

The future of migrant work in the GCC: literature review and a research and policy agenda

Steffen Hertog, London School of Economics

Purpose of the note

This concept note provides

- a) a brief review of the current state of the global “future of work” debate,
- b) a discussion of how global changes in work practices could affect migrant flows and employment in the GCC, and
- c) an overview of research needs to generate more reliable predictions on this matter going forward.

Background on future of work

There is general agreement that the technological forces of automation, big data, and machine learning will change the nature of work fundamentally in the coming decades in both developing and developed economies. There is much less agreement about the pace and extent of change: Frey and Osborne (Frey and Osborne 2017) conclude that 47% of all US jobs are at “high risk” of being automated at current levels of technological development. Arntz, Gregory and Zierahn (2016) of the OECD, having conducted a similar study across 21 OECD countries, find that only 9% of jobs were at high risk of automation. A much-cited study by McKinsey (Manyika et al. 2017) argues that by 2030, the share of jobs being automated across 46 countries could be anywhere between close to zero and 30%.

The reasons for such varying predictions are different methodological choices (while Frey and Osborne focus on occupations as a whole, the OECD and McKinsey researchers focus on individual tasks within occupations), but also uncertainty over future technological development and, critically, over the social and economic factors that will influence technology adoption. Due to this complexity, it is unlikely that the “future of work” debate will be able to make more precise predictions of job losses (or the creation of new, tech-based jobs) any time soon.

There is more consensus over the prediction that there will be significant change of the nature of work *within* existing jobs: The use of technology will generally increase, and human workers will have to be increasingly flexible, adaptable and focused on managerial and social skills as machines and computers take over an increasing share of repetitive and routine tasks, be they physical or administrative. McKinsey estimates that about half of the activities done through paid labor have the potential to be automated (Manyika et al. 2017). Given that less well educated and skilled workers tend to undertake more routine tasks, it is this segment of the workforce that will be particularly affected by automation.

In a report focusing on Bahrain, Egypt, Kuwait, Oman, Saudi Arabia and the UAE, McKinsey finds that the general potential for automation of work activities using available technology reaches 45%, close to the global average of 50% (Aus dem Moore and Chandran 2018). The disappearance of routine work is particularly salient for GCC migrant workers, the majority of whom are unskilled or semi-skilled. McKinsey finds that in the UAE more than 93% of the labor-saving automation potential affects jobs held by expat workers (Aus dem Moore and Chandran 2018).

Digital technology has also started to change the nature of job markets and employment as such. The most notable change is the rise of the “gig economy” where labor is sold on very short notice and in small quantities, increasing precariousness but also creating new opportunities for monetizing

one's time and skills (Graham, Hjorth, and Lehdovirta 2017). New communication technologies are also increasing the incidence of telework and the outsourcing of service activities to overseas workers. Governments are also increasingly trying to leverage technology to improve conventional labor market matching and, in the cases of overseas migrant workers, improve the monitoring of their contracts and work conditions (Abu Dhabi Dialogue 2019; Benton and Patuzi 2018; British Council 2018).

Finally, technology is also changing the nature of unpaid work undertaken privately in households, notably domestic work tasks such as cleaning or shopping. While there is no published research yet on this trend, it is bound to also affect paid labor to the extent that households might find it easier to automate such tasks, thereby reducing the demand for paid domestic work.

[The GCC context: labor cost and social preferences](#)

The literature about the future of work so far focuses more on technological feasibility than on the economic incentives, social preferences and regulatory conditions under which automation is likely to take place. In the GCC in particular, adoption of new technologies is in many cases likely to be driven not by developments at the technology frontier but rather locally specific economic incentives and social preferences.

GCC economies operate a rather specific dual labor market model where the majority of private jobs are held by migrant workers who typically are imported from low-wage countries, while nationals are predominantly employed in the public sector (Hertog 2014). The availability of cheap foreign labor has strongly impacted technology adoption: Despite considerable economic growth since the 1970s, GCC labor productivity has grown only slowly as economic expansion has been based on ever-expanding factor inputs – especially rapid expansion of the workforce – rather than the adoption of more productive technology (International Monetary Fund 2013).

The share of wages in non-oil GDP across the GCC remains considerably below that in both developed and emerging benchmark economies: While the share of wages in GDP typically reaches 60 or more percent of GDP, in the UAE “compensation of employees” amounts to only 32% of non-government, non-oil GDP as per 2012 national accounts figures. This means that on average, labor cost is much less of a concern for producers than in other markets, and incentives to automate are correspondingly weaker. This is similar to the (less wealthy) Indian economy, which in McKinsey's 2017 study (Manyika et al. 2017) is predicted to experience the least change in the nature of work due to its low labor costs.

That said, the comparatively low current adoption of technology in key sectors across GCC economies means that there is a higher share of jobs that are easily automatable if incentives are right, notably in the construction sector (Aus dem Moore and Chandran 2018). There are also no strong vested interests on the labor side that could prevent fast reorganization of workplaces, as foreign workers are not usually unionized and have only limited local lobbying power. Finally, pressures to increase the share of national employment in private sectors, especially in Bahrain, Oman, and Saudi Arabia, are increasing the cost basis of producers and thereby incentives to automate (see below).

A number of sectors in the GCC have already changed significantly due to new technologies, including government (through the introduction of e-government), finance (through automation, online banking and offshoring of back office tasks), retail (through e-commerce), and transport (through gig economy platforms like Uber and Careem as well as new online delivery services). In some cases, this has reduced overall employment for both citizens and migrant workers; in others, notably transport services, it has increased the share of citizen (self-)employment. While some

sectors have followed global trends, in others, the re-composition of the workforce has been strongly influenced by the particular dual nature of local labor markets.

Another local factor that needs to be better understood are social preferences of GCC residents regarding technology adoption, especially regarding the choice between in-person vs. automated services. By many metrics, consumer service and hospitality sectors in the GCC are overstaffed, but some of this apparent excess employment might reflect a local preference for having staff easily available for a variety of mundane tasks (packaging groceries, carrying luggage, showing hotel guests their rooms etc.). The same could be argued for domestic employment of household helpers and drivers.

A final, longer-term factor that will affect the future of migrant work in the region which remains barely understood is the impending demographic change in the GCC: While citizen populations in the GCC remain young, fertility rates have dropped and life expectancy has grown rapidly (Shah 2012). As GCC populations age, there will be new needs for care work – the nature of which is likely to change significantly through new technologies – and the pressures for automation could generally increase (Acemoglu and Restrepo 2018).

Tech trends and workforce nationalization regulations

A GCC-specific factor that is worth discussing in more detail is the trend towards increasing workforce nationalization in the region, be it through fiscal tools (taxes on foreign and subsidies for citizen workers), the barring of migrants from certain sectors or occupations, or quota rules imposing minimal shares of citizen employees on private employers. Such regulations have been used with particular force in the three GCC countries facing a significant national unemployment issue, namely Bahrain, Oman, and Saudi Arabia (Hertog 2014; Peck 2017). Due to the higher cost of local labor, nationalization policies are likely to increase automation pressures. Unless governments impose wholesale bans of foreigners, this could be accompanied by a substitution of less skilled by higher skilled, more technology-savvy foreign labor, of which less would be needed, thereby making it easier to reach nationalization quotas and reduce the relative cost of lump sum taxes.

In cases where new technologies allow outsourcing abroad, higher nationalization pressures could contribute to a general decrease in local employment and increases in overseas employment (as is already happening for local banks' back office operations; see also (British Council 2018) on the general rise of transnational work). Secretarial, accounting, bank telling, and paralegal work are undergoing drastic change through technological innovation, involving both automation and low-cost offshoring. Technology has been threatening mid-skilled jobs in high-income countries around the world (Benton and Patuhi 2018; World Economic Forum 2018) and citizen jobs in the GCC are no exception. Which countries would benefit from offshoring – and whether traditional sending countries would be among them – is an important empirical question.

Impact of sending country economies

Social and economic factors will impact the future of migrant work not only from the GCC demand side: Economic and social changes in sending countries are also likely to condition how technology will shape migrant work. On one hand, global trends in automation could lead to a drop in wages for low- to mid-skilled workers (Manyika et al. 2017), thereby increasing the expatriate labor supply in the Gulf and potentially delaying the adoption of advanced technologies. On the other hand, general trends of economic growth and diversification are likely to improve economic opportunities in traditional sending countries, thereby potentially raising reservation wages of migrant workers and increasing pressures to adopt labor-saving technologies in the GCC.

Similarly, social norms regarding what constitutes acceptable (migrant) work are likely to change in

countries of origin, as has already been happening with regard to domestic labor in several Asian countries. This could both reduce the labor supply and shift its composition towards higher-skilled and better paid migrants, whose work in turn is likely to involve more advanced technologies, including in the domestic sphere.

Likely impact on numbers and skills composition of migrant worker flows

While deep uncertainty remains, the general direction of change in the GCC is likely to be towards smaller numbers of migrants with higher skills. There are reasons to believe that the process will be gradual: While high-skilled migrants are often as expensive to employ in the GCC as in advanced countries,¹ the price of low-skilled foreign labor remains much lower, giving it a considerable cost advantage. Technology-induced changes in migrant worker flows could, however, be accelerated by labor nationalization pressures and economic development in sending countries. More generally, GCC economies are gradually diversifying into more technology-intensive sectors that will require a larger share of higher-skilled, flexible workers.

While technological maturation and diversification will increase the need for more specialized skills and a high-quality labor force, GCC governments are undertaking strenuous efforts to upskill their own citizens to ready them for more technology-intensive private employment (British Council 2018). Together with nationalization pressures, this is likely to put pressure on foreign workers. What the net effect of these counteracting forces will be for skilled work migration is an open empirical question.

Reskilling trends and needs

Much of the “future of work” debate focuses on the greater needs for reskilling the existing workforce and allowing them continuous learning so they can remain integrated in fast-changing, technologically disrupted labor markets. Given the limited training that local employers typically offer for foreign workers, it is not clear that the migrant workforce will benefit from extensive formal reskilling in the GCC. Upskilling is more likely to happen in sending countries, as is already being attempted in cases like the Philippines and Pakistan (Malit Jr and Naufal 2017). Pre-departure training in particular could be deepened. While the demand for specific skills in the GCC is hard to predict, the more fluid nature of future labor markets is likely to call for a stronger focus on generic cognitive and managerial skills. The current debate about jointly defining competency standards should potentially take this importance of general skills into account (Abu Dhabi Dialogue 2019).

While lifelong learning for migrant workers in full employment in the GCC is likely to remain difficult, the increasing maturity of online and remote training technologies offers new opportunities for continuous upskilling. These could be geared to the specific needs of the GCC migrant labor force, whether provided privately or through government institutions.

Impact of technology on labor market matching and employment conditions

As mentioned above, technology is having a significant impact on the functioning of labor markets themselves. Labor market matching in particular is becoming more efficient through online job platforms and platforms like LinkedIn. The market for overseas labor in the GCC currently is fairly inefficient and potentially ripe for disruption: Workers are often brought into GCC countries with limited information about their work biography and skills, and formal or informal intermediaries can take significant fees without contributing much efficiency to the market (Arif 2009).

¹ See e.g. <https://gulfbusiness.com/jobs/salary-survey/> and <https://gulfbusiness.com/gulf-business-salary-survey-2018/>.

New technologies can potentially contribute to new online job platforms, skills verification and tests, as well as remote interviews that would lower costs, cut out inefficient middlemen, and improve job matching and regulatory compliance. Already now, some sending and receiving countries are using technology to verify contracts and share worker information (Abu Dhabi Dialogue 2019).

Sending countries can potentially use technology to monitor the fate of their overseas workers more closely, not only through contract registration but also regular communication and data-gathering during employment, possibly in cooperation with receiving countries. Big data analytics of wage and contract data can also be potentially used to detect suspicious patterns of phantom and informal employment and other abuses.

Private markets for overseas recruitment are ripe for disruption, and governments might consider incentivizing private investors to create new job platforms, recruitment and competence verification tools. Mature labor markets have already seen considerable experimentation with digital job matching and credentialing of competences (Benton and Patuzi 2018).

Technology can potentially increase levels of trust and market information for domestic workers in particular, especially if these are deployed by larger employment agencies rather than individually, which can make it easier to use ratings systems, hold employers accountable, and create cost savings for consumers who do not need full-time domestic employees. It can also make it easier to transition to a higher-skilled model of domestic work, away from pure housekeeping towards home-paid care (Tayah and Assaf 2018).

The emergence of online job markets and “gig economy” platforms also potentially creates the risk of new informal markets where citizens might act as intermediaries for foreign workers under their sponsorship on a case-by-case basis. The GCC already has large informal markets for foreign labor (Hertog 2010), so the emergence of new potential forms of informality should be closely monitored. To the extent that foreign workers are available on a “gig” basis, this should only happen through well-regulated, specialized employment agencies.

Research needs

The above discussion has proposed a number of hypotheses rather than making firm empirical predictions. More detailed research with primary data will be key for anticipating the future of migrant labor in the GCC with more granularity. Issues that should be investigated more closely include:

- the relative cost of migrant labor in different professions and at different skill levels relative to the cost of available technology, which would allow an estimate of potential efficiency gains and employment effects.
- The impact of labor nationalization measures on technology intensity in specific sectors and how it affects the number and composition of foreign workers
- Social attitudes on automation in domestic and other service work, including forms of unpaid (intra-household) labor
- Trends in offshoring service tasks that can be provided from remote
- Demographic trends and their likely impact on care needs and domestic work

Needless to say, there are many other non-technological factors that will impact migrant labor flows

to the GCC, including the oil price and its consequences for local fiscal policy, changing attitudes to private employment among GCC citizens, and labor market conditions in countries of origin. In some cases, these are likely to be more important than technological change at least in the short to medium term.

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