# Reframing the narrative on the future of work

The Global South perspective

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## Index

The future of work: new technologies and jobs	
A dominant narrative on the future of work	5
Reframing the narrative: A Global South perspective	7
Going deeper: regional narratives	11
South and South East Asia	
Middle East and North Africa	
Latin America	
Sub-Saharan Africa	17
Towards an inclusive and innovative future of work	20
in the Global South	

## The future of work: new technologies, new jobs

"Every now and then something happens - ultimately linked to changes in industrial technique, although the connection is not always obvious - and the whole spirit and rhythm of life changes, and people gain a new perspective that is reflected in his political behavior, his manners, his architecture, his literature and everything else."

George Orwell (1942)

George Orwell's description of deep social transformations and their undeniable connection with arising production methods sounds very actual. The types of goods and services that we produce, trade, and consume -and the way we do it- are changing fundamentally. A confluence of a diverse set organizational of and Information Communication and Technologies- with Artificial Intelligence (AI), cloud computing, and the proliferation of data-driven decision-making businesses leading the way- are at the center of these transformations. Behind deep the outstanding modernity of Orwell's phrase is the idea that these technologies together function as a general-purpose technology (GTPs). i.e., those that:

- Are highly malleable and with room for improvement.

- Are if widespread use in different sectors of the economy.

- Generates spillover effects that encourage innovation.

Throughout human history, there has been a wide range of GPTs. Richard Lipsey and his collaborators list only some 25 of them since the domestication of plants around 12,000 years ago. Many of these GPTs redefined the world of work: the Neolithic revolution transformed hunter-gatherers into farmers; the Industrial revolution, converted the self-employed into factory workers. For the subset of GPTs –that emerged in the last 200 years, new labor Throughout human history, there has been a wide range of TPGs. Richard Lipsey and his collaborators list some 25 GPTs since the domestication of plants some 11,000 years ago. Many of these GPTs redefined the world of work: the Neolithic revolution transformed hunter-gatherers into armers; Industrial revoluion, those the selfemployed into factory workers. In a smaller number of GPTs -all in the last 200 yearsnew labor relationships came with the movement of workers from low-productivity high-productivity jobs, which iobs to resulted in higher economic growth and unseen improvements in living standards.

Countries who escaped low-growth and development traps have created new, better paid jobs by leveraging the advantages of emerging technologies in past industrial revolutions. They managed develop. adopt and adapt to new technological solutions quickly and widely enough to transform them into relative gains in terms of productivity and living standards. In the current context of a new wave of technological innovation, societies are reorienting their efforts to make the most of the new GPT. As firms are reimagining products and processes and workers are increasingly intertwined with digital tools, the world of work is again entering a redefinition process.

Governments are well aware of these mutations, and policy frameworks regarding current and future labor markets – that cover a variety of issues, ranging from skills to technology and regulation- are being revised to shape the trajectory of change toward a future with higher productivity and better jobs for all.

## The standard narrative on the Future of Work



Stories or narratives sustain policy frameworks. After all, our brains are story processors, not data or logic processors. Narratives matter because they frame the discussions about the complex issues around us by influencing what we say, what we emphasize, and what we leave unsaid. When powerful enough, a narrative can become "common sense," guiding policies and feeding policy frameworks Urbi et orbi.

Something like that is happening with policy frameworks regarding the future of work. The standard narrative in academic and policy circles around the world (see, for example, IMF (2018), WEF (2020), Autor et (2020)says that AI-centered technological innovation is inevitable, and, its growth, exponential. The future is already here. The narrative borrows from the influential work of Daron Acemoglu and Pascual Restrepo to say that a new revolution is disrupting labor markets through two forces. First. new iob opportunities are being created, particularly in the set of tasks that complement and augment the power of these technologies. Second, it is threatening jobs that involve tasks that will become obsolete due to the adoption of new technologies. The challenge. then. is to match task automation with new work creation. But -as shown in figure 1- the current set of institutions are not appropriate to confront

this challenge. Today's labor and skills development institutions were OK for shaping technological innovation in the pre-ICT era, but are not anymore. Now, outdated curricula and inadequate shaping technological regulations are innovation in a way that creates winners and losers in the labor market (i.e., the polarization hypothesis). In summary, the standard account of the future of work challenges that the mismatch poses between exponential technological change and lower-speed human adaptability is creating income inequality and -that this needs to be fixed by institutional reform, skills development particularly in institutions.

If history is any guide, the narrative concludes, these adaptation will succeed, which will lead to an increase in employment, real wages, and the quality of jobs, as has happened with previous waves of technological change. The World 2020, for example, states that while automation will destroy some 85 million jobs in the near future, the application and AI and related technologies will create an additional 97 million jobs to the global economy. The IMF (2018) added a note on wages: as real wages follow productivity trends, they will move upwards vis-à-vis the adoption of emerging technologies.

Reframing the narrative: A Global South perspective



In a context where the conceptual field is dominated by science fiction, this narrative on the future of work represents a good first step for guiding public frameworks, as it breaks away from existing and unfunded fears of robots dominating humans. However, this framework has its own premises, and acknowledging them is of extreme importance for its own evolution. To illustrate, the standard narrative takes as its starting point the existence of the widespread use of advanced technologies in production processes and therefore concludes that institutions need to catch-up. This makes sense for most advanced countries but is not the case of the Global South. In low and middle-income countries, the most dangerous scenario is the status quo, a situation where technology takes too long to penetrate and spread across businesses and households. Failing to adapt the future of work conceptual framework to local realities might result in too much concern being placed on issues that are not a priority and, even worse, missing important policy questions. It would be like the story of the drunk man looking under a lamppost (known as the Drunkard's search or the streetlight effect).

A natural next step is to add context and diversity to the existing narrative. Luckily, a lot of research has been carried out during the last decade to assess what the future of work is likely to be in the Global South. As a first attempt to systematize this research and data points we have identified four key structural features where the Global South and the Global North differ, and which need to be emphasized in a meaningful narrative on future of work in the developing world.

First, in the past the Global South has failed to make the most of global technological innovations, and remains a follower in the age of AI. From a global perspective, the periods of early adoptions of disruptive technologies were also phases of large bifurcations in income, productivity, and well-being between countries, that is, the emergence of winners and losers at the global level – the Global North and the Global South. It means that in many countries we cannot take exponential innovation for granted.

Second, the challenges of skilling and reskilling are more complex in the Global South, as many current and future workers are excluded from formal education and training institutions due to the lower coverage of secondary and tertiary education and the high prevalence of informality. Furthermore, those who are integrated in these institutions suffer the consequences of lower-quality education systems and learn the hard way that that schooling is not the same as learning. Curricula reform must be addressed, but new elements of analysis –low coverage, bad quality, scarce finance- need enter into the picture.

Third, labor market institutions differ in fundamental ways. While in the developed world, technological change is challenging long-term, secure jobs, in the less developed world to these threats we need to add the likely impacts in the informal sector, as nonstandard forms of employment are the norm (such as e-formality provisions for lowskilled workers).

Fourth, structural differences between more developed and less developed countries go technology. skills. well beyond or institutions. Inequality is a case in point. While in the developed world the digital transformation is fuelling income inequality, in the Global South, structural inequality is a structural kev factor preventing transformation from happening. Various sources of structural inequality associated with an uneven distribution of digital capital, skills and firms' capabilities are blocking the introduction of emerging technologies and novel ideas that have the potential to create better jobs. Getting into the complex issue of structural inequality is key for Global South countries.

How can we reframe the Future of Work narrative to add these elements and capture

the essence of the challenges facing Global South regions? How should we shift the emphasis in the existing discussion and what should we add to it? Table 1 exhibits some ideas.



Торіс	Main issues in the Global North	Aditional issues in the Global South
Technology	- Technological innovation -Infrastructure	-Technological adaptation -Technologies in use
Skills	-Curricula reform -Life long learning	-Dropout rates - Learning vs. schooling
Labor market institutions	- Flexibilization of formal work - Reform of labor institutions	-E-formality in informal settings - job quality with excess supply
Demography	-Aging population - UBI	-Demographic dividend -Job creation needs
Inequality	-Inequality in labor income -Decreasing income share -Political backlash	-Wealth inequality -Pro-rich public policies - Lack of competition

Source: author's elaboration.

## Going deeper: regional narratives



The structural elements mentioned in the previous section are common to developing countries. These elements comprise a shared agenda for the future of work in the Global South. However, the Global South is composed of very different countries, where labor market features differ and with nuances on how demographics, inequality, technological change and skills formation, as well as culture and history, interact with each other. Thus, to go a step further from a single Global South framework, we have worked to unsderstand the most distinct elements characterizing the future of work challenges in four regions of the Global South: South and Southeast Asia, the Middle East and North Africa. Latin America and Sub-Saharan Africa.

salient and Below present these we particular features that represent each region and that we consider are key to make sense of the future of work regional challenges and opportunities. This is the last step of a shared effort that involved 80 experts who participated in the "Dialogues on the Future of Work in the Global South", five institutions who coordinated these regional events, and eight authors who messages crystalized the kev and recommendations the arising from conversations:

-"<u>Technology, equality and the future of</u> <u>work in South and South East Asia</u>" by Sabina Dewan, Apoorva Dhingra and Swati Rao in partnership with JustJobs Network <u>-"The future of work in the MENA region:</u> <u>moving intro the digital fast lane... with the</u> <u>breakes on"</u> by Nader Kabbani in partnership with the Economic Research Forum (ERF).

-<u>"The future of work in the garden of forking</u> <u>paths</u>" by Ramiro Albrieu and Gonzalo Zunino in partnership with the The South American Network on Applied Economics (Red Sur).

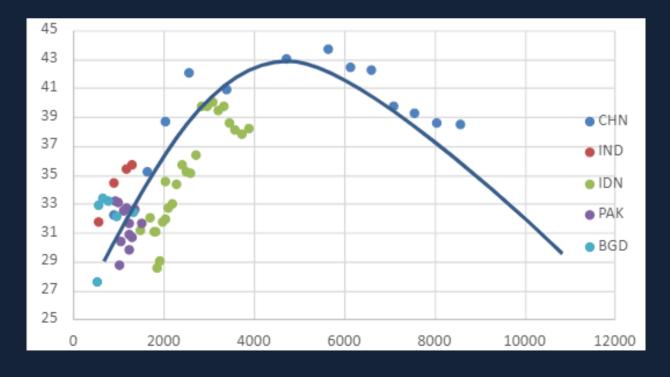
<u>-"Regional views on the future of work in</u> <u>Sub-Saharan Africa</u>" by Victor Okoruwa, Tomson Ogwang and Njuguna Ndung'u in partnership with the African Economic Research Consortium (AERC).

## South and South East Asia

The narrative for this part of Asia differs in one important point from the story from the rest of the regions included in this document. It is а region that has experienced a long period of high economic growth sustained in large part by the diffusion of the technological innovations we mentioned earlier (platforms, artificial intelligence and the "servification" of the economy). Although South and South East Asia are still far from reaching the living standards and welfare levels of advanced economies, this dynamic of accelerated

growth has generated a sharp increase in within-country inequality as measured by the Gini coefficient.

One way to think about the region's key challenges going forward is through the kuznets curve. The Kuznets curve shows the relationship between the level of well-being of an economy (approximated by GDP per capita) and its level of inequality. According to the experience of most of the advanced economies until the mid-20th century, this curve has an inverted U-shape, so that once a country reaches a certain level of GDP per capita, it modifies its growth model to make it more inclusive.



#### Figure 1. Kuznets curve

Source: author's elaboration.

As can be seen in the figure 1, many countries in this region are advancing along the first part of the curve, accelerating growth and inequality at the same time. Therefore, the great challenge ahead for South and South East Asia is not the level of growth or the rate of technological innovation, but the direction of change. It is therefore a question of rethinking policy frameworks for making growth more inclusive by design – and the labor market has a key role to play.

The future of work narrative in South and South East Asia should then be about trying fairer. There are four key elements that should be part of this narrative. The first has to do with structural transformation, and refers to switching the focus from manufacturing to services as the target sector to lead the way, increase productivity, and create quality jobs. The second is associated with the impact of the high penetration of labor intermediation platforms, particularly in the low-skilled segments. In this regard, the impacts in terms of quantity and quality of jobs are varied, but tend to be more negative the greater the oversupply of labor in these markets is. The third point refers to the need to readapt the skills of people in the labor market. There is a need to innovate in Technical and Vocational Education and Training (TVET) in order to adapt it to informal settings.

Finally, the issue of inequality in the digital world, which particularly penalizes women, is largely unaddressed in policy frameworks.

## Middle East & North Africa

The process of technological change and structural transformation implies that a set of innovations emerge and make obsolete the technologies and ways of producing of the past, thus automating specific tasks and creating new jobs in the most dynamic activities, with more modern technologies and more sophisticated skills. This process of structural change was described by Joseph Schumpeter as one of **creative destruction** and is one of the leading forces behind technological innovation and its positive impact on productivity, job creation, and real wages.

The MENA narrative stands out relative to the rest of the regions for the relative absence of creative destruction dynamics such as the one just mentioned. The region continues to rely heavily on commodity exports for growth and employment generation, and very little has been achieved in terms of productive diversification.

The primary indicator of innovation anemia is related to the dynamics of GDP per worker (see figure 2). According to productivity data compiled by the World Bank, growth in GDP per worker was almost exclusively due to new capital investments in natural resource-intensive sectors. At the same time, Total Factor Productivity (TFP), the proxy for technological innovation. contributed negatively (only in some years positively) to GDP per worker growth. In other words, the allocation of new investments was detrimental to innovation and creativity.



#### Figure 2. Productivity relative to the Global North

Source: author's elaboration based on World Bank

Thus, the main challenge for the future of work in MENA, in a context of a rebound in the size of young population relative to total population, will be to fundamentally change its growth model which did not deliver positive growth nor equality. In the past, high levels of natural wealth allowed for a substantial expansion of the public sector, to such an extent that it ended up being the main decision-making agent in terms of investment and innovation, in addition to being one of the leading employers in the economy - particularly in the high-skilled segments. Moreover, the combination of "high natural wealth - big state" developed a counterpart in the educational system, where the incentives were placed on obtaining the necessary credentials to enter the public sector, rather than acquiring the skills to get employed in the more productive sectors.

A future of work narrative for MENA must then highlight the need to find paths to encourage innovation and risk taking in the private sector. In a nutshell, the region needs to reconnect to the innovation dynamics of growth, that is, to find Schumpeter. The issues that need to be emphasized in this narrative relate to a very small and protected private sector, an overly large public sector, a high dependence on natural resources, an education system based more on credentialism than on 21st century skills, as well as a damaged relationship between the state and the citizenship.

### Latin America

The literature on future studies usually refers to а acknowledging the fact that the future is not given but it depends on a set of actions to be taken. But in the case of Latin America the multiplicity is of a different nature: it refers to the duality created by the high levels of structural inequality that prevail. Thus, dynamic and competitive labor markets coexist with others where old technologies and routine skills are still in use. Policy frameworks have systematically failed in connecting both markets resulting in a pocket of islands of modernity in a sea of low productivity.

Thus, one of the most important elements to build a narrative about the future of work in Latin America is inequality. But not to refer only to inequity on current income distribution, but to the deep asymmetries in the wavs Latin American societies accumulate and use diverse forms of capital. Take the private sector. There is ample evidence of the presence of dynamic firms, particularly in specific sectors such as agriculture and finance. Agriculture, which was considered non-innovative for decades, has undergone an intense process to incorporate new technologies in recent decades, particularly in precision agriculture. In finance, the transformation came with the increasing use of digital media to carry out all types of banking and credit transactions,

particularly by a new type of firm named "fintech": fully automated, AI-powered, platform-based credit institutions. However, these cases alone cannot explain the average performance of the region. These are innovative but still small sectors or particular segments within pre-established firms.

In Argentina, for example, barely 4% of agricultural companies use precision technologies, and something similar occurs in neighboring countries. Moreover, the fintech share in total credit is still minimal (i.e., less than 1%). The lagging firms are characterized by being smaller establishments, not performing R&D activities, operating in the non-tradable sectors of the economy, and not hiring digital services companies.

Inequality is also in the present accumulation of skills. Coverage in early childhood education, for example, is low and focused on children from well-off families. Gaps in skills formation do not close over the vears: while quintile, they are just over 40% in the poorest quintile. And in terms of learning, an adolescent from the richest quintile is twice as likely to solve age-appropriate problems as one from the poorest quintile.

Finally, labor markets are dual in the sense that a formal sector that enjoys the benefits of social protection and legal regulations coexists with an informal sector that operates outside of all regulations. Informality is detrimental to workers' rights and increases the risk of social security systems' unsustainability, which is exceptionally high in the region due to an accelerated demographic transition.

The narrative about the future of work in Latin America needs to emphasize the low and uneven penetration of new technologies, the high fragmentation and low quality of education institutions, the unsustainability of pensions systems, and the status quo bias in the private sector behavior and public policies.

### Sub-Saharan Africa

The Narrative on the future of work for Sub-Saharan Africa differs substantially from those mentioned above. While societies in the rest of the world are aging rapidly. Sub-Saharan Africa is young -about to enter the demographic dividend stageand the demographic transition is unusually smooth. In opposition to global tendencies, the dependency ratio (the number of dependents aged zero to 14 and over the age of 65) will fall in the coming decades, reaching a plateau in 2070-2080.

In other words, the challenges of job creation at the global level in the coming decades will be concentrated in Sub-Saharan Africa. The labor market of the future will be shaped by the stock of skills, the technologies and the regulations of African labor markets.



#### Figure 3. Working age population shares by region

#### Figure 4. Change of population of different age groups (thousands)



Source: author's elaboration based on World Bank (2020).

The need to create more than 700 million jobs in the next three or four decades meets a complex outlook in terms of adaptability to change. In the technology realm there has been a lot of progress in recent years, but in relatively simple, end-user applications. Still, much remains to be done to disseminate complex AI solutions on a large scale -let alone to participate in their creation or adaptation. On the skills side, there is underinvestment in critical skills (with the early childhood level being particularly concerning the demographic given challenges), there is mis-investment in routine skills rather than creative ones, and there are severe problems of inequity, which go beyond income or gender. Finally, the productive bias towards agricultural activities implies low employment a elasticity of economic growth.

Therefore, the biggest challenge for sub-Saharan Africa regarding the future of work is to match structural transformation with the demographic dynamics of a long-lasting expansion in the labor force. In the coming decades, the pressures to create jobs will be very strong - the labor force is set to double in just three decades - and policy frameworks must be revised to accelerate change. For example, in terms of technology, the goal must be to go beyond leapfrogging in simple technologies. In terms of skills, investing decisively in the current education system is key. In regulatory issues, policies must increase its efforts in encouraging productivity gains in the informal sector. A major underlying challenge for embracing the needed transformations is the limited capacity of governments in terms of resources, capabilities, and incentives.

## Towards an inclusive and innovative future of work in the Global South

There is a fundamental mistake in trying to predict the future: it doesn't exist yet. nothing revealed There's to be and everything to be created. In that sense, taking ownership of the Global South's transformational capacity is the first step not to predict but to build a brighter future of work. Not only for the Global South but for the global economy: developing countries will account for 90% of the world working age population by 2050.

In this document, we sought to provide a first set of elements that serves to adapt the standard narratives on the future of work to the context of different Global South regions. We hope it ultimately helps developing countries to keep working on a framing that reflects their own background and challenges, which is essential to develop innovative and inclusive future-building policy frameworks.

While one person signs the document, it is the result of a collective intelligence exercise involving 80 researchers from Asia, Latin America, the Middle East and North Africa, and Sub-Saharan Africa. Coming back to the streetlight effect, we hope to have contributed with the growing number of streetlamps that are helping us look for the lost key in new places.

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#### **ABOUT FOWIGS**

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The Future of Work in the Global South is an initiative supported by the International Development Research Centre (IDRC) and coordinated by the Center for the Implementation of Public Policies Promoting Equity and Growth (CIPPEC). It aims at understanding the implications of technological change on jobs from a Global South perspective bringing data, knowledge, and policy frameworks to build evidence-based narratives on the future of work in developing countries.