Economic perspectives on employment 2021-2030

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INTRODUCTION

Long before the pandemic, labour force all over the world was facing the quest of incertitude, which is normal and inherent of the market, but the extent of this quest was shaped by the pace of acceleration of technological progress, which became exponential in the last ten years, from 2010 to 2020. Robotic process automation, work remote, computer science, electronic and communications, mechanical engineering, information technology digitalisation o public administration and so one are ones of the pillars of the future of work. Some authors even stated that without robotic process automation (RPA) included in technological processes, companies will not be able to sustain a competitive level on the market (Madakan et al, 2018). Robots and automation make processes to operate automatically, especially those which are repetitive, emerging a new concept, o robotic workforce.

Prominent empirical studies (Frey and Osborne, 2017 and Acemoglu and Restrepo, 2017) prove that continuous progress in digital and robotic technologies shape a trend towards the demise of work. Prospects of a future where many people will not have jobs due to automation are enhanced by additional publications (Brynjolfsson and McAfee, 2014, Ford, 2015). Automation and the complementary digital technology might come along with unemployment and conversely with inequality, hence the fear of people for what will bring the future. Social and economic policies are to be implemented, such as education for new adaptive skills or, in the worst scenarios, provision of a basic income. Despite of this unsecure perspective, automation processes come in hand with some peculiar qualities: they free people of repetitive tasks, provide availability of 24/7, are convenient and helpful, escape from risky jobs from dangerous situation, bust workflow inefficiencies, shore up productivity. These all are nowadays pillars of further growth, which economic mainstream still supports.

Nevertheless, in line with continuous extension of capitalism, work didn't cease to expand too, occupying workers lives due to new and diversified needs. At the beginnings of capitalism, in the early nineteenth century, the working hour programs were devastating people, from children to elders, forced to work up to exhausting levels, or death sometimes, due to low standard living (Heillbronner, 2005). Until the beginning of twentieth century, thanks to greater productivity and better social and economic policies, the decline of working hours improved the general background of the workforce. Despite of the solid trend improving the life of workers in the expense of working ours, from 1970s the trend has reversed, with a starting point in the United States (Friedman, 2017). Furthermore, in the twentieth century the productivity in United States improved 15 times, and in Europe 18 times, but the working hours has barely halved. Henceforth, a paradox is rising between the general growth efficiency and productivity and the expanding working our program (Spencer, 2018). Historical expectations of high quality of life with abundance and spare time seem to last more to be achieved. More, along with this economic paradox, non-cyclical crisis such as Covid-19 pandemic, decrease more the chances of a restless future for the workforce.

This paper offers a critical perspective on the present debate of the future of work, under the provocative context of automation and the unexpected pandemic and its consequences. This debate is targeting economics and social aspects which are colliding in order to identify what is the best template to accept a provocative future with a reality far out our possibility to foreseen. It

illustrates, in general, how the idea of online or remote work will face the future of employment, and presents, in particular, what are the short run policies we should to access to get back on track. The paper contributes by setting out some of the main positions in the debate of disruptions brought by pandemic.

The Paper is organised as follows. Section two offers some metrological hints on the research and scientific outcomes. Section three discusses issues on historical background on the vision of the reducing of working time. This discussion helps to identify limits in economic thinking and the origin of the ideas in context. Section four draws out the area of automation and its consequences. Section five reflects on the opportunities for changing educational paradigm after pandemic. Section six concludes.

HISTORICAL BACKGROUDS OF ECONOMIC THOUGHT

In 1930 John Maynard Keynes published now the famous article Economic Possibilities for our Grandchildren. Written basically in the middle of the Great Depression, his essays is important through the analysis of the standard of life of people, past and future. Keynes stated that until the Industrial Revolution of 1700s, with little up and downs, practically the standard of life remain plain, when it was not affected by plague, famine or war. Furthermore, Keynes asserted that this slow rate of progress was due to two reasons: lack of technical progress and poor management of capital accumulation (Keynes, 1930). After the discovery of the New World and the rise of England as a maritime power, the companies founded to colonize the Orient brought money and due to compound interest, England finally prospered. In the moment of his analysis, Keynes made the estimation that the average standard of life in Western world, namely in England and United States has been raised about fourfold, and the growth of capital of about a hundredfold. Henceforth, as a good mathematician, John Maynard Keynes has claimed his marvellous optimism about the future: with a capital increase of 2 percent a year, he thought that the capital equipment of the world would have increased by half in twenty years, and seven and a half times in a hundred years.

However, this optimism is not worry free, because Keynes has also pointed the menace of technological unemployment in the future, but even so, economic problem are eventually solved and the prognosis for the next one hundred years was the improvement in the standard of life between four to eightfold more than was in 1930. His famous words: “Three-hour shifts or a fifteen-hour week may put off the problem for a great while. For three hours a day is quite enough to satisfy the old Adam in most of us!”(Keynes, 1930:5). People have been waiting ever since for this prophecy, but the working time not only it did not reduced, but it even increased. Then why all this capital accumulation and technical progress which overpass by far Keynes predictions does not let people to enjoy more personal spare time? Nowadays at last his working time predictions took shape, but the reasons are related to different things, such as the automation, a particular case study of technical progress, and the virtualization of public-facing activities due to pandemic crisis.

AUTOMATION AND THE KEYFRAME OF WORK

There is a difference between the reduction of working time for a specific job, and the total disappearance of an established job: human drivers, warehouse operatives, retail workers, journalists and financial traders and many others. It is about the redundancy and the availability of the machines to replicate these activities. Computing, robotics and artificial intelligence are not science fiction issues anymore, they have arrived in our time and are changing everything. The point is to what extent will be the changes, because, at the first sight, it might be easier and cheaper to hire machines instead of humans. Furthermore, the perspectives look dire, because the predictions of the automation of jobs until 2040 are presenting as follows: half of the existing jobs in the United States and United Kingdom, two-thirds of jobs in India and three-quarters of jobs in China (Spencer,

2018). However, there are positive approaches of the decline of work, as a liberation of a burden and enhancing the freedom of personal spare time (Srnicek and Williams, 2015).

Still, the upheaval of the equilibrium on the labour market is not new. Technology, from the mutinies of peasants against the rise of the weaving machines, against all odds, augmented the work. New opportunities have always emerged, and the extent where the Internet has brought the world economy was barely imagined by someone ever. It was indeed a catalyst for consumerism, but still, in economic numbers, gave steam to development. Furthermore, the wheels of capitalism keep workers consuming and working, to maintain the profit making mechanism. Machines bring low cost for capital and henceforth there is a collision between machines and people, because the last ones should maintain a cheap level of wages in order to keep competitive. But workers' bargaining power has already became low from the 1970s', due to the restraining welfare state and the weak labour unions. More, with the process of automation the bargaining power will fall more, and not only unemployment will rise, but also a low quality of work will emerge. Either way, the scope of capitalism is to reproduce work and prevent the move to a future of less work . The real menace is one on the lowering the quality of work to be allowed to persist (Spencer, 2018), whereas the real outcome of the future of work should be a key frame with less and better work along with more personal spare time.

The literature presents two main perspectives. The first position claim that work should be supported to endure in spite of the technological pressure towards it lowering extension. In other words work is important for its own end and it is inherent for the welfare of human being. It's not only about the wages which practically pay the human living, the social dimension counts too (Brynjolfsson and McAfee, 2014). After March 2020, after Covid-19 pandemic burst, the disruption of social dimension of work was hard to endure. Even jobs have been commuted in online as much as it was possible, in time, the lack of social engagement for people became obvious. Furthermore, work is permanently preventing an under-consumption crisis (Ford, 2015: 256). As a consequence, if work as a social component of life is menaced by automation towards its demise, then government regulations like basic income to support workers are to be implemented. The first perspective was supportive for work as a normal consequence of social evolution and integration of every human being within the society as a whole, due to the utility derived from work characteristics, whereas the second position states that work distort the human well-being through requirements and mandatory tasks. The abundance of personal spare time instead of the obsession of social recognition mainly due to work hierarchy should be the way to reach creative activities for personal and spiritual development. In this perspective, authors claim that automation is welcome for freeing up of personal time (Srnicek and Williams, 2015: 126).

Before the rise of automation, work had its nemesis: low pay, poor work-related security, long hours of work or "out of hours working", stress associated with physical and mental illness, lack of motivation or long-time unemployment. Henceforth, technology deepens the worries and the aforementioned problems, instead of lowering them. Automation will certainly reduce the amount of work, but it would be a general social outcome if it would do this thing my distributing more evenly the work distributed across people. Indeed, there is overemployment for some, and underemployment for others. Reducing average working time by including the left behind people without work should do a normal goal for automation of work. Either way, the general claim is that a future with less work is ahead. History maintained the status quo of work in the life of human beings in spite of technological progress, but there are arguments to thing this digital revolution will bring upheaval to a greater extent.

COVID-19 PANDEMIC AS A FACTOR TOWARDS ACCELERATED DIGITAL TRANSFORMATION

To survive the pandemic and then to remain socially engaged through work, humanity accepted restrictions which forced the employers to adapt to a technology-intensive operational model. These digital accelerated transformations came on the general background of already

existing pressure towards the demise of classic work. The restrictions implemented from March 2020 have involved lack of physical contact and social distancing, hence the inevitable increased in innovative technologic activities instead of traditional market processes. Companies needed to implement changes to become more intensely digitized entities. Restrictions affected general workforce, management, decision-makers.

A great challenge was imposed to higher education landscape, where large groups of people are working together. Henceforth, universities implemented quickly protocols for cleaning and social distancing, cancelling as soon as possible public-facing events, career fairs, conferences, speaker events or foreign professor or student exchange. Then the pandemic forced universities to switch their entire instructional apparatus to online learning, using e-learning platforms, social media and professional meeting platforms like Zoom, Google Meets and others. However, pandemic has not only forged the acceleration of online learning, but set new trends in the competencies, entrepreneurship education and pedagogy:

BUSINESS BASICS	ENTREPRENEURSHIP BASICS	ENTREPRENEURIAL MINDSET/ COMPETENCIES
Finding the most prominent literature	Entrepreneurship defined	Disruptive thinking
How to sell	Entrepreneurial process	Risk management
Hiring of staff and manage leadership	Characteristics of entrepreneurs	Resource leveraging
How to adapt to different forms of enterprise	Context for entrepreneurship	Critical thinking, Critical reading, critical writing
Cash flow management	Innovative business model	Decision making
Formulating strategy	Government support for entrepreneurship	Strategic thinking
Market analysis	Identifying the best opportunities	Persistence and tenacity
Setting up operations	Input discovery/creation	Creative problem-solving
Understanding market processes	Venture capital and merger administration	Optimism management
Promotion and advertising	Start-up investment	Learning from failure
Financial statements	Entrepreneurial orientation	Implementing change
Franchising	Entrepreneurship and society	Adaptation
Management control	Ethical challenges in entrepreneurship	Resilience
Cost analysis		Building and using networks
Protecting intellectual property		
Exit strategy		

Source: adapted from Eric Liguori and Cristoph Winkler

Nevertheless, no matter how professional and sharp managed are the techniques of online learning, it is questionable to admit that they could ever replace completely traditional learning based on physical presence of mentors and disciples.

CONCLUSIONS

This paper has addressed concerns around the future of work, due to automation and non-cyclical crisis as pandemics. It began by showing the idea that work has endured and defined the civilized human being, yet the historical hope go forward towards personal and spiritual development and the happiness of people.

It has been argued that the automation is mainly targeting the quality of work, but the truth is that the new informatics technologies make the workforce more expandable, more insecure and

with little leverage on the employers than before 2000s. The most important things is that progress and technology are inevitable and henceforth they are not problems by themselves, but rather the social and economic policies sustaining the essence of capitalism, which is profit making. As long as we will use the technologies to lower the costs, and to enhance the profit making, nor burden will be reduced, nor will quality of work be improved. As stressed above, .in line with the arguments of Keynes, without worker ownership it will be very difficult to promote the expanding of liberty of free time correlated with more intrinsically rewarding work (Spencer, 2018).

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