



POLICY BRIEF  
**LOCAL LEADERSHIP: PREPARING  
FOR THE FUTURE OF WORK  
AND FOSTERING IMMIGRANT  
INCLUSIVITY**



Task Force 9  
**MIGRATION AND YOUNG SOCIETIES**

Authors  
**OMAR KADKOY, GÜVEN SAK**

# موجز السياسة القيادة المحلية: الاستعداد لمستقبل العمل وتعزيز مبدأ الشمولية للمهاجرين

فريق العمل التاسع  
الهجرة والمجتمعات الشابة



المؤلفون  
عمر كادكوي، جوفين ساك



## ABSTRACT

There are two sources of competition in the labor markets of the Group of 20 (G20). One is modern technology, which is changing the future of work. The other is relatively older, but has increased in recent years: immigration. The two sources of competition share a denominator, which is the notion of "us vs. them," and both are amplified by the consequences of COVID-19.

This policy brief scrutinizes the impact of technology, immigration, and COVID-19 on the labor markets of developing economies and sets forth several policy recommendations to bridge the gap between birth rights and human rights.

هناك نوعان من مصادر المنافسة في أسواق العمل لمجموعة العشرين (G20). الأول هو التكنولوجيا الحديثة التي تغير مستقبل العمل. والآخر، هو مصدر أقدم نسبيًا، لكنه زاد في السنوات الأخيرة. وهو الهجرة. وثمة قاسم مشترك بين مصدري المنافسة، وهو فكرة "نحن ضدهم"، وكلاهما تأثر بالآثار الناجمة عن جائحة فيروس كورونا (كوفيد-19).

ويفحص موجز السياسة هذا تأثير التقنيات والهجرة وجائحة فيروس كورونا (كوفيد-19) في أسواق العمل في البلدان النامية، ويقدم العديد من التوصيات بشأن السياسات لسد الفجوة بين الحقوق المكتسبة منذ الولادة وحقوق الإنسان.



## CHALLENGE

Before the COVID-19 pandemic, the local labor force in immigrant hosting countries was already under two types of pressure. First, digitalization and artificial intelligence (AI) are disrupting the traditional work environment. Commonly referred to as “robots replacing humans in the workforce,” the impact on the future of work is gradually becoming more visible.

Since the world is in transition, the impact of new technologies on the economy is asymmetric. Take, for example, online food ordering platforms. The highest level, the collection and transmission of orders is an AI task. The middle level, where orders are processed and prepared in restaurants, is not yet fully automated, but possesses a high potential for further automation. At the lowest level, order delivery is carried out by low skilled couriers. Alarmingly, working as a food courier is associated with traffic accidents: 90% of all traffic accidents in Nanjing, China, involved food delivery couriers (China Labour Bulletin 2017). Moreover, the same urban space attracts immigrants who add to congestion while seeking employment. Thus, migration is an urban problem.

Second, immigrants compete with natives in the labor market. The notion of immigrants crowding out locals in destination countries gives rise to “birth rights versus human rights” protests in numerous countries. However, welcoming immigrants to the labor market allows natives to perform jobs demanding a higher set of skills.

The COVID-19 pandemic has changed this situation. Lockdown measures designed to control the spread of the virus have led to a slowdown in economic activity all around the world, especially in developing countries that are hosting the majority of refugees. Decline in natural resource prices, tourism revenues, remittances, and other export revenues due to slowdown in economic activity is particularly bad for developing economies with savings deficits and/or foreign exchange debts.

Two examples from G20 countries stand out: the emerging economies of Turkey and Brazil. The former hosts 3.5 million Syrians<sup>1</sup> and the latter is the country with second highest positive COVID-19 cases in the world: 2.8 million.<sup>2</sup> Attending to both subjects requires financial resilience. The latter is questionable as both economies face increasing difficulties to meet the obligations of maturing debts and deteriorating fiscal deficits (IMF 2020).

---

1. Ministry of Interior, Directorate General of Migration Management, Statistics of Temporary Protection, accessed August 6, 2020. <https://en.goc.gov.tr>.

2. Coronavirus Research Center, John Hopkins University, accessed August 5, 2020. <https://coronavirus.jhu.edu/map.html>.

## CHALLENGE

Thus, the already rather asymmetric and messy transition to the future of work is becoming more challenging with the virus. The digitalization process, which causes rising competition between natives and immigrants, is being aggravated by the rapid contraction in economic activity due to COVID-19.

Hence, the challenge at hand is multifaceted and requires the involvement of different stakeholders at multiple levels. This policy brief examines the impact of technology, immigration, and COVID-19 on the labor markets of emerging and developing economies and sets forth a number of recommendations for the G20 to address them.



## PROPOSAL

The rapid development of artificial intelligence (AI), machine learning, and robotics has generated both positive and negative by-products. These new technological advancements are creating newfound capabilities and offering both higher productivity and greater job quality. A leading financial technology company in China, for example, introduced AI to fill the tasks of loan officers. In return, the company hired 3,000 data analysts to look after the algorithms of lending (World Bank 2019). These results indicate that AI creates jobs. Second, utilization of AI requires skills upgrades for the future of work, namely programming and coding.

Nevertheless, there are worries and malpractices associated with technological advancements. These include the potential displacement of human labor (Brynjolfsson and McAfee 2011), broadening income inequality (Acemoglu and Autor 2011), and the expanding share of informal employment, which affects the quality of jobs created (OECD 2016a).

These worries are present in both developed and developing economies. However, they are more prominent in the latter. The rapid growth of the labor force in relatively young societies of developing economies raises concerns about their ability to accommodate the expanding working-age population due to inadequate job opportunities. Combined with technology that permits developed countries to return production facilities to nearer proximity locations, or even back into domestic markets due to fully automated factories, a process referred to as reshoring (De Backer et al. 2016), developing economies suffer from premature deindustrialization (Rodrik 2016). This means that there is less economic convergence and slower urbanization. Therefore, youth in developing countries will prioritize emigration for better opportunities.

Initial estimates showed that automation poses a higher risk of large-scale displacement in the labor markets of developing countries since there are abundance low-wage and low-skilled occupations (Bowles 2014). Recent studies, however, based on analyzing either tasks (Nedelkoska and Quintini 2018) or work activities (Manyika, Chui, et al. 2017) indicated that the share of jobs at risk of automation may have been significantly over estimated by initial studies. Still, some developing countries are more predisposed to a greater risk of automation because of two factors: diverse industry and occupational structures, and dissimilarity in job content within the same industries and occupations (Nedelkoska and Quintini 2018).

Nevertheless, there are factors delaying the exposure to automation in developing countries. First, the speed of adopting new technologies is slower due to the associated costs of utilizing robots (Manyika, Lund, et al. 2017). Unlike the case in developed economies, the lower labor costs, mainly low wages, in the developing economies are favorable for the traditional labor force. However, the costs of using robots will be lower in certain developing economies, such as China, where wages are expected to continue rising (Sirkin, Zinser and Rose 2015). In addition, the population in most developing countries, particularly those with a working age population, is expected to grow. In other words, the higher the age dependency ratio, usually the case in developed countries, the higher the tendency to use robots in order to offset the effects of the aging population (Acemoglu and Restrepo 2017).<sup>3</sup> Moreover, the production structure in developing countries is dependent on informal micro-size enterprises. Thus, adopting technology becomes more difficult (Sudhir and Talukdar 2015).

**Invest in developing the skills of the youth to prepare for the future of work and reduce polarization in the labor market.** In developing countries, the poor reading and numeracy skills among adults (OECD 2013) and the severely limited Information and Communication Technology (ICT) skills of the workforce slow the pace of automation (OECD 2016b). Needless to say, the level of skills varies among the workforces in developing countries (World Economic Forum 2017). As a result, the pace of automation within the developing countries differs accordingly. In the future workforce, emphasis on growing the basic literacy and numeracy skills for students will be crucial for employability and acquiring new skills (OECD 2016c). Equally important is learning “the language of the future.” Developing coding and programming skills is essential to the future of work and there is abundant demand for these abilities. In 2015, almost one-third of the 25 million job opening in the U.S. required software development-related skills (Burning Glass Technologies 2016). Elsewhere, Nordic countries like Denmark and Finland project shortages in professionals with computer skills. It is estimated that Denmark will need 19,000 Information Technology (IT) professionals by 2030. Finland, meanwhile, was reported to need 7,000 software developers in 2016 (Daxx 2017). Germany is suffering from similar problems; in 2016, there were 51,000 job vacancies in the IT sector and in IT positions in the other sectors (Bitkom 2016). Filling the vacancies will require teaching the necessary skills to natives and immigrants, including refugees. Initiatives like New American Code in the U.S., HackYourFuture in Denmark, Integrify in Finland, and ReDI School of Digital Integration in Germany are equipping refugees with the necessary education and preparing them for the future of work.

---

3. The age dependency ratio relates the number of children (0-14 years old) and older persons (65 years or over) to the working-age population (15-64 years old).

Relevant to technology penetration into economies is the associated transformation in the labor force, namely polarization: the decline of middle-skills jobs and greater concentration of employment at the top and bottom ends of the skills distribution. Technology affects polarization in two ways. First, it reduces employment in routine and cognitive tasks. Consequently, displaced workers are pushed into less-routine jobs at the lower end of the skills spectrum. Second, technology increases the demand for workers in higher skilled and, to a lesser extent, lower skilled occupations. It therefore expands the concentration at the two ends of skills range. This process is called Routine-Biased Technological Change (RBTC) (Autor, Levy and Murnane 2003) and explains the declining demand for middle-skilled jobs and the increasing labor force polarization. The role of technology in polarizing the labor force and in deindustrialization is more evident in developed countries (OECD 2018a). Therefore, the share of middle-skilled occupations is declining in all sectors of the economy (OECD 2018b). In a similar context, upskilling and reskilling are necessary interventions to cope with job transitions in the labor market (World Economic Forum 2019). Upskilling refers to “learning new competencies to stay in current role, due to the change in skills required, or adding certain competencies for career progression.” Reskilling refers to “learning new sets of competencies to transition to a completely new role.”

The driver of polarization in developing countries happens differently. The loss of middle-skilled jobs to high-and-low skilled jobs is mostly due to the decline in specific sectors. Hence, the polarization between industries is more evident in, for example, Indonesia and Turkey, while polarization within industries is more relevant in Brazil and South Africa. Therefore, polarization in developing countries is driven by structural transformation: “reallocation of employment from less [polarized] sectors (agriculture, but also manufacturing in some countries) to more [polarized] service sectors,” rather than by technology (Soto 2019). This transformation assisted economic growth in emerging and developing economies (Baymul and Sen 2017). It also resulted in the growth of jobs requiring cognitive tasks (Aedo et al 2013; Apella and Zunino 2017). Nevertheless, a decent share of employment in developing countries consists of occupations with content still based on manual tasks. Combined with growth in jobs requiring cognitive tasks, workforces of the developing countries are more vulnerable to worker displacement driven by Routine-Biased Technological Change (Soto 2020). As such, imposing severe challenges for workers whether they are locals or immigrants, to firms, and policymakers.

The second source of competition within labor markets relates to human mobility. The International Organization of Migration (IOM) indicated that the total number of international migrants in 2019 was 272 million, including 25.9 million refugees. While 68% of international migrants are in high income countries, refugees are in different



situations. The overwhelming number of refugees are located in developing countries, namely: Turkey, Pakistan, Uganda, and Sudan (McAuffile and Khadria 2020).

**Developing countries should utilize the benefits of hosting forced migrants who expand the labor market for locals.** This eases the transition to the future of work. One example of a developing country with a large number of forcibly displaced migrants is Turkey. The arrival of Syrians was relatively sudden and not motivated by the availability of jobs in the Turkish labor market. Therefore, the impact of Syrians' influx is expected to be, at least in the short-term, negative in the form of displacing locals from the labor market. There are signs that this displacement is already occurring in the informal economy. The most affected groups being the less educated and women who experienced net displacement from the Turkish labor market. On the other hand, the penetration of Syrians into the informal economy triggered occupational upgrading in the form of increased employment for locals in the formal economy, particularly for men without high school degrees (Del Carpio and Wagner 2015).

The occupational upgrading of Turks in the aftermath of influxes of Syrians can be also seen with the entry of firms. There were increases in firm entries in provinces hosting refugees and no increases in firm exits (Akgündüz et al 2015). Thus, the findings suggest that refugees encourage the generation of formal jobs. Furthermore, and in line with occupational upgrading, the increase in low skilled Syrian workers in Turkey helped increase the complexity of tasks performed by locals from less manual tasks to more abstract ones (Akgündüz and Torun 2019).

**The global slowdown in the economy is taking its toll on a critical instrument for developing countries and immigrants: remittance.** International remittance has been negatively affected by the consequences of COVID-19. It has aggravated the situation of families left behind and unfavorably impacted activity in the real economy of developing countries. For the former, remittance impacts development along different lines, including alleviation of poverty, investment in human capital, and entrepreneurship activities. For the latter, received remittance as a percentage of Gross Domestic Production (GDP) is integral to many economies, especially poorer

ones: 6.6% in low-income economies; 4.4% in lower middle-income economies; 1.5% in middle-income economies; 0.7% in upper middle-income economies; and 0.3% in high-income economies.<sup>4</sup> However, the economic aftermath of COVID-19 suggests different decreases in remittance sent to all regions (World Bank 2020). Therefore, there is an urgent need to readdress the costs of sending remittance. This is associated with finding the cheapest medium to transfer money. Here, FinTech companies stand out as the solution. TransferWise, WorldRemit, and InstaRem are a few examples of players reshaping the dynamics of sending remittance.

**Notwithstanding the strains of COVID-19 on the emerging and developing economies, local leadership is playing a decisive role in assisting immigrants in alleviating the consequences of the virus.** The International Monetary Fund estimates that the overall budget deficits of the emerging and developing economies will almost double in 2020, from 4.8% in 2019 to 9.1%. This will be partially due to loosening fiscal policy interventions due to COVID-19 pandemic. Coupled with decline in real growth rate of GDP per capita since 2013, and with risks of increased spread of the virus, the financial safety net of emerging and developing economies is waning and requires international support (IMF 2020).

Moreover, the same economies are home to the largest populations of refugees in the world. Istanbul, for example, is home to one million immigrants including 500,000 Syrians. The metropolitan municipality launched a social assistance program to provide for anyone of the 16 million Turks and one million immigrants who could be affected by consequences of the virus (Evrensel 2020). In Medellín, Colombia, the municipality is working with an NGO so that Venezuelans receive physiological support and navigate bureaucracy to access health services (Humanity & Inclusion 2020).

**The local response, however, needs international support to address a critical subject: difficulties facing refugee children's accessibility to education during the pandemic.** The breakout of the pandemic necessitated social distancing as the only control variable for protection. While physical distancing is a protective measure, distance learning can be an unaffordable luxury for refugee students. The policy of suspending schools as a temporary containment measure turned into a common practice in numerous countries. As an alternative, ministries of education resorted to piloting e-learning or broadcasting lessons on national TV channels. This type of

---

4. World Bank: Personal remittance, received (% of GDP). <https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS>.

learning requires access to internet and the possession of technological devices (e.g. computers, tablets and/or television). The lack of these necessities prevented refugee children from participating in distance learning in Turkey (ASAM 2020; ESSN 2020). The situation is equally difficult in other locations. Syrians in Jordan, for example, have the same educational barriers as only 2% of households own computers (Tiltnes, Zhang and Pederson 2019).

**Immigrants are urban dwellers and local leadership is key to fostering immigrants' innovation and integration.** Immigrant entrepreneurs are tech savvy and possess the potential to ride the wave of the future of work by engaging in the gig economy. The megacity of Istanbul is witnessing the birth of new gig platforms established by immigrants. For example, one immigrant entrepreneur developed a mobile application for online shopping. The app chiefly targets Arab customers and allows them to shop on a platform with 3,000 different products.<sup>5</sup> A second example comes from the border province of Gaziantep where another immigrant entrepreneur first established a company specialized in the domestic sales of electronics. Then, the company launched an e-commerce platform with the purpose of exporting electronics worldwide.<sup>6</sup> Syria Desk, an in-house program in the chamber of commerce in Gaziantep, won the Best Unconventional Project prize for its role in providing support and guidance for immigrant entrepreneurs. The Chamber of Industry in Gaziantep also won the prize for the best education project. The project focused on vocational education that facilitated skill development for Turks and Syrians and integrating them into the labor market (ICC 2019).

**Recommendations for G20:**

The domestic economies of the G20 are showing various degrees of adaptability to new technologies. Hence, the preparation for the future of work will be asymmetric. The COVID-19 pandemic will further skew the classic working environment. Immigration, furthermore, will also be an integral part of the new reality. The solutions are interrelated and are built on foundations of solidarity and sharing responsibility. Therefore, the G20 should consider:

---

5. Pazarapp website, accessed April 13, 2020. [https://www.pazarapp.com/ar#about\\_section](https://www.pazarapp.com/ar#about_section).

6. NoonTek Market website, accessed April 13, 2020. <https://www.noontek.com>.

- Assisting emerging and developing economies to stop further deterioration of their real economic activity due to imminent debt servicing problems, as hard currency earning capacity is declining rapidly in both due to global economic slowdown. Additionally, currency crisis due to dollar liquidity is a relevant issue and addressing it is important when discussing debt servicing problems. Debt relief for low income countries agreed upon by G20 leaders is only the necessary first step. COVID-19 is now impacting developing countries; the number of positive cases is increasing in Brazil, Russia, India, Peru, Pakistan, and Bangladesh. Keeping in mind that developing countries are home to 84% of the world's forcibly displaced migrants, G20 should be more active in preventing a developing country debt crisis that is highly likely. In a world where there is no sovereign debt relief mechanism, G20 needs to follow the recommendations of their Eminent Persons Report to improve global liquidity in times of crisis.
- Responding in collective solidarity to combat the spread of COVID-19. The response must be swift, particularly to support countries hosting immigrants, especially forcibly displaced ones. The World Health Organization (WHO) clearly identifies hygiene as an essential factor to reduce the possibility of contracting the virus. However, forcibly displaced populations are at a greater risk of exposure due to their lack of essentials necessary to meet basic needs. For example, one-third of Syrians in Turkey, do not have access to basic hygiene items (World Doctors 2019). The support mechanism already exists, Facility for Refugees in Turkey (FRIT), and the stakeholder to function and distribute the necessary hygiene items when almost everyone is advised to remain at home is also obvious: localities.
- Pledging to reduce the cost of sending remittance to 5% through supporting effective new FinTech measures. This goal was on the G8 agenda in 2009 and the G20 agenda in 2011 and 2014, but it has not yet been achieved. Reducing the cost of sending remittance means saving money for migrant families and thus improving their living conditions. Furthermore, the reduction in costs will assist developing countries in amplifying the benefits of the remittance-development nexus.

- Providing equal internet access and other necessary tools to all children to facilitate accessibility to online education during the COVID-19 crisis. Access to education is important both to alleviate rising inequalities and to prepare kids for the future of work. The difficulty of accessing education has shifted from problems with directly accessing schools to hardships associated with accessing online education platforms. The latter requires access to a set of new capabilities for a child to be successful: a computer, an internet connection, and access to a private room. As a first step, G20 could opt for vulnerable populations to have broadband internet access and coordinate with the United Nations Educational, Scientific, and Cultural Organization (UNESCO) to lead the service.
- Supporting a bottom-up approach to prepare for the future of work and immigrants' inclusivity by engaging with stakeholders at the local level, namely municipalities, chambers of commerce and industry, business associations, and NGOs. Bringing all the relative stakeholders at the local level to one space, like Mayors Migration Council for example, will generate a diverse pot of ideas covering all perspectives from various localities. This will set the stage for a hybrid global example where robust policies for the future of work will demonstrate how to cope with the long-term implications of the future of work and immigration.
- Complementing the Global Compact for Safe, Orderly, and Regular Migration, and the Global Compact for Refugees with skills development tools that are necessary for countries of origin and destination. The Compacts are essentially moral. The Compacts should be operationalized with an element of economic practicality by supporting the aforementioned reskilling and upskilling of the labor force. This could revive global resettlement efforts, equip immigrants with the necessary skillset for the future of work, and expedite their integration process in destination countries.

**Disclaimer**

This policy brief was developed and written by the authors and has undergone a peer review process. The views and opinions expressed in this policy brief are those of the authors and do not necessarily reflect the official policy or position of the authors' organizations or the T20 Secretariat.



## REFERENCES

Acemoglu, Daron, and David Autor. 2011. "Chapter 12: Skills, Tasks and Technologies: Implications for Employment and Earnings." *Handbook of Labour Economics*, Vol 4, part B: 1043-171. [https://doi.org/10.1016/S0169-7218\(11\)02410-5](https://doi.org/10.1016/S0169-7218(11)02410-5).

Acemoglu, Daron and Pascual Restrepo. 2017. "Secular Stagnation? The Effect of Aging on Economic Growth in the Age of Automation." *National Bureau of Economic Research, Working Paper 23077*. <https://doi.org/10.3386/w23077>.

Aedo, Cristian, Jesko Hentschel, Javier Luque and Martin Moreno. 2013. "From Occupations to Embedded Skills: A Cross-Country Comparison." *World Bank, Policy Research Working Paper 6560*. <https://doi.org/10.1596/1813-9450-6560>.

Akgündüz, Yusuf Emre, Marcel van den Berg and Wolter Hassink. 2015. "The Impact of Refugee Crisis on Host Labor Markets: The Case of the Syrian Refugee Crisis in Turkey." *IZA Discussion Paper No. 8841*. Accessed July 24, 2020. <http://repec.iza.org/dp8841.pdf>.

Akgündüz, Yusuf Emre and Huzeyfe Torun. 2019. "Two and a Half Million Syrian Refugees, Tasks and Capital Intensity." *Journal of Developmental Economics*, 145: 102470. <https://doi.org/10.1016/j.jdeveco.2020.102470>.

Apella, Ignacio and Gonzalo Zunino. 2017. "Technological Change and the Labor Market in Argentina and Uruguay: A Task Content Analysis." *World Bank, Policy Research Working Paper 8215*. <https://doi.org/10.1596/1813-9450-8215>.

Association for Solidarity with Asylum Seekers and Migrants (ASAM). 2020. "Sectoral Analysis of the Impact of COVID-19 Pandemic on Refugees Living in Turkey." ASAM website, Report. Last updated May 21, 2020. <https://data2.unhcr.org/en/documents/details/76640>.

Autor, David H., Frank Levy and Richard J. Murnane. 2003. "The Skill Content of Recent Technological Change: An Empirical Exploration." *The Quarterly Journal of Economics*, 118, no. 4: 1279-333. <https://doi.org/10.1162/003355303322552801>.

Baymul, Cinar and Kunal Sen. 2017. "What Do We Know About the Relationship Between Structural Transformation, Inequality and Poverty?" *University of Manchester Global Development Institute, Working Paper Number 2*. [https://pdfs.semanticscholar.org/00f6/30d68719df74f9334016bea51fc9339e03f3.pdf?\\_ga=2.151213119.701777153.1597604178-1549787240.1596925896](https://pdfs.semanticscholar.org/00f6/30d68719df74f9334016bea51fc9339e03f3.pdf?_ga=2.151213119.701777153.1597604178-1549787240.1596925896).

## REFERENCES

Bitkom. 2016. "Der Arbeitsmarkt für IT-Fachkräfte [The Labor Market of IT Professionals]." Bitkom website, IT chart. Updated November 14, 2016. <https://www.bitkom.org/sites/default/files/pdf/Presse/Pressegrafik/2016/November/Bitkom-Charts-IT-Fachkraefte-14-11-2016-final.pdf>.

Bowles, Jeremy. 2014. "The Computerisation of European Jobs." Bruegel Blog Post, July 24, 2014. <https://www.bruegel.org/2014/07/the-computerisation-of-european-jobs>.

Brynjolfsson, Erik and Andrew McAfee. (2011). *Race Against the Machine: How the Digital Revolution is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*. Digital Frontier Press.

Burning Glass Technologies. 2016. "Beyond Point and Click: The Expanding Demand for Coding Skills." Burning Glass Technologies website, report. Updated June 2016. [https://www.burning-glass.com/wp-content/uploads/Beyond\\_Point\\_Click\\_final.pdf](https://www.burning-glass.com/wp-content/uploads/Beyond_Point_Click_final.pdf).

China Labour Bulletin. 2017. "Fatal Accident Highlights Intense Pressures Faced by China's Food-Delivery Workers." CLB website, blog, December 6, 2017. <https://clb.org.hk/content/fatal-accident-highlights-intense-pressures-faced-china%E2%80%99s-food-delivery-workers>.

Daxx. 2017. "Talent Shortage in the Nordics: Finland, Sweden, and Denmark Are Coming Short of Software Developers." Blog post. Updated August 17, 2017. <https://www.daxx.com/blog/development-trends/nordics-tech-talent-shortage>.

De Backer, Koen, Carlo Menon, Isabelle Desnoyers-James and Laurent Moussiégt. 2016. "Reshoring: Myth or Reality?" OECD Science, Technology and Industry Policy Papers, No. 27. Paris: OECD Publishing. <https://doi.org/10.1787/5jm56frbm38s-en>.

Del Carpio, Ximena V. and Mathis Wagner. 2015. "The Impact of Syrians Refugees on the Turkish Labor Market." World Bank, Policy Research Working Paper 7402. <https://doi.org/10.1596/1813-9450-7402>.

Emergency Social Safety Net (ESSN). 2020. "Impact of COVID-19 of Refugee Population Benefiting from the Emergency Social Safety Net (ESSN) Programme." International Federation for Red Cross and Crescent Societies website, PDF assessment report. Accessed July 29, 2020. <https://reliefweb.int/report/turkey/impact-covid-19-refugee-populations-benefitting-emergency-social-safety-net-essp>.



## REFERENCES

Evrensel. 2020. "İBB'den kayıtlı mülteciler için yardım kampanyası [Aid campaign for registered refugees from Istanbul Metropolitan Municipality]. Article, April 16, 2020. <https://www.evrensel.net/haber/402370/ibbden-kayitli-multeciler-icin-yardim-kampanyasi>.

Humanity & Inclusion. n.d. "HI Assisting Thousands of Venezuelan Refugees in Colombia." HI Website, blog article. Accessed July 30, 2020. <https://hi-canada.org/en/news/hi-assisting-thousands-of-venezuelan-refugees-in-colombia->.

ICC. n.d. "Rio'da düzenlenen "Dünya Odalar Yarışması"ndan Suriye Masası Projesi ile Gaziantep Ticaret Odası birincilik ödülü ile döndü [Gaziantep's Chamber of Commerce Returns with the First Prize From World Chambers Competition]." ICC website, article. Accessed July 30, 2020. <https://icc.tobb.org.tr/manset/manset-42.php>.

International Monetary Fund (IMF). 2020. "Chapter 1: Policies to Support People During the COVID-19 Pandemic." Fiscal Monitor, April 2020. Last updated April 15, 2020. <https://www.imf.org/en/Publications/FM/Issues/2020/04/17/Fiscal-Monitor-April-2020-Chapter-1-Policies-to-Support-People-During-the-COVID-19-Pandemic-49278>.

Manyika James, Michael Chui, Mehdi Miremadi, Jacques Bughin, Katy George, Paul Wilmott and Martin Dewhurst. 2017. "A Future that Works: Automation, Employment and Productivity." McKinsey & Company website, report. [https://www.researchgate.net/profile/Mohamed\\_Mourad\\_Lafifi/post/What\\_are\\_the\\_theories\\_of\\_productivity\\_for\\_automation\\_in\\_construction/attachment/59d651d879197b80779aa423/AS%3A509446619975681%401498472947867/download/MGI-A-future-that-works-Full-report.pdf](https://www.researchgate.net/profile/Mohamed_Mourad_Lafifi/post/What_are_the_theories_of_productivity_for_automation_in_construction/attachment/59d651d879197b80779aa423/AS%3A509446619975681%401498472947867/download/MGI-A-future-that-works-Full-report.pdf).

Manyika James, Susan Lund, Michael Chui, Jacques Bughin, Jonathan Woetzel, Paula Batra, Ryan Ko and Saurabh Sanghvi. 2017. "Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation." McKinsey & Company website, report. Accessed June 12, 2020. [https://www.mckinsey.com/~media/mckinsey/industries/public%20and%20social%20sector/our%20insights/what%20the%20future%20of%20work%20will%20mean%20for%20jobs%20skills%20and%20wages/mgi%20jobs%20lost-jobs%20gained\\_report\\_december%202017.pdf](https://www.mckinsey.com/~media/mckinsey/industries/public%20and%20social%20sector/our%20insights/what%20the%20future%20of%20work%20will%20mean%20for%20jobs%20skills%20and%20wages/mgi%20jobs%20lost-jobs%20gained_report_december%202017.pdf).

McAufffile, Marie and Binod Khadria (Eds). 2020. "World Migration Report 2020." United Nations International Organisation for Migration. Accessed June 10, 2020. [https://www.un.org/sites/un2.un.org/files/wmr\\_2020.pdf](https://www.un.org/sites/un2.un.org/files/wmr_2020.pdf).

## REFERENCES

Nedelkoska, Ljubica and Glenda Quintini. 2018. "Automation, Skills Use and Training." OECD Social, Employment and Migration Working Papers No. 202. <https://doi.org/10.1787/2e2f4eea-en>.

OECD. 2013. OECD Skills Outlook 2013: First Results from the Survey of Adult Skills. Paris: OECD Publishing. <https://doi.org/10.1787/9789264204256-en>.

OECD. 2016a. OECD Employment Outlook 2016. Paris: OECD Publishing. [https://doi.org/10.1787/empl\\_outlook-2016-en](https://doi.org/10.1787/empl_outlook-2016-en).

OECD. 2016b. OECD Skills for a Digital World: 2016 Ministerial Meeting on the Digital Economy Background Report. Paris: OECD Publishing. <https://doi.org/10.1787/5jlwz83z3wnw-en>.

OECD. 2016c. PISA 2015 Results (Volume I): Excellence and Equity in Education. Paris: OECD Publishing. <https://doi.org/10.1787/9789264266490-en>.

OECD. 2018a. OECD Employment Outlook 2018. Paris: OECD Publishing.

OECD. 2018b. Good Jobs For All in a Changing World of Work: The OECD Jobs Strategy. Paris: OECD Publishing.

Rodrik, Dani. 2016. "Premature Deindustrialization." *Journal of Economic Growth*, 21 no 1: 1-33. <https://doi.org/10.1007/s10887-015-9122-3>.

Sirkin, Harold L., Michael Zinser, and Justin Rose. 2014, August 19. "The Shifting Economics of Global Manufacturing." Boston Consulting Group, blog post. Accessed May 11, 2020. <https://www.bcg.com/publications/2014/lean-manufacturing-globalization-shifting-economics-global-manufacturing>.

Soto, Daniel Alonso. 2019. "Technology and the Future of Work in Emerging Economies: What is Different." OECD Social, Employment and Migration, Working Papers No. 236. Paris: OECD Publishing. <https://doi.org/10.1787/55354f8f-en>.

Sudhir, K. and Debabrata Talukdar. 2015. "The "Peter Pan Syndrome" in Emerging Markets: The Productivity Transparency Tradeoff in IT Adoption." *Marketing Science*, 34 no. 4: 500-21. <https://doi.org/10.1287/mksc.2015.0921>.

## REFERENCES

Tiltnes, Åge A., Huafeng Zhang and Jon Pederson. 2019. "The Living Conditions of Syrian Refugees in Jordan: Results From the 2017-2018 Survey of Syrian Refugees Inside and Outside the Camps." United Nations High Commissioner for Refugees. Last updated February 10, 2019. <https://data2.unhcr.org/en/documents/details/67914>.

World Bank. 2020. "COVID-19 Crisis Through a Migration Lens. Migration and Development brief no. 32. Washington: World Bank.

World Bank. 2019. The Changing Nature of Work. World Bank website, World Development Report. Accessed May 19, 2020. <https://www.worldbank.org/en/publication/wdr2019>.

World Doctors. 2019. "Multi-sectoral Needs Assessment of Syrian Refugees in Turkey." OCHA Services, Reliefweb website report. Last updated April 29, 2019. <https://reliefweb.int/report/turkey/multi-sectoral-needs-assessment-syrian-refugees-turkey>.

World Economic Forum. 2017. "Global Human Capital Report 2017 Preparing People for the Future of Work." World Economic Forum website, Insight Report. Accessed May 11, 2020. [http://www3.weforum.org/docs/WEF\\_Global\\_Human\\_Capital\\_Report\\_2017.pdf](http://www3.weforum.org/docs/WEF_Global_Human_Capital_Report_2017.pdf).

World Economic Forum. 2019. "Toward a Reskilling Revolution: Industry-Led Action for the Future of Work." World Economic Forum website, Insight Report. Accessed July 16, 2020. [http://www3.weforum.org/docs/WEF\\_Towards\\_a\\_Reskilling\\_Revolution.pdf](http://www3.weforum.org/docs/WEF_Towards_a_Reskilling_Revolution.pdf).



## AUTHORS

### **Omar Kadkoy**

The Economic Policy Research Foundation of Turkey (TEPAV)

### **Güven Sak**

The Economic Policy Research Foundation of Turkey (TEPAV)

