaced by machines, computers, or robots.

Make lifelong learning the rule, not the exception

Society as a whole will benefit from a better educated and employed workforce. Higher employment levels will boost economic development and tax revenue, as well as lower spending on unemployment benefits, which will in turn improve the public balance sheet. Smart public policies should have the objective of widening opportunities on the labour market for all workers, instead of desperately trying to cling onto jobs that are already slipping away or gone. As the likelihood of participation in education and training is directly linked to the level of educational achievement,⁸ providing greater, broader access to lifelong learning opportunities could render the labour market more equitable and inclusive.

⁸ According to Eurostat’s lifelong learning statistics for 2016.

The need to improve lifelong learning policies appears to be especially evident in France. While France spends a comparatively high amount of GDP on continuing education, the effectiveness of its policies appears limited. Compared to other OECD countries, the numeracy and literacy skills of French adults are low. Moreover, the French lifelong learning system does not appear to reach those most in need of upgrading their skills; workers with secondary degrees are only half as likely to continue learning throughout their careers than workers with tertiary degrees. Overall, less than 2 percent of workers aged 25 to 64 participate in formal continuing education leading to a degree, compared to 5 to 10 percent in Nordic and German-speaking countries.⁹

Adapting the education landscape to lifelong learning

Lifelong learning can only succeed if formal education and work-based education are integrated and if transparent educational pathways allow workers with different levels of initial levels of education access to study opportunities. The advanced systems of professional colleges in Germany and Switzerland could serve as an example for other countries to follow.¹⁰ In both countries, a large part of the workforce goes through vocational training rather than academic education and pursues part-time studies at professional colleges during their careers. These professional colleges offer officially-recognised degrees that blend academic and practical skills. The degrees tend to be especially valuable to workers as they are constantly updated in collaboration with labour unions, employers, and policy makers to keep track of technological progress.

The growing supply of high-quality online-classes provides a large portfolio of comparatively low-cost continued education options. Governments should make efforts to better capitalise on the increasing supply of these online courses. At the moment, these classes are mainly used by workers who already have a tertiary degree.¹¹ Governments could facilitate access to them by accrediting degrees according to official quality standards in order to make them more easily comparable.

⁹ OECD. “Vocational training and adult learning for better skills in France”. (2015)

¹⁰ OECD. “OECD Reviews of Vocational Education and Training”. (2013). Also see the national OECD “Skills beyond schools reviews” of Germany and Switzerland from 2013 et OECD. “OECD Reviews of Vocational Education and Training”. (2013)

¹¹ The Economist. “Learning and earning. Equipping people to stay ahead of technological change”. (2017)

In general, lifelong learning degrees will only be attractive to workers if previous work and education experience can be accredited and if courses are offered both in part-time and semester-long modules to reflect the heterogeneous needs of both workers and businesses.¹²

Offering annual study days

Workers need time for lifelong learning, and it is time to give it to them. Given that having to take leave or spend leisure time on education is a disincentive for workers to seek lifelong learning opportunities, we propose that workers be accorded the right to 5 to 10 days of annual study leave in order to refine and develop their skills, while being able to continue working full time.

We propose that these annual study days are jointly financed by employers and employees, requiring employers to pay employees their full salary for half of the annual study days. In designing this policy, the terms and conditions of the study leave programme should be determined in consultation with the relevant stakeholders. Moreover, there should be a possibility for the policy to differ across industries. Most small and medium enterprises (SMEs) will not find it financially feasible to provide study leave for longer periods of time. However, SMEs may be able to give their employees a day off once every month or two. Larger international companies, on the other hand, could more readily absorb the costs of giving employees time off for several days or months in between projects, rather than during busy periods. Taking account of these nuances and the realities of working life, both from the perspective of the employee and from that of the employer, is vital for this proposal to succeed.

In line with our proposal, France could further develop the existing system of the Compte Personnel d'Activité (CPA), which gives workers the right to two and a half training days each year for a period of six years. In its current configuration, the CPA appears to suffer from a number of shortcomings.¹³ Principally, with a threshold of 150 hours of training, it does not allocate enough time for continuing education,

¹² OECD. "OECD Reviews of Vocational Education and Training. Skills beyond School. Synthesis Report". (2013)

¹³ Institut Montaigne. "Un Capital Emploi pour la Formation" (2017); European Commission. "France Review of Progress on Policy Measures Relevant for the Correction of Macroeconomic Imbalances." (2016)

especially where the unemployed - who are in need of more thorough retraining - are concerned. In addition, the CPA is reported to be complex to navigate due to a high number of training providers and little comparable information on different pathways. These challenges will need be addressed in a further reform of lifelong learning policies in France.

Creating the right to regular one-semester sabbaticals

In order to allow for more fundamental retraining, which may be required by workers who want to or have to transition into new industries, the provision of a few days' study leave a year may not be sufficient. We propose complementing the annual study days with a right to take sabbaticals of 4 to 5 months every 5 to 10 years. In order to pay for intensive multi-month training courses, we propose the provision, to every citizen, of a one-off allowance of continued education vouchers worth at least several tens of thousands of Euros once mandatory schooling is over. While vouchers could only be redeemed with specific educational institutions certified by the government, it would be up to individual citizens to decide when and on which offers they want to spend the vouchers. In order to ensure effective retraining, governments could offer career counseling for workers who choose to exercise their right to one-semester sabbaticals. Moreover, European governments should consider the opportunity to implement such a scheme on a European level, combining trainings with internships and apprenticeships, for example, with the financial support of the European Investment Bank.¹⁴

¹⁴ For further innovative ideas on this, see the Argo website to read the contribution for Europe Think Again by Laurent Abraham titled: "[European Program for Training and Innovation](#)" (2017).

Future work

There are many other opportunities to incentivise continued education and lifelong learning. This Argo Note developed two principal proposals, namely to give workers the right to annual study leave days and to provide them with the possibility to take one-semester retraining sabbaticals every few years. In light of the complexity of the labour market and rapid technological changes, future Argo Notes will build on the analysis in this paper and will continue to address other important angles of the topic, such as the future of early-age education, labour market regulation, and redistributive policies.

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