PORGMUN Research Paper

PROTECTING THE LABOR FORCE IN EMERGING SERVICE-BASED MARKETS

Introduction

It seems that technological progress has never been as fast as in the recent few decades. Advanced technologies bring new broad possibilities and enable an increase of productivity and efficiency in most areas of economy. Thanks to developed software and digitial devices, we can save time and hard or dangerous work. However, technological development is not only positive. Serious concerns arise regarding the danger of widespread unemployment and the decrease of wages as a consequence of automation. Low-skilled workers, who are a significant part of the population, are particularly vulnerable to these negative effects. The problem applies not only to developing but economically developed countries as well, however, the problem is much more grave in the case of unskilled workers in developing economies, because these labourers tend to have less powerful voices and social security systems in these countries are often underfinanced or even non-existent. Negative consequences can further evolve if education is not publicly and widely available.

There are several approaches to this issue. While certain economists believe that automation will not lead to permanent and high unemployment because new jobs will be created, others have doubts and cannot imagine a new economic branch which would create enough places for these displaced workers. There is also a very popular opinion that new jobs will be created, but automation is and will be faster and cheaper, of course, and workers will therefore struggle to find new jobs. Many experts

point out that progress is linked to the disappearance of certain ocupations but also the creation of new ones throughout history.Since the Industrial Revolution, this progress has sped up and is more extensive. Workers moved from agriculture to the industrial sector and, most recently, from industry to the service sector. Some developing countries are in this state of transition currently. Unfortunately, there are concerns that the shift of workers from industry to service might be more problematic than in the case of more economically developed countries. Major problematic aspects of automation with regard to the emerging service-based markets will be discussed below.

Problems associated with automation

Is is common that companies seek ways to cut expenses as much as possible. As part of the phenomenon of globalization, big international enterprises shifted the manufacturing of products to less economically developed countries with cheaper labor. They are adopting new technologies as well. Many advanced digital devices, including robots, have already existed for decades. Nowadays, the major change is that the cost of these digital devices is reduced significantly. Therefore, investing in these technologies is much cheaper for the company, so they are even becoming more finacially favorable than cheap human labor (It is important to note that in many dynamically developing countries, including China, wages are increasing, which makes the option of automation even more attractive.) One example of factories who are laying off workers and replacing them with robots is Foxconn, who manufactures iPhones as well as other things . Digital devices have even more advantages – they tend to be more "flexible", because they can work 24 hours a day, 7 days a week, as well as turned off whenever it is necessary to reduce production. Routine manual work jobs are the ones most likely to be automated.

Automation will make many (mainly unskilled) workers redundant. Unemployment rates will rise, bringing with them serious negative social effects including criminality. More families will find themselves below the poverty line. Human labour is ednagered also in another way. There will be many more workers seeking jobs than the number available. These job-seekers, forced to ensure themselves at least some income will be therefore more prone to accept even very disadvantageous working conditions and low salaries.

Of course, workers will still be needed as digital devices need operation, which requires certain qualifications. Publicly available education that teaches the right skills therefore seems to be crucial to enable the population to adapt to the changes brought on by technological progress. On the other hand, if education is not widely accessible because it is too expensive or the number of schools is simply not sufficient, it can lead to a vicious circle. Unskilled workers might get dismissed, leaving their families with minimal income - insufficient to provide children with necessary education. Poverty would be transferred from generation to generation without any realistic possibility of change. If we look away from this social aspect, such a situation would naturally negatively affect the economy as a whole with a lower aggregate demand as one of the causes.

It seems that new technologies and automation have the power to make the rich richer and the poor poorer. Of course, some amount of economic inequality is natural. However, if it exceeds a certain level, it can have destructive effects on society and its economy. Some researchers believe that huge economic inequality has a negative impact on social cohesion and leads to higher criminality rates. In addition to this, it slows down the economy. In order to develop a service-based economy, it is necessary to have a base of consumers, people who have enough money to spend

them not only on their basic needs but also on additional services, such as healthcare, banking, entertainment or travel.

As described by Martin Ford in The Fiscal Times (2012), more economically developed countries managed to build a strong middle class in the past, which enabled development of the service sector by simply spending money on those services. Simultaneously, dismissed workers from the industry sector (which was gradually automated) could shift to the newly created job opportuinities in the service sector, which provided them with sufficient income to spend on services again as consumers and thus further develop the service sector. However, this process can be disrupted if economic inequality is too large and the middle class does not represent a sufficient percentage of the population.

Important factors affecting the problems

As mentioned above, education is among the key factors, so world states face the challenge of providing their citizens with the appropriate qualification that would enable them to find jobs in the ever changing labour market. Moreover, it seems that the education system needs to be more flexible and adaptable to the changes in demand for particular skills, because these changes are happening much more dynamically and unpredictably than in the past. While people without access to education used to have the possibility of occupying unskilled jobs, those places are disappearing now, leaving them jobless. Unemployment rates can increase tremendously also because of high population growth, which naturally demands the creation of a large number of new jobs.

Labourers can be further threatened by a non-existent or insufficient social security system. It is important for world states to make considerable effort in order to provide unemployed people with at least minimal income. The idea behind this is that those displaced workers would need funds not only to cover their basic needs, but also to learn

necessary skills in order to find new jobs. Unfortunately, it is evident that not all developing countries have enough resources to provide their citizens with sufficient amounts of money.

There are other important factors which are harmful for the economy as a whole, with effects on workers as well. Among those are the corruption of public authorities, unsatisfatory and poor-quality infrastructure and an extensive informal sector of economy. Attention should also be paid to legislation, ensuring a healthy competitive environment for companies, clearly set rules for the conduct of business and regulations guaranteeing the appropriate protection of workers. Moreover, adequate taxation systems play an important role. It should also be noted that many large companies manufacturing in developing countries have foreign owners, so earnings might be reinvested in home countries of the owners instead of the country of production.

One of the many theories which try to describe the causes of unemployment and other socio-economic problems of developing countries is called the theory of technological dualism and was presented by professor Higgins in 1940s. This theory can be applied even nowadays. Basically, it states that in certain developing countries, there are two different parts of economy– the modern sector and the traditional sector. The traditional sector mostly consists of agriculture (primarily small farmers) and small industries. It is typically labour-intensive, without substantial use of technologies and the productivity and wages are low. The modern sector covers mainly large-scale industries, it employs modern technologies with better efficiency and also offers higher wages while requiring more qualification. Those who cannot find work in the modern sector need to move to the traditional sector which is, to a large extent, tied to soil and more workers do not necessarily bring more product.

According to some experts, implementation of new modern technologies is likely to deepen this dualism and unemployment as the technologies are mostly introduced to the modern sector (which then needs even less labour force), while the traditional sector is much less influenced by them and is not able to accept all the displaced workers and provide them with sufficient wages. However, it seems that it is the agriculture sector of economy which would need modernization and use of technologically advanced machines to save work and increase productivity. (More details on the theory of technological dualism can be found on the websites listed in the "*further reading*" section.)

Possible solutions

This issue which will be discussed on the conference is obviously very complex and cannot be solved easily. The problems require a wide variety of both short and long-term solutions. Among the long-term ones, the development and support of publicly accessible education is key. Requalification programmes would also be very beneficial for displaced workers. However, the problem of limited financial resources available to governments of developing countries will have to be addressed. The creation and maintenance of good-quality education systems available even to persons living below the poverty line would significantly improve the situation of workers, but many developing countries might need assistance from the international community. This possibility should be considered by the United Nations.

In the short-term, workers need certain protection. This includes a stable social security system, which would provide job seekers allowances and/or other forms of aid. Other forms of protection of laborers can be considered, including minimum wages, health protection regulations, legislations establishing rules of termination of employment by the employer etc. However, the downside of such measures is that they raise the cost of labour for companies, so they can be even more motivated to

replace workers by machines. It is therefore necessary to maintain these arrangements balanced. Some economists claim that limiting working hours was also historically used for both protection of workers and providing employment for more people, as more laborers are needed to accomplish the same amount of production.

Fiscal policies can be used to make employing workers more economically advantageous for companies. There might be lower taxation for entreprises providing places to a certain amount of workers, the state´s financial aid for them or on the other hand, higher taxation rates for entreprises automating their production to a certain degree (which is however problematically defined). The risk here is that if companies are too economically burdened, they can leave the market and move to a different country or even go bankrupt, which would naturally lead to an increase in unemployment rates and harm the economy.

Role of the Digital Revolution Committee

Some general aspects of automation and its impact on the labor force as well as possible ways of addressing the problems were described. However, it cannot be ignored that every country and region have their specifics. Some of the problems mentioned might apply to certain emerging service-based markets, while other ones, ignored in this research, can appear in other cases. It is therefore very fortunate that you, the delegates of many countries all over the world, acquainted with the situation in your region, come to this conference. Together, through debates in the Digital Revolution Committee, the most efficient solutions can be found and presented in resolutions.

Further reading:

http://www.iza.org/conference_files/worldb2012/campbell_d2780.pdf

http://www.spiegel.de/international/business/speed-of-innovation-and-automation-threatens-global-labor-market-a-897412-2.html

http://www.thefiscaltimes.com/Articles/2012/08/20/Will-Robots-Cause-Mass-Unemployment-in-China#page1

http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

https://josephekwu.wordpress.com/2008/01/17/unemployment-in-the-third-world-countries/

http://iospress.metapress.com/content/9605560254776733/?p=e53d3991677943fe895cf7e0e2df478c&pi=0

Sources:

http://www.spiegel.de/international/business/speed-of-innovation-and-automation-threatens-global-labor-market-a-897412-2.html
http://www.ted.com/conversations/13603/will_automation_lead_to_econom.html
http://www.theguardian.com/world/2011/aug/01/foxconn-robots-replace-chinese-workers
http://www.thefiscaltimes.com/Articles/2012/08/20/Will-Robots-Cause-Mass-Unemployment-in-China#page1
http://www.thefiscaltimes.com/Articles/2012/06/07/10-Jobs-that-Wont-Be-Taken-By-Robots-Yet?page=0%2C0
http://www.thefiscaltimes.com/Articles/2011/07/12/The-Robot-Revolution-Your-Job-May-Be-Next
http://motherboard.vice.com/blog/the-rich-and-their-robots-are-about-to-make-half-the-worlds-jobs-disappear
http://www.economist.com/news/leaders/21594298-effect-todays-technology-tomorrows-jobs-will-be-immenseand-no-country-ready?spc=scode&spv=xm&ah=9d7f7ab945510a56fa6d37c30b6f1709)
http://en.wikipedia.org/wiki/Economic_inequality
http://www.studymode.com/essays/Unemployment-In-Developing-Countries-156702.html
https://josephekwu.wordpress.com/2008/01/17/unemployment-in-the-third-world-countries/
http://diposit.ub.edu/dspace/bitstream/2445/33140/1/617293.pdf
http://www.theguardian.com/global-development/2014/jul/24/jobs-social-security-income-inequality-undp
http://www.modernghana.com/news/435566/50/unemployment-in-africa-what-policy.html
http://blogs.worldbank.org/growth/factors-structural-unemployment
http://iospress.metapress.com/content/9605560254776733/?p=e53d3991677943fe895cf7e0e2df478c&pi=0
https://books.google.cz/books?id=6svsVnwDzdMC&pg=PA81&lpg=PA81&dq=unemployment+in+ldcs+technologies&source=bl&ots=tsBGoAe33g&sig=B7d0IQHeOrQ6VHqPVllkC378SUI&hl=cs&sa=X&ei=fGfkVOvJH4mGywOiqYGwCw&ved=0CEwQ6AEwBQ#v=onepage&q=unemployment%20in%20ldcs%20technologies&f=false

http://www.scribd.com/doc/47449015/TECHNOLOGICAL-DUALISM-AGRICULTURE-AND-THE-UNEMPLOYMENT-PROBLEM-OF-DEVELOPING-ECONOMIES-Egbe-B-E-1-Ogar-A-M-2-Ibrahim-M-K-3-and-Albert-A-T#scribd
http://www.iza.org/conference_files/worldb2012/campbell_d2780.pdf