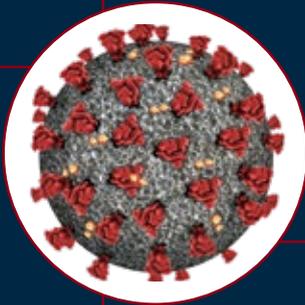


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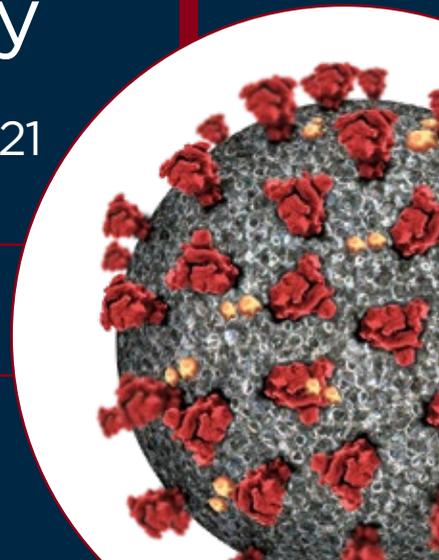
REPUBLIC OF TURKEY  
MINISTRY OF INDUSTRY  
AND TECHNOLOGY



# Turkey post-COVID recovery

## Principles for a sustainable and resilient strategy

June 2021



## Turkey post-COVID recovery

### Principles for a sustainable and resilient strategy

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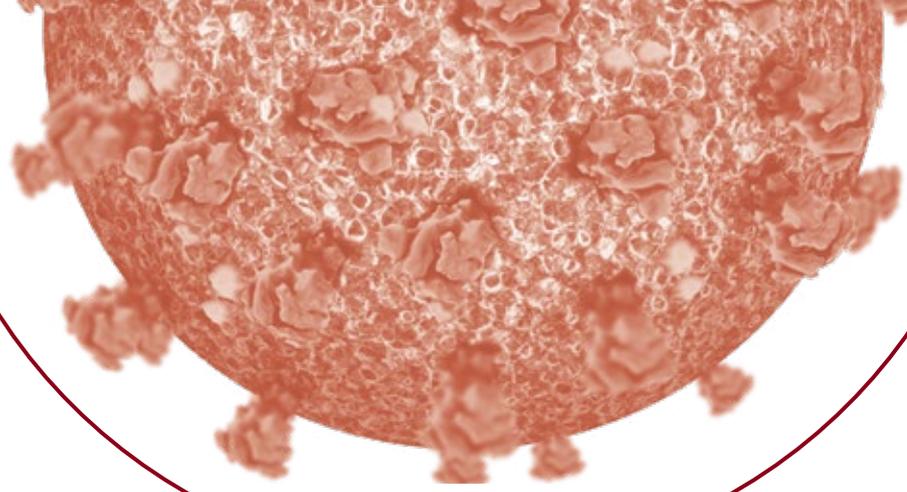
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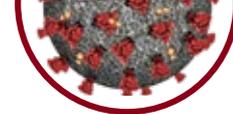


# **Turkey post-COVID recovery**

Principles for a  
sustainable and  
resilient strategy

June 2021

Andrés Rodríguez-Pose  
*London School of Economics*



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# Executive Summary

## ***The current pandemic calls for new approaches to address pressing old and emerging challenges***

The COVID-19 pandemic has been a destructive force that has vigorously shaken the world economy. Virtually, no country has been left unaffected. COVID-19 has aggravated existing vulnerabilities and accelerated global trends that were already underway. The fragilities that the western countries have been striving against, including Turkey, have been exacerbated by the wave of economic slowdown that resulted both from the containment measures put in place to slow the spread of the virus, and from the economic uncertainty that followed immediately after. Among those, the relatively feeble competitiveness of domestic micro-, small-, and medium-sized enterprises (MSMEs), high level of youth unemployment, low participation in global value chains (GVCs), large numbers of vulnerable people, and the comparatively weak ability to attract inward investment. They also represent important issues that will need to be addressed in the recovery process. New generation policies and interventions should therefore incorporate innovative approaches that take into consideration the long-lasting challenges faced by the economic players in Turkey, but also the megatrends that are expected to be changemakers in the years to come.

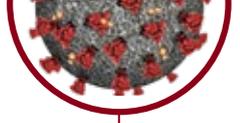
## ***Multi-dimensional, horizontal policy interventions are key to ensure strategies come as coherent packages***

In the past, across both the developed and developing world there has been a tendency by policymakers to pursue standalone policies, that is, initiatives that fail to create synergies and find a synthesis across different yet cognate policy areas. This oftentimes has led to the development of so-called *strategies of waste*, frequently reflecting vain attempts to revitalise national, regional and local economies through ‘copy-cat’ and ‘one-size-fits-all’ approaches. Now more than ever, with COVID-19’s differential impact across regions, sectors and people, a strategy that is mono-dimensional and focuses on only one of the developmental axes which have traditionally underlay intervention rationales —i.e., infrastructure, human capital, inward investment and industrial clusters— is unlikely to warrant satisfactory returns.

Striking a good balance across these levers, therefore, becomes of utmost importance. Strategies need to acknowledge the interconnectivity and interdependency of the various sources of economic competitiveness. These may derive from a well-functioning infrastructural system, high levels of skills or dense agglomeration of industrial activities, but, in most cases, from a combination of all these factors. For development strategies to function, they should aim to create synergies across the policy areas that are more likely to deliver greater returns in different parts of Turkey. Relying on ‘skewed’ interventions that unilaterally emphasise one development lever —such as through large investments in human capital development or infrastructure alone— risk curtailing the economic development of territories by igniting counterproductive dynamics, such as brain drain or weakening the competitiveness of local firms.

## ***Particular attention has to be devoted to resolve institutional challenges and embed the SDGs in the recovery process***

In addition to the more ‘traditional’ levers usually adopted in developmental policies, institutions and the SDGs will play an ever-greater role in the post-COVID Turkey. The extent to which the institutional dimension and the SDGs are incorporated into interventions will likely make or break future policy initiatives. With regards to institutions, this is the case owing to their mediating role in determining the trajectory of policies both in their design and implementation. For the SDGs, a recovery strategy that endorses enhanced ESG standards will be instrumental in facilitating both greater resource efficiency and market access, especially in light of the recent regulatory developments, i.e., EU Green New Deal, with which Turkey may need to comply in order to access and maintain preferential trade terms. Contextually, an inclusive recovery that aims at leaving no one behind needs to adopt targeted interventions for the most vulnerable segments of the Turkish society, including women, youth and refugees.



### ***Adapting the recovery strategy to the specificities of Turkish regions will lead to more successful strategies***

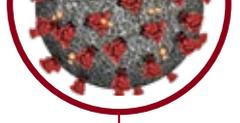
This report highlights that the non-negligible disparities between Turkish regions can burden the post-pandemic recovery. Regional inequalities in Turkey exist across a wide variety of factors, including: (i) income levels; (ii) sectoral composition; (iii) technological content of production output; (iv) educational attainments; (v) innovative capacities. Although the analysis of Turkish inequalities presented in the report does not aim to be exhaustive, but rather remain illustrative, the picture that emerges is one of stark differences in socio-economic endowments across the different regions of the country. Against this backdrop, place-sensitive approaches can represent a valuable, and potentially more effective, alternative to blanket policies that tend to disregard the local context in which interventions take place. In doing so, the role of regional and local administrations and development agencies can become pivotal in diagnosing the territorially specific bottlenecks and shortcomings that impede achieving a more competitive local and regional industrial fabric. Similarly, local stakeholders are likely to retain a useful knowledge on the strengths and opportunities that typify any given territory.

### ***Proactive initiatives will need to address Turkey's low participation in GVCs vis-à-vis international competitors***

The COVID-19 pandemic has accelerated a process of restructuring of global value chains (GVCs), already underway following the rise of trade wars and the rapid technological developments that impacted international production patterns. Whereas huge relocation effects remain yet to be seen, Turkey could, in principle, leverage the current crisis to grow stronger in international markets by increasing its export shares and integration into GVCs. However, these gains will not be automatic. Evidence from a number of Asian emerging markets showcases the importance of integrated and proactive initiatives in order to address the multi-dimensional bottlenecks that frequently prevent countries from achieving greater levels of GVC integration. From the development of indigenous human resources to the enhancement of institutional arrangements that constitute barriers to further integration, integrated initiatives will have to consider the various factors that often reduce the attractiveness of domestic value chains in Turkey in the eyes of foreign investors.

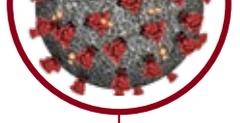
### ***Industrial policies that play to Turkey's strengths can warrant the viability and sustainability of interventions***

Turkey's most competitive sectors have been negatively affected by the pandemic. As a result industrial policies are now more needed than ever. Turkey's future industrial policies need to tap into the wide international experience of developed and developing countries alike to be successful. In general terms, those industrial policies that play to a country's —or a territory's— strengths have showed higher chances of success. In contrast, developing so-called 'high-tech fantasies' disconnected from the local industrial fabric and, therefore, lacking essential pre-conditions to create links to the local economy, will likely lead to wasteful initiatives incapable of revitalising the Turkish economy in the wake of the COVID pandemic. Strategies that focus on promoting related variety across Turkish regions can help many areas of the country, by gradually and cumulatively, to upgrade the innovative and productive capabilities of domestic firms. Such a strategy will also be instrumental to render Turkish economic actors more competitive on the global stage through a progressive diversification into higher value added industrial activities.



***A concerted, whole-of-government approach to the recovery process is a sine qua non factor towards a more sustainable, inclusive and competitive Turkish economy in the post-COVID era.***

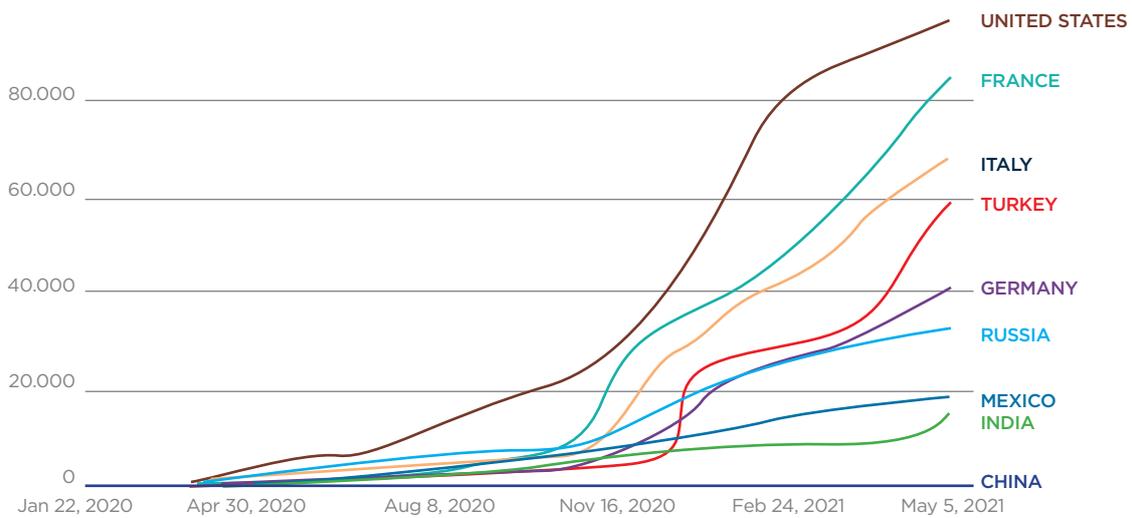
Ultimately, whether tomorrow's development interventions will succeed to transition the Turkish economy to more sustainable, inclusive and competitive standards will, first and foremost, depend on a concerted, across-the-board effort by the different government layers involved in the various stages of policy design and implementation. Commitment by the highest political institutions and strong backing by high levels of government will also be functional to endow interventions with a clear mandate that reflects nation-wide priorities in terms of socio-economic development for the post-COVID era. In this sense, a territorial approach that is coherent across Turkey will be fundamental. Whereas it is crucial to develop region-specific interventions that directly respond to the needs and constraints of a territory, this, however, must not come at the expense of broader national development strategies that look at territorial interventions as part of the national system of production and innovation. A whole-of-government, concerted and integrated approach will facilitate Turkey's transition towards a more sustainable, inclusive and competitive economy in the post-COVID era.

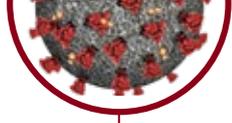


# Introduction

The COVID-19 pandemic has been a global health calamity without comparison since the outbreak of the Great (Spanish) flu of 1918-1920. By mid-May 2021 nearly 3.4 million lives had been lost across the world and over 160 million cases diagnosed (John Hopkins Institute, 2021). This assumes an even stronger bearing, if we acknowledge that the official tally of COVID-19 related deaths and positive cases remains, in all likelihood, underestimated as many more people died in their homes without access to testing and treatment, especially in the early stages of the pandemic and in developing countries (Schellekens & Sourrouille, 2020). Turkey identified its first COVID-19 positive case in March 2020. Since then, the number of cases in the country reached nearly 5 million by mid-May 2021. The death toll to coronavirus-related health complications totalled, at the time, 40,000 people (Republic of Turkey Ministry of Health, 2021). In terms of confirmed cases per million people Turkey has been heavily affected, although its impact has been lower than in some developed countries —i.e., the United States, France, or Italy— but higher than others —i.e., Germany, Russia, or China (Figure 1). In contrast, when it comes to cumulative confirmed COVID-19 deaths Turkey seems to have been successful, at least to some extent, in containing mortality rates, registering lower deaths per million inhabitants than most of developed countries, including the United States, the UK, Germany, and Italy (Figure 2).

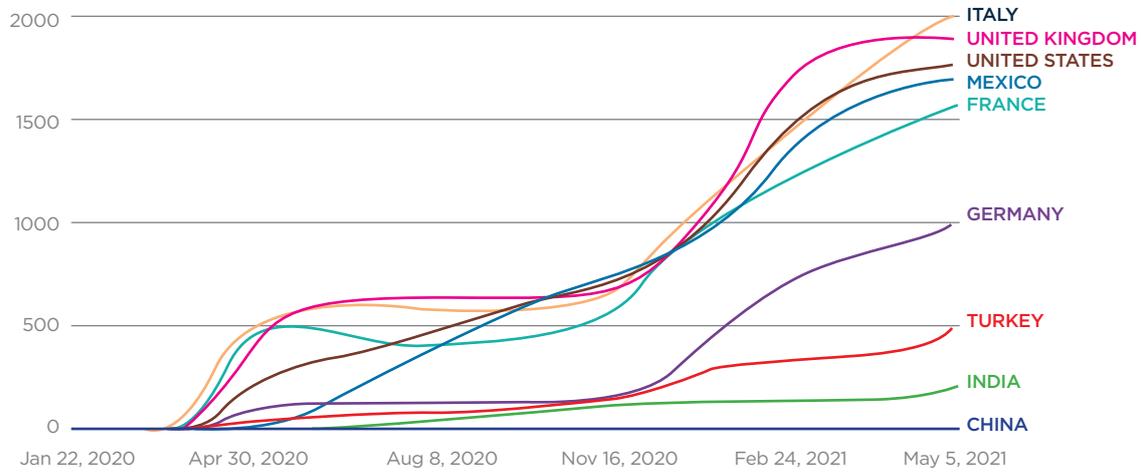
**Figure 1 | Cumulative confirmed COVID-19 cases per million people.**





Source: Johns Hopkins University (2021)

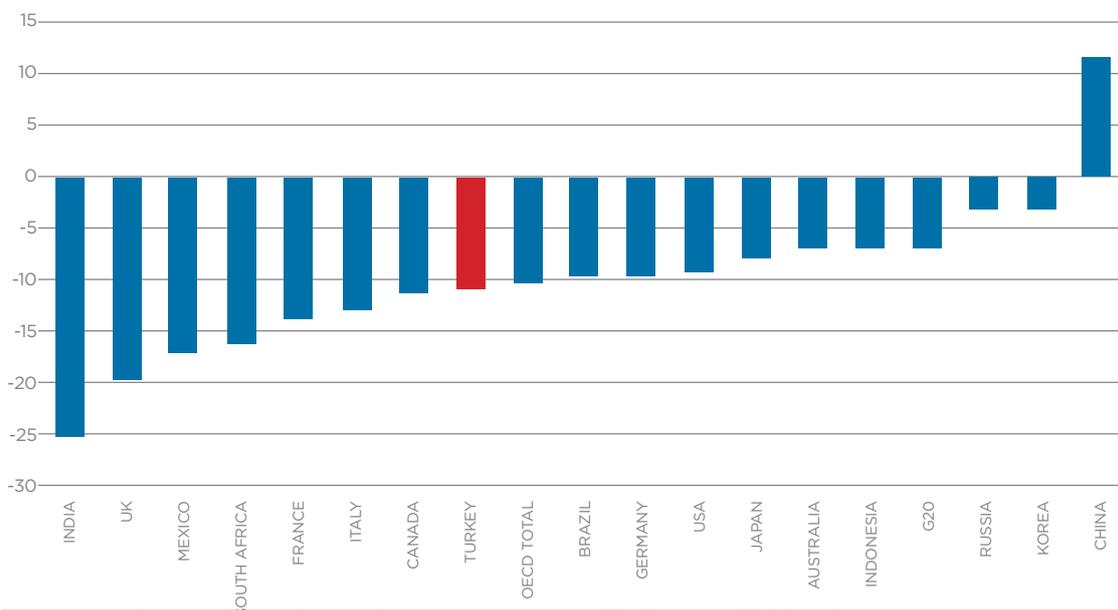
**Figure 2 | Cumulative COVID-19 deaths per million people.**



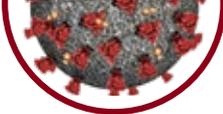
Source: Johns Hopkins University (2021)

While still being far from closing the curtain on the pandemic, the current vaccination drive is inching many parts of the world —especially its most developed parts— towards the end (or at least towards a more nuanced phase) of not only the pandemic, but also the profound pandemic-related economic and social transformations. The vaccines’ rollout and immunisation programmes are gaining momentum in developed countries and, once they are widespread in developing and emerging economies, will subdue the health emergency the world has been under since the early months of 2020. Yet, another threat looms large over countries across the world: the entrenched economic disruption and insecurity that has ensued the COVID-19 pandemic. With regards to the economic slowdown, Turkey has not been spared. The containment measures put in place in response to the three waves of COVID-19 experienced by Turkey —the first in Q2 2020, the second in Q4 2020, and the more recent one in Q2 2021— have caused GDP, as well as imports and exports to plunge (Figure 3), owing to the social distancing measures and the disruption of global value chains (UNDP, 2021<sup>1</sup>). The decline of GDP due to containment measures has been in line with the OECD average. However, it has been stronger than that of a number of competing emerging markets, like Indonesia and China.

**Figure 3 | Percentage change in quarterly GDP (Q2 2020) across selected countries.**



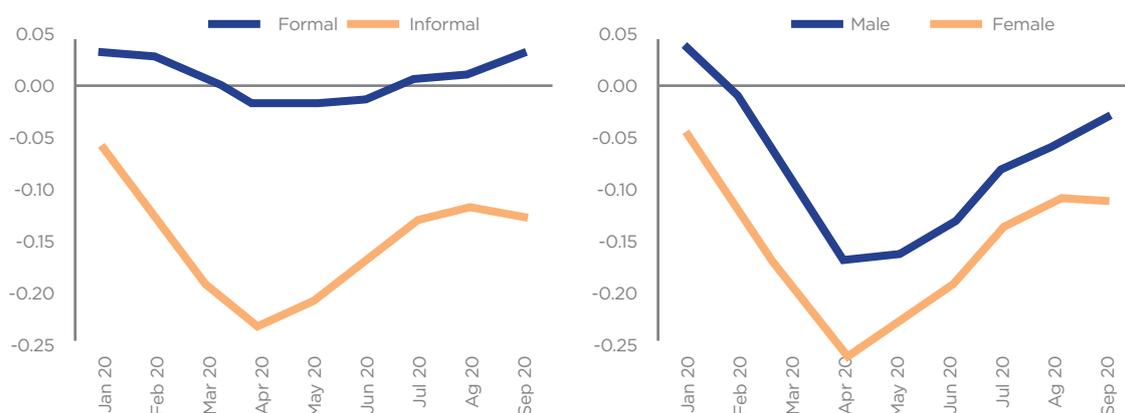
<sup>1</sup> When cited, UNDP (2021) refers to a series of analyses and background reports conducted by UNDP Turkey.



Source: OECD

Turkey managed to avoid yearly GDP contraction in 2020, with its economy rebounding at a full-year growth of 1.8 percent, despite the economic fallout caused by the pandemic. COVID-19, however, has deepened gender gaps, increased youth unemployment and caused the poverty rate to spike (World Bank, 2021). According to the World Bank, poverty rates have increased by as much as 2.1 percentage points —equivalent to 1.6 million people falling into poverty since the outbreak of the pandemic. Vulnerable groups, including women and informal workers and refugees, have experienced the highest drop in employment and, consequently, in standards of living (Figure 4).

**Figure 4 | Year-on-year percentage change in employment by groups in Turkey.**

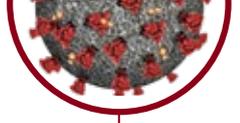


Source: World Bank (2021)

The Turkish economy is expected to grow by 6 percent in 2021 and 3.5 percent in 2022 and 2023 (IMF, 2021). The recovery risks, however, being uneven and highly skewed in favour of certain economic sectors, regions, and population groups. Even if 72 percent of the 1.9 million jobs lost during the early stages of pandemic had been regained by September 2020, the recovery is far from being equitably distributed. Over one million women have still not recovered their pre-pandemic employment and remain out of the labour market (World Bank, 2021). This trend of inequitable recoveries is not exclusive to Turkey. It is common across the majority of developed and developing countries, where the labour market recession has been shorter and milder for high-wage, male workers, while the biggest burden has fallen on informal, low-wage and/or female workers (Facebook, OECD and World Bank, 2020).

Moreover, the economic slowdown is expected to have a differential impact across regions, often reflecting sectoral specialisation across territories (OECD, 2021). Overall, some regions and economic sectors have been capable of adapting faster and better to the changing reality sparked by the COVID-19 pandemic. For instance, regions with the greatest resilience have been those with the largest shares of jobs that can be performed remotely and with fast and reliable access to the internet infrastructure. In this regard, Turkey exhibits huge differences: while the jobs amenable to remote working account for around 30 percent in Istanbul, in Eastern Anatolia less than 15 percent of job-related tasks can be carried out at a distance (OECD, 2020). Notably, service sectors, such as ICT and finance, could adapt relatively quickly to the new telework setting, while sectors, such as textile and apparel, tourism, construction and agriculture, which require in-person interactions, have been found to be the most vulnerable to the weighty shifts of working patterns (Seker et al, 2020). For all these reasons, the economic slowdown is likely to produce both winners and losers, therefore hampering an equitable recovery across population segments, regions and sectors.

The disruption caused by COVID-19 is not the only hurdle countries must face. In addition to the new emerging challenges, the economic fallout sparked by the pandemic has likely exacerbated a number of pre-existing vulnerabilities that already affected most countries in the Western world. First, inequality, both interpersonal and territorial, has been on the rise in the majority of OECD countries. The average income of the richest 10 percent of the population is today about nine times that of the poorest 10 percent across the OECD, up from seven times



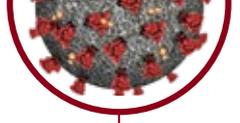
25 years ago (OECD, 2021). Similarly, the spatial concentration of income inequality has been increasing across half of OECD countries since 2008, as it unfolds both within cities —from one area of a city to another— and through what has been called the ‘urban advantage’ between urbanised and rural regions (OECD, 2020).

Second, micro-, small-, and medium-sized enterprises (MSMEs) endured considerable challenges even in pre-COVID-19 times, having failed to fully recover in many developed countries, following the 2008 global financial crisis. Enterprise births had recovered and market conditions and financing for MSMEs had improved across the OECD countries since the 2008 crisis until the current pandemic. However, below-average productivity levels often determined lower wages, with many MSMEs lagging in digitalisation and innovation capabilities (OECD, 2019). The lower capacity of many MSMEs to adopt new technologies can be at least in part traced back to difficulties in undertaking the complementary investments in skills and organisational changes needed to adopt and benefit from technology. In this regard, despite the fact that governments across developed and developing countries have frequently undertaken proactive initiatives to foster linkages between multinationals (MNEs) and SMEs to aid the digital transformation of smaller firms through greater access to global value chains, the training gap and digital divide between larger and smaller firms remains large (OECD, 2019).

Third, youth unemployment and the “not in education, employment, or training” (NEET) rate have been rising globally in the past decades, with young people (aged 15-24) three times as likely as adults (25 years and older) to be unemployed (ILO, 2020). Furthermore, the NEET status pertains to around one-fifth of young people globally, with young women twice as likely to be out of work and education vis-à-vis their male counterpart (ILO, 2020). On the whole, even following the recovery from the 2019 global recession, there has been a lack of adequate decent jobs for young people as the increase in the number of labour force participants with a degree has not been matched by a similar increase in the number of high-skilled jobs. Although some developed world regions, such as Northern America, display the highest levels of youth labour force participation rates (at 52.4 percent), other developed countries, such as many in Europe and Central Asia, have not been immune to the ‘youth crisis’, with participation rates only above to those in the MENA and South Asian regions (ILO, 2020). As mentioned above, the detrimental impact of the COVID-19 crisis is set to further accelerate pre-existing negative trends in youth unemployment and labour insecurity.

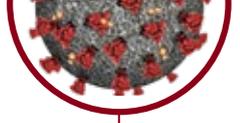
Fourth, COVID-19 is not the only game changer for international production. Changes in international production patterns, driven by the Fourth Industrial Revolution (4IR) and the sustainable development imperative, may considerably reshuffle existing value chains and consumer preferences (UNCTAD, 2020). On one hand, the application of new technologies in supply chains has far-reaching consequences for the configuration of international production networks, and this has raised important concerns for policymakers with the realisation that it will be harder to sustain growth based on traditional strategies that seek to leverage low labour costs. On the other hand, the adoption of sustainability measures in the global operations of MNEs and the implementation of regulations that aim to render production more sustainable and less polluting will change location determinants of investment and benefit those countries that are more equipped with climate adaptation and mitigation measures (UNCTAD, 2020).

The Turkish economy is by no means unaffected by these pre-COVID challenges and emerging trends. Instead, it also suffers from the vulnerabilities that characterise many countries in the Western world —and increasingly developing countries approaching graduation to developed status. For instance, Turkey displays the largest regional disparities in terms of GDP per capita across small regions among OECD countries, even though disparities have slightly decreased in the last ten years (OECD, 2020). Youth unemployment is higher than the OECD average in 17 out of 26 Turkish regions, and it has increased in most regions in the period 2014-2017, and particularly in regions with already low labour participation rates, such as Eastern Anatolia (OECD, 2018). On top of this, the Turkish economy features an over-representation of MSMEs with almost 45 percent of the total workforce employed in micro- and small-firms (from 1 to 19 employees), well above the OECD average of around 30 percent (OECD, 2019). Finally, many of the sectors that drive the underlying economic activity of Turkish regions —i.e., textile and machinery— are confronted with stiff competition from developing countries that benefit from lower labour costs and economies of scale, and Turkish firms increasingly face challenges to adapt to the new standards of resource efficiency, carbon footprint, or gender equality, needed, for instance, to comply with the 2025 Green New Consensus set out by the EU (UNDP, 2021).



Against this backdrop, there is a heightened need for horizontal policy interventions that act upon three dimensions: **territories, sectors, and people**. First, a spatial approach to recovery policies is likely to be needed in order to mitigate the territorially differentiated impact of the COVID-19 economic slowdown. In this regard, place-sensitive, coordinated policies can go a long way in adapting policy design and implementation to the underlying local context. Second, the differential impact of COVID-19 across sectors calls for sectoral policies that can render production more sustainable and efficient, while also boosting the competitiveness of local firms through the adoption of new technologies and diversification in related sectors. Third, the greater disruption of the COVID-19 crisis on vulnerable groups of people, such as women, youth, and refugees, will demand targeted policy actions. Finally, institutional quality and an orientation towards the Sustainable Development Goals (SDGs) are likely to be crucial in ensuring interventions are effective and able to withstand future shocks.

The aim of this policy report is to present recommendations for new norms of the economy in the post-COVID-19 era and transition to low-carbon, inclusive and rights-based economy in line with the SDGs. The report largely builds on the key findings of a plethora of sectoral reports and market analyses prepared beforehand within the scope of Covid-19 Resilience and Response Project implemented by UNDP Turkey and MoIT, DGDA. The report is divided in four sections. This first section has provided the background against which the post-COVID-19 recovery of the Turkish economy takes place. Section 2 outlines the guiding principles of a territorial development strategy in which all the key dimensions cited above can find a synthesis and work in synergy. The strategy draws from empirical evidence stemming from international experiences and the latest research. Additional emphasis is put on institutional elements and the need to support vulnerable groups while also transitioning to more sustainable standards of economic development. Section 3 then provides a number of policy guidelines for the development of industrial policies that can avoid 'locking in' regional economies and foster diversification based on related variety strategies. Finally, concluding remarks are presented to summarise the key points and pull the different strands of the report together.



## 2. Territorial Development strategy for a post-COVID-19 Turkey

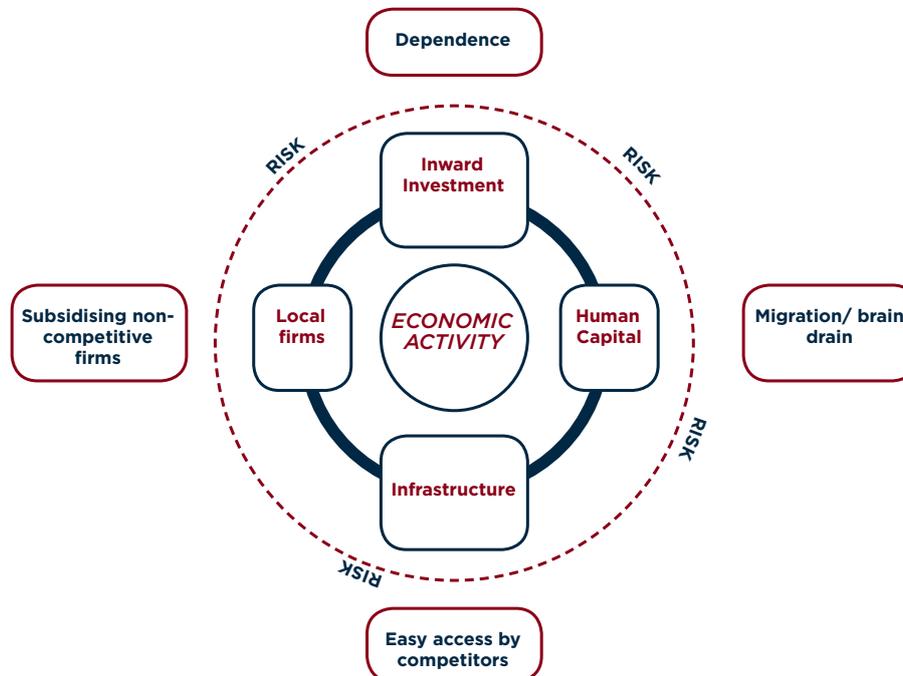
### 2.1 Overview of the strategy

**There is a growing need for horizontal interventions that take stock of local socio-economic and institutional conditions.** The previous section depicts a scenario whereby different territories have been affected at varying degrees by the economic slowdown sparked by COVID-19. Policies crafted from “best practice models” derived from high-tech areas and well performing regions — reflecting the ‘often-mindless groping for best practice’ (Markusen & Schrock, 2006)— risk failing to deliver on their goals and to leverage the endowments of what are an heterogenous groups of regions from an economic perspective for a sustainable recovery. Instead, policy alternatives that are sensitive to the characteristics, features and conditions of regions and places at different levels of development are best positioned to maximise the potential of every part of Turkey in building back better after the economic fallout of the current crisis (Iammarino et al, 2018). Similarly, recent surveys conducted by UNDP within the scope of the project illustrate the multifaceted nature of the factors that Turkish firms often single out as important constraints, therefore vertical interventions acting upon one segment of the economy —i.e., infrastructure, human capital, or inward and foreign investment— are unlikely to address the multi-dimensionality of the current pandemic-related economic slowdown.

**Regional specific initiatives need to be integrated into broader national development strategies.** A horizontal approach that is sensitive to the local preconditions should not imply local approaches that lack policy coherence with nation-wide developmental objectives. In the past, across the world examples of standalone policies lacking the support from complimentary policy areas have mushroomed. This often led to ‘strategies of waste’, that is developmental interventions that leave the treated territory in the medium- and long-run in a similar or worse condition than before the intervention, despite sometimes having short-term positive effects (Rodríguez-Pose & Wilkie, 2019). This has been the case, for instance, of the development of Special Economic Zones (SEZs) in Peru, where an indiscriminate approach to attracting FDI through investment promotion initiatives neglected the provision of adequate skilled labour and infrastructure, and, as a result, failed to deliver on national development targets (World Bank, 2016). In this sense, each intervention, be it developing digital infrastructure, providing training and consultancy services to MSMEs, supporting resource efficiency, needs not to be seen as an end in itself, instead it should be purposely targeted to respond to region-specific development constraints, while ensuring it works towards the attainment of country-wide development objectives and goals.

**A comprehensive, multidimensional strategy is built around four development axes that shape the underlying economic activity of each sector and territory (Figure 5).** A policy strategy that includes a balance between four elements —inward investment, human capital, infrastructure and local firms— is likely to be better equipped to ignite a long-term recovery process from the current slowdown sparked by Covid-19. The four development axes correspond to the four broad categories of ‘levers’ that strategies of late across the world have used to catalyse and promote growth. A comprehensive strategy that finds a synthesis and creates synergies across all four levers will also be instrumental to shift from the enactment of emergency measures, targeting the most pressing issues such as individual and businesses’ liquidity constraints, and move towards recovery programmes aimed at “building back better”. Similarly, an all-encompassing approach based on the four pillars is functional to yield strategies of gain — that is, development approaches that are particularly capable of delivering on their expected impacts by fulfilling both their inherent potential and designated objectives (Rodríguez-Pose & Wilkie, 2019)— so as to produce future-proof regional economies that are better suited to withstand upcoming challenges, i.e., digital transformation, changes in international production patterns, and climate change.

**Figure 5 | Schematic representation of the territorial development strategy.**

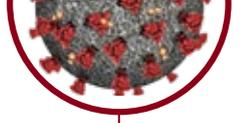


Source: Adapted from Rodríguez-Pose (2001)

**The four pillars need to be strictly intertwined.** In the past, many development interventions have frequently gravitated towards a main development axis —fundamentally, either e.g., infrastructure or inward investment— leaning towards unbalanced development strategies (Rodríguez-Pose & Wilkie, 2019). However, the close relationship between each development axis implies that interventions in one of the pillars will reap the intended benefits only if local capabilities in the other dimensions are adequately developed. A balanced strategy needs to feature an appropriate mix of structurally, socioeconomically, and institutionally oriented policies and reforms (Barca et al, 2012). For instance, policy initiatives to upgrade the quality of the local labour force will fail to deliver if efforts are not made to ensure an adequate demand of skills by local and foreign firms located in that territory, leading to phenomena like brain drain, as in the case of the development of skill upgrading programmes in the Philippines (Phan & Coxhead, 2015; Rodríguez-Pose & Wilkie, 2017).

**On top of the four pillars, two cross-cutting elements —institutions and the SDGs— are key to ensure the effectiveness and long-term sustainability of any development strategy.** The institutional context has in the past been described as the key driver of innovation, mutual learning, and productivity growth, and it is a mediating factor that can in effect determine the fortunes of any policy intervention (Putnam, 2000; Rodríguez-Pose, 2013). In this regard, the level of accountability, transparency and autonomy of institutions is crucial to ensure the achievement of the intended objectives. Similarly, a greater focus on the SDGs and, more broadly, on enhanced environmental, social and corporate governance (ESG) standards is likely to make or break the long-term sustainability of intervention aimed at reinventing regional industrial fabrics and revamping targeted sectors (UNDP, 2016). Additional caution will then need to be exerted to make sure development interventions reach the most vulnerable segments of the population. They, in turn, are likely to be affected harder and longer by the current pandemic, as mentioned in the previous section. Failing to do so will lead to half-baked policies: though at times capable to address regional or sectoral constraints, they would be incapable of igniting equitable growth to tackle the ever-growing territorial and interpersonal inequalities propelled by the COVID-19 crisis.

**Adapting the strategy to the local conditions facilitates a more effective and efficient deployment of resources.** Mimicking interventions that proved successful elsewhere but



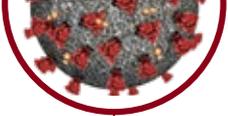
neglect the territorial specificity of comparative advantages may also end up in wasteful policies. The pandemic has reinforced pre-existing trends in inequality and it is expected to leave countries much more polarised than in pre-COVID-19 times (OECD, 2021). From here the need to embrace development approaches that respond to the scale, scope and nature of the development challenges territories face and the opportunities and potential with which they are endowed. In particular, interventions in the different pillars post-pandemic need to be sensitive to the specific conditions of different Turkish regions. This is particularly important taking into account the huge internal disparities in Turkey, where Western parts of the country (especially around Istanbul) have levels of development that are close to the average of, say, the European Union, whereas in Eastern parts of the country the levels of development are low, i.e., Eastern Anatolia. As a result, policies more likely to succeed will be those adapting along the *level of complexity* —understood as the number and diversity of elements across development axes— and *the breadth of scope* —that is, the narrowness of the development outcomes or objectives by which a strategy is guided (Rodríguez-Pose & Wilkie, 2019).

## 2.2 The importance of the 4 pillars underlying economic activity

### 2.2.1 Inward investment - attracting MNEs and productivity-enhancing practices

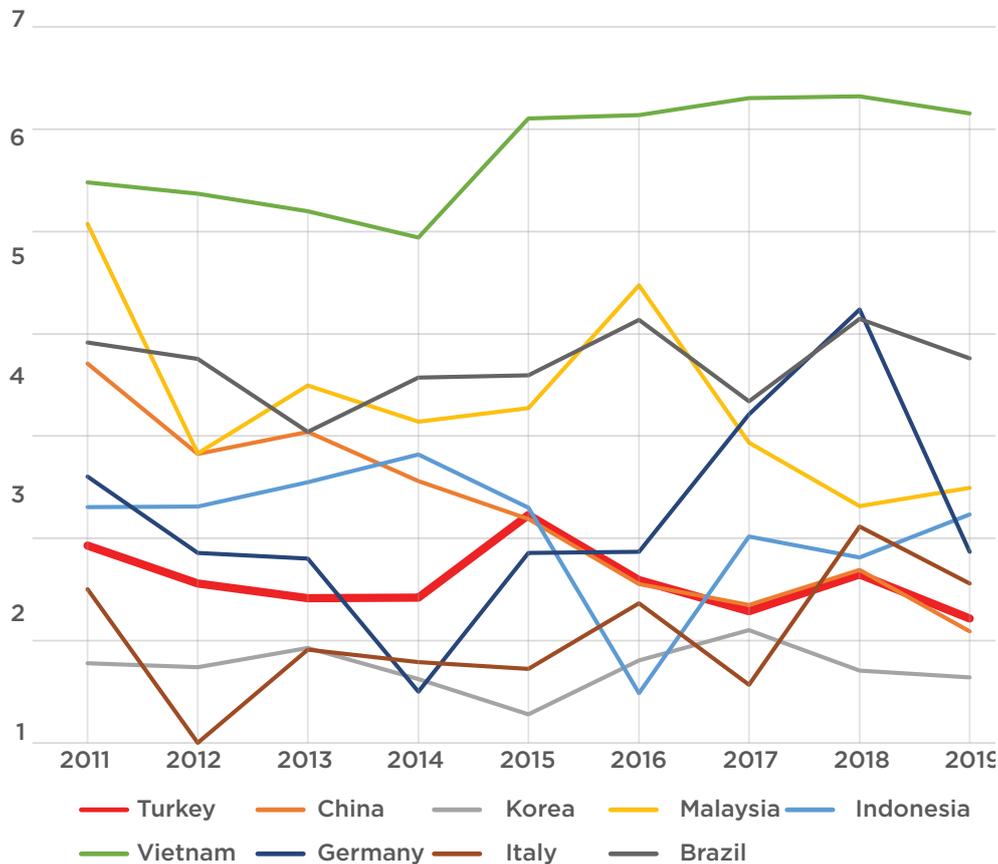
**Turkey is a large and complex economy, but one that needs to increase its resilience.** On the one hand, there is a myriad of micro-, small-, and medium-sized firms, many of them facing various challenges. As mentioned in the introduction, Turkey has an over-representation of MSMEs, clearly above the OECD average. Evidence gathered by the World Bank Enterprise Survey prior to the COVID-19 crisis indicates that Turkish small and medium firms were already facing various challenges, including limited access to finance and lack of qualified personnel and digital tools (World Bank, 2019). These have been hit very hard by the pandemic and the recovery in uncertain times represents a significant challenge for them. In this regard, surveys conducted by UNDP in collaboration with the private sector suggest that 62 percent of MSMEs have been substantially affected by the pandemic, while the business volume of more than half of the surveyed companies has decreased by more than 50 percent. On the other hand, the Turkish economy hosts considerable large firms —many of them in the hands of multinationals (MNEs)— that make the backbone of the most competitive sectors in Turkey, i.e., logistics and automotive. These firms also face a considerable amount of Covid-19 related challenges and require targeted interventions in order to remain competitive in a world that is likely to change.

**The attraction and embedding of FDI remains crucial to the prospects for local and regional development.** Turkey's ability to attract FDI has been lower than that of international competitors (Figure 6). Turkey's FDI inflows account for a smaller share of GDP compared to both manufacturing powerhouses among developed countries, such as Italy and Germany, and emerging markets such as Vietnam, Indonesia, Malaysia and Brazil (World Bank, 2021). MNEs have been described as the 'movers and shapers' of the global economy, as they are increasingly perceived as the bearers of new technology, innovative management practices, and stimuli to local suppliers (Dicken, 2003). Indeed, attracting MNEs to regional economies cannot only bring static benefits, such as an increase of investment flows, exports and employment creation, but the interaction between MNEs and domestic firms can ignite a number of dynamic and indirect economic benefits. For instance, past research suggests that foreign firms are indeed carriers of positive externalities in the recipient industries (Ascani & Iammarino, 2018). In particular, domestic firms —especially those serving regional and national markets— active in sectors with greater investments by MNEs show a stronger innovative performance vis-à-vis domestic enterprises operating in industries with few interactions with MNEs (Crescenzi et al, 2015). That said, the attraction of foreign investment remains only one part of the approach and indiscriminate efforts to attract MNEs to Turkish regions without putting in place complementary policies are likely to fail to upgrade the potential and competitiveness of local firms. Indeed, the transfer of knowledge and innovation from MNEs to MSMEs is often conditional on the presence of a number of mediating factors, such as an adequate absorptive capacity by local firms, an enabling institutional framework, and proactive efforts through targeted programmes,



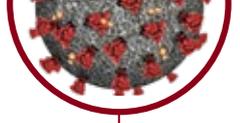
that facilitate the materialisation of transmission channels, i.e., backward and forward linkages and pooled labour markets (Boschma, 2005).

**Figure 6 | Foreign direct investment, net inflows (% of GDP)**



Source: World Bank

**An overreliance on FDI may backfire.** Although inward investment can trigger beneficial effects such as labour mobility, demonstration effects, and backward and forward linkages with local suppliers and customers, an excessive reliance on mobile investments may cause Turkey and its regions to become dependent on such sources for employment creation and economic output. Indeed, dependence on inward investment may have a number of detrimental ramifications for Turkish regional economies. First, local firms may be victims of market-stealing dynamics by MNEs subsidiaries. This applies especially to those local firms operating in the same sectors of activity of MNEs —i.e., horizontal linkages (Crespo et al, 2009). Second, higher wages paid by foreign firms may determine limited labour mobility, with the most skilled workforce seeking employment opportunities in MNEs subsidiaries, therefore hampering the procurement of human resources by local firms. This has been the case, for instance, in Mexico, where FDI contributed to local skills downgrading through the wage differential between foreign and local firms (Ibarra-Olivo, 2019) Third, attracting inward investment by granting fiscal incentives may ultimately lead to pure-waste inter-regional competition that is unlikely to leave regions better off in terms of investment stocks (Rodríguez-Pose & Gill, 2005). Pushing line ministries or allowing regional development agencies to provide non-negligible location incentives to mobile investors may incur in so-called *deadweight effects*, which occur when incentives are provided to firms for projects that would have taken place anyway (Massey, 1995). For all these reasons, it is crucial for Turkey to have safeguards in place and ensure that the productivity-enhancing externalities of hosting MNEs are maximised, while minimising the challenges that might originate from the co-existence of foreign and domestic firms.



**Proactive initiatives to embed foreign firms into the regional industrial fabric are key to favour local upskilling and the transfer of innovative practices.** In particular, leveraging inward investment in an effective way often translates in fostering development of the region, rather than development in the region. The materialisation of positive externalities is conditional upon the attraction of the most suitable type of investments given the local context. A huge gap between the technologies of the MNEs attracted and local firms is unlikely to spur linkages among the two (Boschma, 2005). Likewise, the attraction of inward investment in a particular sector or industry to a region that is ex-ante not specifically suited to it will either be immediately ineffective or unsustainable. Hence, attempting to launch a new industry from scratch focusing only on the attraction of foreign firms is more likely than not to end up as a strategy of waste (Rodríguez-Pose & Wilkie, 2019). In this sense, assessing the development potential of target FDI, how it can contribute to the achievement of wider policy objectives and the quality of investment projects (i.e., skills levels of expected jobs, occupations, functions, or supply chains) can go a long way in facilitating local upskilling and knowledge transfers (Young & Hood, 1995). Countries and regions that have adopted such a strategy of developmental targeting have been able to maximise the gains stemming from inward investment attraction. For instance, in Ireland a shift away from an indiscriminate attraction of foreign investment to a more targeted approach based on the country's skills and industrial endowments contributed to the gradual indigenous development of local firms towards higher value-added industrial activities (Fuller & Phelps, 2004). Finally, ensuring an adequate absorptive capacity of local firms and workforce is equally crucial to reap the dynamic gains of mobile investment, as illustrated by the case of strategies based on FDI attraction in the Dominican Republic (see Box I). The following section illustrates some all-important considerations when it comes to human capital development.

#### **BOX I**

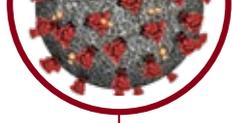
##### **Inward investment-based strategies that deliver: evidence from Malaysia**

Development interventions based on the attraction of mobile investment have been pursued by a plethora of countries across the world, both at low and high development status. These strategies, however, have often been designed and implemented following unidimensional approaches, hence failing to incorporate adjacent policy areas that frequently determine the successful implementation of such strategies. Inward investment-based initiatives followed by the Penang economic zone, in contrast, highlight what it takes to achieve the upgrading of the local economic fabric through the attraction of FDI.

Inward investment policies have often implied the development of Special Economic Zones (SEZ), geographically delimited areas where governments seek to attract foreign investors through the provision of both fiscal and non-fiscal incentives and a special customs regime. The Penang SEZ (Malaysia) has proven to be a powerful instrument for job creation, exports, and productive diversification. The programme has been successful because of the solid local and national institutional framework, favourable trade preferences, and the involvement of the private sector. However, well-targeted initiatives to promote inter-firm linkages and local skill upgrading have also been key factors in its success. A fundamental component has been the establishment of an industry-led training centre—the Penang Development Skills Centre—with the purpose to train local workers: over a period of 30 years, over 200,000 workers received training in areas such as Industry 4.0, applied engineering, and digital technology. Additionally, initiatives were also undertaken to facilitate interactions between local firms and MNEs, through business matchmaking and supplier development programmes.

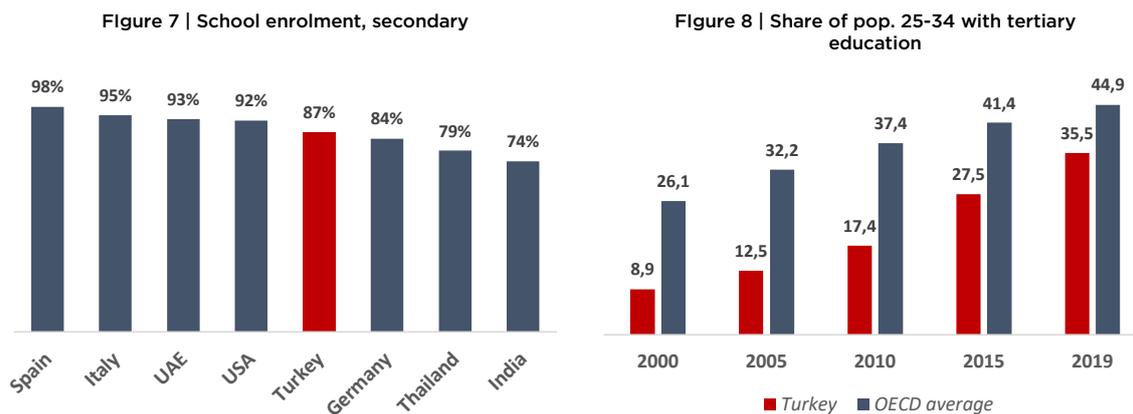
The type of interventions designed at Penang SEZ illustrates the potential economic gains of attracting MNEs and foreign investors to regional economies. The process, however, is in no way automatic, and initiatives targeting other development axes (i.e., human capital upgrading) are likely to make or break any attempt to dynamise local economies through FDI.

*Source: COMCEC (2017)*



## 2.2.2 Human capital—upgrading the local workforce with relevant skills

**Despite considerable improvements in educational outcomes in the last decade, Turkey still lags behind some of its competitors when it comes to educational attainments and employment prospects.** The number of Turkish young adults (25-34 years old) that have attained tertiary education has doubled in the last decade, from 15 percent in 2008 to about one-third (35 percent) by 2019. Even so, tertiary attainment is still low in Turkey relative to developed countries. It remains 9 percentage points below the OECD average of 44 percent (Figure 8) (OECD, 2019). In addition to access, quality also remains an issue. In recent years, university world rankings have consistently included a relatively limited number of Turkish universities —only two Turkish universities featured among the world top 500 universities in 2019 (THE, 2019). With regard to secondary enrolment, Turkey ranks below some of its direct competitors in sectors where Turkey retains a comparative advantage, including textiles, automotive, machinery, food, logistics, and tourism (Figure 7). Unsurprisingly, one of the main challenges experienced by Turkish firms in sectors as diverse as the textile and logistics is the lack of qualified personnel (UNDP, 2021). Falling behind competitors in the capabilities and capacities of local labour may determine the loss of competitive edge following the inability to accommodate and develop new technologies, therefore losing touch with the technological frontier.

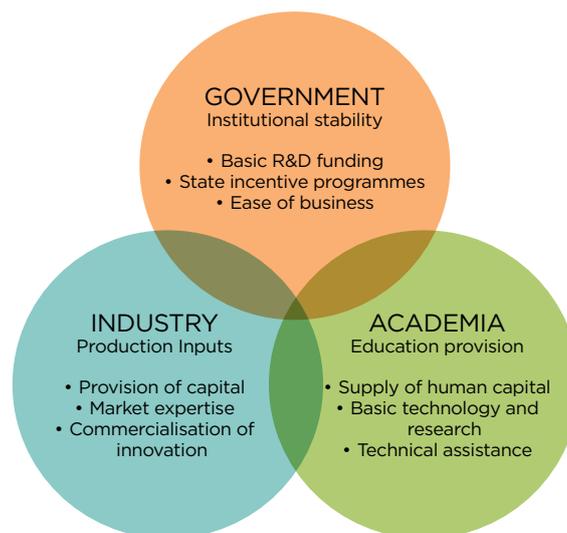


Source: World Bank Development Indicators and OECD

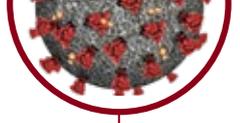
**Developing and upgrading labour can have far-reaching implications.** Investment in human capital improves the quality of human resources, increasing the productivity, the endogenous innovation capacity, and the ability to absorb the innovation produced elsewhere (Aghion & Howitt, 1998; Rodriguez-Pose & Crescenzi, 2008). Efforts to upgrade indigenous human resources can determine different trajectories in the development of a country or region, either facilitating or hindering the adoption of external innovation and knowledge. For instance, empirical evidence highlighted the diverging trajectories of the USA and Chile, both hosting copper mining firms in the early twentieth century. Of these two countries only the USA successfully developed a knowledge network that enabled the local industrial fabric to diversify in chemistry and metallurgy. Similarly, both Mexico and South Korea attracted inward investment in electronics in the 1980s, yet only the latter has generated indigenous capabilities that allowed the country to become market leader in the production of electronic devices (Maloney & Valencia, 2016). In this regard, horizontal learning strategies have been deemed essential to increase the absorptive capacity of the local workforce and firms, hence enabling the adoption of superior technologies that laid ground for the development of indigenous industries (Cirera & Maloney, 2017). All this assumes even greater relevance in the Turkish economy, which is subjected to long-lasting deficiencies in terms of human capital standards and, as mentioned above, strives to source the right source of skills required by local firms in a wide array of sectors, from textiles to machinery and logistics.

**A coordinated approach to human capital upgrading is key to warrant the creation of synergies and the alignment of objectives.** How to put in place skill development programmes has frequently constituted a wedge issue. At times, the upgrading of skills has been left entirely—or to a great extent—in the hands of the private sector. Too much business influence, however, risks skewing educational priorities if students become too narrowly trained according to the wishes of industry, but without the adaptive ability to think critically, broadly and creatively about problems outside the realm of commercial usefulness (Rodríguez-Pose, 1998). For instance, after two decades of entrepreneurship education at university level in the United Kingdom, its effectiveness was found to be relatively weak (Greene, 2002). Skills development programmes also require local customisation, as proven by some of the most successful training programmes worldwide, e.g., the CEFE programme implemented by the German Foundation for International Development in over 60 countries around the world (Fisher & Reuber, 2000). For instance, in jurisdictions with large chronic or temporary pockets of youth and female unemployment interventions can be targeted to specific segments of the population in order to develop entirely new skill sets, readapt existing ones or breaking the cycle of long-term unemployment through pre-employment training (Belt & Richardson, 2005). Conversely, in regions with high populations of recent immigrants, language training can go a long way to improve access to employment (Campbell & Meadows, 2001). In general, human capital development initiatives work best if they are coordinated and feature the alignment of key stakeholders, including the private sector, the public sector, and educational providers, in what has been referred to as the Triple Helix (Figure 9) (Leydesdorff & Etzkowitz, 1998; Smith & Bagchi-Sen, 2010). In the Turkish context, this sort of approaches can effectively leverage the early signs of knowledge specialisation that a number of Turkish universities display, such as Bursa Technical University in the textile-related engineering and Erbakan University in Konya in the electrical machinery technology. That said, the type of university-industry linkages is likely to be determined by the local context. For instance, university-industry linkages can take the form of: (i) general research support, through monetary endowments, equipment donations and research facilities; (ii) contract research as part of which industry finances specific research projects under a contract; (iii) knowledge transfers and training schemes, such as advisory training schemes and student placements in industry; (iv) government-funded collaborative research projects which are jointly undertaken by university and industry; (v) cooperative research centres where the government provides shared facilities. Which model is more suited will depend on the level of development of the local industrial fabric, the presence of large firms versus MSMEs, and the institutional capacity of local institutions and education providers.

**Figure 9 | Triple helix model of innovation.**



**Providing skills that are relevant to the target sectors minimises the risk of poor employment prospects.** The employment rate for tertiary-educated young adults has fallen by 6 percentage points in the last decade in Turkey, with women being particularly hit (OECD, 2019). The current crisis caused by COVID-19 has likely exacerbated the lack of adequate employment opportunities for skilled workers. In this regard, it is fundamental to provide the right set of



skills relevant to the regional industrial fabric. Following the 2008 global economic slowdown, investments were targeted to the acquisition of new skills to be employed in emerging sectors. However, such efforts were sometimes undermined by low firm demand and sub-optimal use of those skills in the workplace. The extent of these skills mismatches differed by region and was a downward drag on local productivity for some places (OECD, 2020). As documented by UNDP analysis, rapid technological advancements are set to reshape international production patterns in Turkey's strategic sectors. For instance, the waning primacy of labour costs as location determinants of textile production are associated with increased efficiency and productivity obtained through digital innovations. Equipping the local workforce with up-to-date skills will therefore be crucial to maintain and reinforce Turkey's competitive edge (see Box II).

## BOX II

### Leveraging the current crisis to provide digital skills to SMEs and local workforce

Initiatives to enhance the digitalisation of SMEs and the local workforce can be part of both emergency support and policies that target the long-term recovery and resilience of strategic sectors. It is estimated that we have vaulted five years forward in business digital adoption in a matter of eight weeks. As a result, a number of countries have leveraged the opportunities set by expansionary fiscal policies to close the persistent digitalisation gaps in their industrial fabrics and workforce.

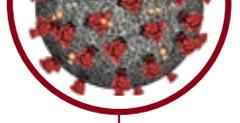
In December 2020, the government of New Zealand instituted a government-funded Digital Boost skills training and support initiative, as part of which a partnership between the Ministry of Business, Innovation and Employment (MBIE) and the private sector supported SMEs and their workforce to adopt digital tools and technologies in their daily operations. The initiative is part of a \$10 million worth of funding allocated specifically to SMEs in the 2020 government budget.

Similarly, Argentina launched a \$8.6 million finance line for SMEs to use specifically on teleworking. Ireland introduced the Digital Trading Online Voucher scheme worth \$4 million as part of which local entrepreneurs can receive up to \$3,000 worth of online training. Developing countries have also embraced similar initiatives. In Malaysia, for instance, the government e-commerce campaign provides e-commerce onboarding training facilities to local firms.

Providing support to digitally upgrade not only aids local firms and workforce to withstand better the impact of the COVID-19 crisis in the short term, but it also endows SMEs with superior skills to compete with international competitors once the economy recovers.

*Source: Baig et al (2020); OECD (2021)*

**Investing heavily on human capital development without ensuring adequate job prospects may fuel skilled migration.** Improving education and skills levels without cultivating the competitiveness of local industries or attracting foreign resources may result in a mismatch between the labour force skills level and demand within the local economy, generating dissatisfaction and possibly brain drain of the highest qualified personnel (Rodríguez-Pose, 2002). Brain drain is related to a wide array of detrimental consequences for the source country, including lower levels of human capital investments and negative demonstration effects that bring students to either leave after acquiring a higher education degree or abandon high level education with the intention of migrating abroad (Brzozowski, 2007). Turkey, in particular, has a long-standing history of emigration of skilled workers. Turkey's first "brain drain" wave began in the 1960s, with doctors and engineers among the first group of emigrants. More recently, recent graduates have often sought relocation to European countries and North America on the basis of income differentials, and family considerations (Güngör & Tansel, 2013). A total of 330,289 people left Turkey in 2019, according to Turkstat, and around 40 percent of those who left were between the ages of 20-34. With the purpose of mitigating the risks of reinforcing pre-existing trends of skilled emigration, it is of utmost importance avoiding purely supply-



driven interventions in skills development, or interventions highly skewed towards the human development axis vis-à-vis the other pillars of economic activity outlined in this section. Instead, strategies that pursue a healthy balance between supply and demand of skills can create the right conditions to both upgrade skills and, more importantly, increase the productivity of local labour. The examples stemming from the Philippines and Vietnam are highly representative of these dynamics and offer interesting cautionary evidence for the Turkish case (see Box III).

### BOX III

#### **Supply-driven vs. market-oriented skill development initiatives: evidence from Vietnam and the Philippines**

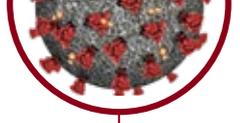
Human capital development initiatives have often been deemed as crucial to increase the skills and capabilities, and, in turn, the productivity of individuals and the regions they lived in. At times, there has been, however, an equally pervasive tendency to ignore the way and extent to which skilled persons would be absorbed by the labour market. In this regard, the experiences of Vietnam and the Philippines, being designed in inherently different ways, display two opposite outcomes of the respective skill upgrading programmes.

On one hand, the Filipino experience exemplifies the challenges that emerge from an ill-conceived and insufficiently integrated supply-side human capital development approach. By 2010, the Philippines had implemented over 470 country-wide nursing training programmes that were producing around 20,000 nurses per year. Despite this huge supply of labour force, the country still faces considerable shortages of nurses, which have in the past contributed to the closure of 200 hospitals and the partial closure of 800 ones. The persisting shortages have been attributed to the significant emigration flows of newly-skilled nurses, who leave the country due to the general undersupply of employment opportunities at home, including a wide array of 'push' factors, such as low salaries, no overtime or hazard pay, poor health insurance coverage, high workload, or slow promotion, among others. The evidence stemming from the Filipino case illustrates that the unavailability of training opportunities is not the only cause of shortages of skilled workers. Instead, the inability of the government to address demand-related bottlenecks, hence improving the quality of local opportunities, can also translate in shortages of qualified personnel.

On the other hand, market-oriented education and training can be effective not only in rising education standards, but also in mobilising and engaging skilled individuals in productive activities, such as in the case of Vietnam's Vocational and Technical Education Project. Vietnam comes from a long history of skill underdevelopment. For instance, in 1998 about 80 percent of the population was unskilled, while only 10 percent had received formal education. To tackle this, the country, with the help of the Asian Development Bank, implemented the Vocation and Technical Education Project, a multi-dimensional initiative aimed at improving the market-orientation of vocational programmes. The aim was to enhance the efficiency of the programmes offered by 'key schools' and reinforce the institutional capacity of the government's General Department of Vocational Training. An ex-post performance evaluation by the Asian Development Bank found that the programme had been highly effective in addressing both the unavailability of training opportunities (supply-side) and integrating skilled individuals into the local workforce. This programme thus reduced the risks of brain drain (demand-side): only 4.1–6.2 percent of graduates were unemployed two to three years after the completion of training.

The diametrically opposite trajectories of the efforts of upskilling labour in the Philippines and Vietnam points to the bare fact that multi-dimensional interventions, addressing the plethora of bottlenecks usually related to shortages of qualified personnel, are better positioned to increase the productivity of local labour. This lesson learnt can serve as an all-important warning for the Turkish case.

*Source: Lorenzo et al (2007); Dimaya et al (2012); ADB (2013); Rodríguez-Pose & Wilkie (2019)*



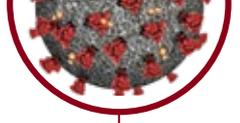
### 2.2.3. Infrastructure—enabling market access and low trade costs

**Turkish infrastructural endowment is generally high.** In particular, road infrastructure is generally well-developed. Turkey benefits from higher shares of motorways in the total road network vis-à-vis some developed countries, such as the United Kingdom and is on a par with France (OECD, 2019). Road infrastructure investment per GDP has been in recent years higher in Turkey than many other OECD countries, including Switzerland, Germany, the United States, France, the United Kingdom, Spain and Italy (OECD, 2019). Moreover, sector-specific indicators, such as the World Bank logistics performance index, highlight the positive performance of Turkey in terms of infrastructural endowments vis-à-vis other subcategories, such as customs procedures and tracking systems. There is evidence to suggest that improvements made to Turkey's transport infrastructure from the 2000s significantly enhanced domestic and international market access for Turkish regions, especially those located far from trade getaways, such as ports and international airports (Coşar and Demir, 2016).

That said, there remain realms in which Turkey exhibits low infrastructural endowments that can potentially limit the capacity for firms to compete. First, digital infrastructure—including the Internet backbone, fixed broadband, network infrastructure, data centres, and cloud computing—remains a cross-cutting weakness across sectors. For instance, firms in the textile sector in Bursa report inadequate digital infrastructure as a key constraint to their competitiveness, together with the shortage of qualified labour (MoIT DGDA, 2021). Digital gaps have further widened with the pandemic, which accelerated pre-existing trends in technological adoption. As a result, firms that came unprepared were hit harder and face daunting challenges in the recovery. For instance, surveys conducted among agricultural enterprises in Antalya, Burdur and Isparta suggest that the lack of e-commerce infrastructure was a significant challenge during the pandemic and risk curtailing growth in the post-COVID-19 era (MoIT DGDA, 2021). Second, the transport infrastructural endowments of Turkey are highly skewed towards road transport, at the expense of other types of infrastructure that can be more competitive for firms (MoIT DGDA, 2021). Turkey, for instance, has significantly less kilometres of rail line per capita when compared to other OECD countries and is around three times below the average of EU countries (UIC, 2018). The density of the Turkish rail network is also around one-seventh that of Germany, one-fifth that of the United Kingdom, and one-fourth that of Italy and France (OECD, 2020). The overreliance on road infrastructure, and consequently on road transport, can hinder the competitiveness of Turkish firms on the global stage, particularly those active in the logistics sector. In this regard, while road transport can indeed provide greater flexibility and door-to-door transport, other types of transport, such as rail, can have significant advantages in terms of unit transport costs and environmental impact. These infrastructural deficits impair the competitiveness of Turkish firms across a great variety of sectors, and they are likely to leave Turkish economic players at a disadvantage when competing with firms in other OECD countries.

**Basic utility and transport infrastructure is crucial to increase accessibility to market and reduce trade costs.** Developing reliable and efficient infrastructures remains critical to promote economic growth and it is often considered as a prerequisite for development (e.g., Calderón & Servén, 2004). Research and past empirical evidence have highlighted the importance of adequately developed infrastructural endowments to maximise the local economic potential and allow a better exploitation of resources (Bronzini & Piselli, 2009; Deliktas et al, 2009). Transport infrastructure assumes even greater relevance in lagging and rural regions, where local firms normally strive to integrate with global value chains. In terms of infrastructure development, Turkey has arguably moved in the right direction, attempting to diversify the infrastructural stock away from road-based transport towards air cargo and rail lines. In recent years, public investment in road infrastructure has decreased in favour of increased investments in rail-based transportation. Important projects are in the pipeline, including the Ankara-İzmir High Standard Rail Project and other projects aimed at the electrification of regional rail lines. Completion of such projects can in effect lower transportation costs and delays.

In contrast, digital infrastructure seems to be a step behind. Investments in digital infrastructure are somewhat more complicated since it is often not enough to put in place the digital 'hardware', instead accessibility also plays a big role. In other words, everyone knows how to use a train, whereas access to digital tools require a large set of pre-existing skills. This is already proving challenging in certain Turkish regions and sectors, such as the food industry in



the Antalya region, where agricultural workers are ageing. This is hampering the adoption of new technologies. In this sense, initiatives aimed at increasing the ability of firms and workers to adopt digital tools are likely to make or break any investment in the digital infrastructural endowments of Turkey.

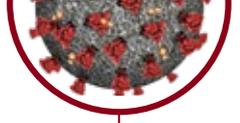
## 2.2.4 Local firms—fostering dynamic local ecosystems through clusters

**The locational distribution of Turkey's strategic sectors is fairly concentrated in certain regions.** According to analysis conducted within the scope of the project, the location quotients of the six fragile sectors identified as having key contributions to Turkish GDP and employment are generally above 1<sup>2</sup> in a number of selected regions. This suggests that the sectors are concentrated in specific regions and they are important growth generators in the local economy. That said, industrial sectors within the selected regions tend to be fragmented both in terms of size and industrial activity of firms. Across the six strategic sectors identified by the UNDP's market analysis, firms are normally micro or small enterprises, and they specialise in different sub-sectors depending on the region. For instance, in the textile sector, while the manufacture of footwear is concentrated in the Izmir sub-region, the companies involved in weaving of textile are generally concentrated in the Bursa and Southern Aegean sub-regions. This relatively high degree of co-location, however, has often failed to ignite positive externalities, such as information and knowledge exchanges among firms or between firms and educational providers. This has been the case, for instance, of the food industry in the region around Konya and the machinery industry around Antalya, where collaboration mechanisms—both intra-sectorial and inter-sectorial—have failed to gain momentum and have traditionally remained marginal (MoIT DGDA, 2021). Arguably, there is scope to implement proactive, targeted cluster initiatives aimed at fostering collaborative exchanges among local firms. Doing so would improve local firms' competitiveness, as the transfer and exchange of information and technology foster and support the innovation and technological progress that spur economic growth.

**Clustering and agglomeration initiatives can facilitate the materialisation of knowledge spillovers between firms.** The close proximity of firms can increase tacit learning, knowledge sharing, and other productive relations that collectively improve the competitiveness of participant businesses (Storper, 1997). In particular, co-location is thought as a facilitator of interactions, cooperation and collaborations between physically proximate economic actors. It enables, *inter alia*, the sharing of resources, the establishment of efficient input-output linkages, and the realisation of economies of scale and scope (Fujita et al, 1999; Glaeser, 2019). Proximity through clusters can also boost employment generation, value creation, and export propensity (Garone et al, 2015). As a result, the agglomeration of industries can, in theory, aid the Turkish economy to become more competitive in the post-COVID-19 era. However, mere co-location is likely to be necessary but not sufficient to spur inter-firm linkages and the often-associated dynamic economic benefits, as it has also been observed in many Turkish regions. Linkages across firms and sectors—especially those between the cluster and the nearby economic system—are by no means automatic, nor guaranteed to occur. The reasons for the failure of many clusters around the world, both in developed and developing countries, have been related to the limited attention devoted to make sure the clusters do not become isolated enclaves, but rather develop connections with the surrounding industrial fabric outside the boundaries of the geographically delimited area of the cluster (Rodríguez-Pose & Wilkie, 2019). In order to avoid having isolated clusters that fail to spur linkages within and outside, it is essential, when developing cluster-based initiatives, to put in place complementary policies such as supplier development programmes, training programmes, mutual investment promotion initiatives, and shared facilities that act as additional levers for the creation of spillovers.

**That said, pursuing cluster policies without a pre-existing critical mass may result in wasteful policies.** Cluster-based policies have often envisioned the establishment of different types of clusters—including science and technology parks, innovation hubs, industrial parks—while seeking to promote dynamic urban centres within specific countries, which often coincide with larger and more dense agglomerations. Although cluster initiatives can be a powerful tool

<sup>2</sup> Location quotients are calculated as a ratio between the share of regional employment in an industry to the share of national employment in that industry.



for regional development, SME support and industrial dynamism, their success is conditional upon existing competences and an already favourable business environment. Relatedly, far too often, policymakers have sought to nurture the co-location of firms and economic actors in economically disadvantaged regions without enough attention for the capacity of those regions to, in the first instance, sustain and, subsequently, benefit from the clusters they were attempting to cultivate (Rodriguez-Pose & Wilkie, 2019). From here, the need to carefully evaluate the pre-existing critical mass that characterises each territory, and, if deemed unsatisfactory, work to increase endowments in terms of, for instance, hard infrastructure and skills concurrently to the development of clusters. Cluster-based policies that adapted the different steps of cluster development, as outlined in Box IV, to the local context have, in general, been much more successful vis-à-vis those applying copy-cut strategies, often stemming from well renowned cases, i.e., the Silicon Valley. This has, for instance, proven to be the case of Brazil's Arranjos Productivos Locais (APL) policy, a contextually-tailored cluster-based development strategy that has managed to have a profound positive impact on the economic fortunes of the places in which it was implemented (Garone et al, 2015). One of the main success drivers of the policy implemented by Brazil has been its ability to identify suitable areas —through bottom-up and participatory initiatives— based on a credible development potential and the level of pre-existing SME concentration and specialisation, and then adapt the type of intervention more suitable to the selected territories. As a result, the policy successfully augmented the overall productivity of firms in the cluster (Garone et al, 2015). Importantly, also firms that were not specifically targeted in the strategic interventions benefitted from the medium- and long-term spillovers, indicating that the APL policy has not only benefitted target firms but also those physically proximate (Garone et al, 2015). All these factors are expected to play a major role in determining the fortunes of Turkish cluster-based initiatives aimed at revitalising regional economies and creating collaborative linkages between already agglomerated local firms.

#### **BOX IV**

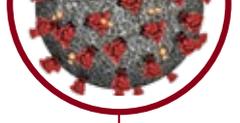
##### **Key steps of cluster policy for regional development**

Economic development policy has long been attracted to cluster-based strategies as a means to promote national, regional and local competitiveness, growth, and innovation. This type of strategies may assume ever-greater relevance in the post-COVID-19 era in order to create more resilient economies. Indeed, the impact of COVID-19 has been found to be significantly lower in areas/industries exhibiting a higher degree of clustering. Turkey, as mentioned above, may also benefit from leveraging the current agglomeration forces that characterise many regions and sectors. Nevertheless, it is key to see cluster policies as fundamentally embedded in the underlying local context where they are implemented, hence emphasising indigenous strengths and addressing local constraints.

As part of the process, cluster policy development usually comprises several activities. First, it begins with mapping existing agglomerated firms within local and regional economies. Each pre-existing cluster can then be categorised according to its stage of development —i.e., embryonic, growing, or declining. Second, further analysis is conducted of the significance of the clusters —i.e., assessing their employment contributions, share of exports, and R&D investment. Third, the strengths and weaknesses of each cluster are individually examined to identify priority areas for intervention.

Following such phased and gradual approach is more likely to culminate in a fruitful revitalisation of local industrial fabrics. It is also instrumental to avoid the adoption of similar types of clusters across different regions that often feature in cluster policies seeking to capture the potential of knowledge-based, high-tech, and creative industries, resulting in what have been called clusters of “ballet and biotech”. Finally, whereas clusters offer an opportunity to boost the productivity of firms in a number of Turkish regions, an approach that builds on distinctive, indigenous regional strengths will be required were cluster policies to deliver more resilient and sustainable economies in the aftermath of the pandemic.

*Source: Porter (2003); Pike et al (2006); Dai et al (2021)*



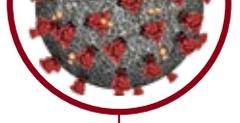
## 2.3. Cross-cutting elements

**In addition to the four development axes outlined in the previous section, two cross-cutting elements can make or break development interventions.** First, institutions. The underlying rationale of incorporating the institutional dimension in policies to be implemented in Turkey lies on the one hand on the performance of Turkish institutions vis-à-vis OECD fellow countries. On the other hand, there is growing empirical evidence that points at the correlation between not only economic development and institutions, but also institutional capacity and development interventions' outcomes. For this reason, addressing key institutional challenges remains crucial regardless of the specific initiatives undertaken to revitalise the Turkish economy in the post-COVID-19 era. Second, a sustainable approach, entrenched in climate adaptation and support for the most vulnerable segments of the Turkish society, will also be needed. Climate adaptation and higher ESG standards are certainly necessary to comply with increasing regulations on environmental standards that follow from the sustainable development imperative but are also likely to result in greater resource efficiency, therefore boosting the productivity of Turkish firms. In this sense, lowering the carbon footprint is not only beneficial for the fight against climate change and minimising the detrimental consequences that originate from it, but can also serve as a launching pad for firms to transition towards more competitive business models on the global stage. Finally, ensuring that the needs of the most vulnerable segments of society are addressed through targeted policies will be an all-important aspect of initiatives that aim at an inclusive recovery. That said, inclusivity and equity can go beyond being an end in themselves, as they could potentially lead to greater efficiency and economic dynamism, as large pockets of youth, female and refugees' unemployment can be leveraged to address the systematic skill shortages that affect the Turkish economy.

### 2.3.1. SDGs – bringing the environment and vulnerable people on board

**The COVID-19 pandemic has called the *status quo* into question.** The COVID-19 crisis has been one of the most multi-dimensional crises of the last decades, hitting concurrently health, education, and incomes. As a result of the massive breadth and depth of the impact of the pandemic, the UNDP predicts that the global human development index—a combination of education, health, and living standards—could fall in 2020 for the first time since 1990, when the measurement started (UNDP, 2020). That said, for the recovery to be the most sustainable, durable and resilient as possible, a return to 'business as usual' in Turkey must be avoided. Unchecked, global environmental and human emergencies, i.e., climate change and refugee crises, could cause social and economic damages even greater than those caused by COVID-19 (OECD, 2020). For these reasons, as the health crisis abates, recovery interventions should aim to more than getting the economy back on its feet. Instead, 'building back better' will entail targeted interventions that trigger improvements in the environmental and social performance of the economy so to render it more resilient to future shocks and emergencies. Targeted interventions will also be needed in light of the greater impact that the COVID-19 pandemic is exerting on vulnerable communities, including youth, women, informal workers, and refugees. As mentioned in the introduction, social inequalities have been exposed and rapidly exacerbated by the massive but uneven loss of employment with vulnerable groups experiencing the largest drops in income levels. Hence, central to a 'building back better' approach in Turkey will be the extent to which the recovery is people-centred and improves inclusiveness and reduces inequalities.

**An SDG-oriented recovery can both increase the productivity and sustainability of a sector, boosting resource efficiency (SDG 13).** Turkey has been the fastest growing OECD country since 2008 and, relatedly, its greenhouse gas (GHG) emissions have also risen the most across the OECD (OECD, 2019). Concurrently, whereas the country is among the top performers in installed capacity of renewable energy sources, fossil fuels still represent 88 percent of the energy mix and the share of renewable sources in the energy mix has not increased since 2005 (OECD, 2019). Against this backdrop, 'greening' the economy will require regulatory adaptation, investments in key infrastructures such as modern waste treatment facilities and promotion of behavioural changes towards more sustainable consuming patterns. Importantly, building a climate resilient economy does not benefit only the environment, but it can also raise the

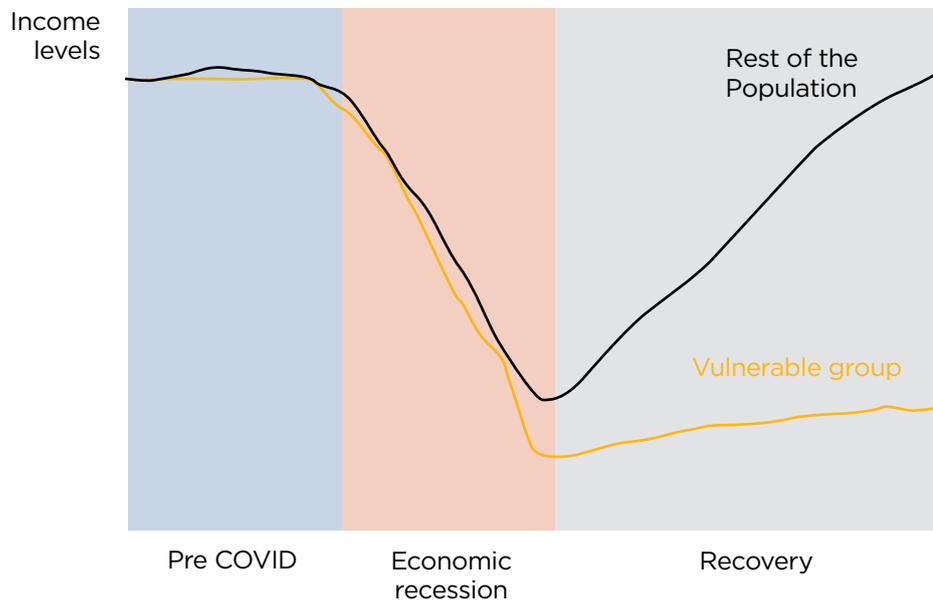


productivity of industrial sectors by boosting resource efficiency. Indeed, research finds that paying attention to sustainability promotes value creation and can foster firm-level innovation in at least four ways: (i) top-line growth, by tapping into new markets and expanding into existing ones; (ii) cost reductions, by reducing operating costs related to, for instance, energy and water usage; (iii) easing regulatory pressure, by reducing adverse government action and engendering institutional support; (iv) productivity uplift, by retaining and attracting the best talent and avoiding ‘social stigma’ (Henisz et al, 2019). Evidence stemming from Asian emerging markets also supports the link between sustainability and productivity. In Vietnam, the establishment of eco-industrial parks —where environmental performance was enhanced through the provision of public services that supported the transition towards improved ESG standards— has been instrumental in increasing productivity of firms active in the textile sectors and other sectors with high resource intensity (VNCPC, 2019). Therefore, embedding the ESG lens when designing and implementing recovery interventions can improve the overall productivity of Turkish firms while also enhancing their competitiveness at the global level. On top of this, regulatory adaptation towards enhanced ESG standards will also be needed, were Turkey to leverage the emergence of regional value chains. As outlined in section 2.5 of this report, the possibility of leveraging the trends related to the shortening of GVCs will depend at least in part on the ability of Turkey to strengthen compliance on environmental and social performance, hence achieving greater alignment with EU regulations.

**Increasing the ability of territories and local firms to adopt green technologies and sustainable innovations is key.** In Turkey, although regulatory advancements will be crucial to gain greater market access in regional markets, limiting the policy action to the enactment of regulations for greater ESG compliance is unlikely to deliver. This is because green innovations and technology frequently require a conducive and adequate absorptive capacity by domestic firms, not dissimilarly from other technologies. Path dependency often constrains diffusion patterns of green technologies (Hotte, 2019). In order to ensure domestic firms have the capacity to adopt new technologies and meet ESG standards, Turkish policymakers will have to focus on demand-side diffusion barriers so to break path dependency. For this purpose, increasing the capabilities of the workforce will be crucial to warrant the adoption of new environmentally friendly technologies. Vocational training, skills development programmes — especially focused on green practices— and also targeted fiscal and non-fiscal incentives to trigger the technological transition are all key elements of any recovery policy that plans to incorporate the sustainability lens.

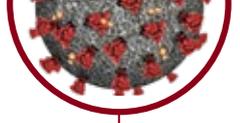
**Directing policy interventions to vulnerable groups may realise greater returns while ensuring an equitable recovery (SDG 10 & SDG 5).** In Turkey —like in many other countries around the globe— fragile population groups, such as women, informal workers, and refugees, have been the most affected by the pandemic. Evidence collected by Facebook, the OECD and the World Bank in 2020 shows that female-led MSMEs were seven percentage points more likely to close compared to male-led MSMEs (Facebook et al, 2020). Similarly, surveys conducted by the UNDP indicate that 65 percent of Syrian owned enterprises in Turkey have been substantially affected by the pandemic and 60 percent of them would not be able to resume business once the pandemic is over, hence resulting in significant job losses (MoIT DGDA, 2021). These groups are affected disproportionately for a plethora of reasons, including that their businesses are concentrated in the industries most affected by the pandemic, have relatively small financial buffers, and limited access to different financial sources (OECD, 2020). Here, the priority should be to avoid a K-shaped recovery, in which segments of the population experience a quick recovery to pre-crisis livelihoods, while others, more vulnerable to the detrimental socio-economic impact of the ensuing crisis, fail to regain employment in the short-term, therefore suffering from long-lasting consequences in terms of income levels and standards of living (Figure 10).

**Figure 10 | Illustrative scheme of a K-shaped recovery across different segments of the population**



Source: Authors' elaboration.

To tackle the needs of fragile communities, inclusivity is crucial to ensure no one is left behind and interventions will have to focus on vulnerable groups that have less access to government's blanket support programmes, i.e., women, youth and refugees. Thus, targeted interventions to address the needs of vulnerable groups are vital to ensure an equally distributed recovery and an equitable economy and society in the aftermath of the COVID-19 crisis (see Box V for a few examples on how other countries have tackled the needs of specific groups most affected by the current crisis). Once again, a coherent package of reforms and interventions is likely to deliver greater returns. Different criteria of intervention can be employed to ensure policy coherence. For instance, the upskilling and/or reskilling of people more exposed to unemployment can be tied to the demands and needs of domestic businesses—which, in turn, report the lack of qualified personnel as a primary constraint to their competitiveness. Skill development programmes targeting vulnerable people, such as women and refugees, can be developed retaining a focus on the needs of firms operating in specific industries, such as food and tourism, which exhibit higher participation of women, minorities, and youth (MoIT DGDA, 2021). Doing so would offer a unique opportunity to protect and engage vulnerable groups, whilst reducing poverty and inequality in the post-COVID era. In contrast, the lack of targeted interventions that take into account the specific circumstances of vulnerable groups will fail to break the barriers to economic inclusion they face—reinforced by the current pandemic—with the undesirable consequence of them remaining untapped resources for the Turkish economy.



## BOX V

### Targeting interventions to support vulnerable groups during the pandemic and in the recovery process

In their continued support efforts, policymakers have sought to take the specific circumstances of vulnerable groups into account in order to avoid the risk of some segments of the population not being able to benefit from support and recovery policies. The inclusive schemes that were designed and implemented around the world employed different forms of support and tended to be adapted to the local context they were developed for.

For instance, Canada targeted its interventions towards women entrepreneurs by allocating CAD 15 million (approximately \$11.7 million) to the Women Entrepreneurship Strategy Fund. This fund provides a number of support services to female-led MSMEs, including increasing their capacity to mitigate risk during the pandemic and in the recovery. In addition, the government targeted its support to businesses led by minorities, through, for instance, the disbursement of CAD 221 million (around \$180 million) for a series of initiatives for black entrepreneurs, including a National Ecosystem Fund, a Black Entrepreneurship Loan Fund and a Black Entrepreneurship Knowledge Hub. Similar interventions were developed in the United States.

As part of its National Economic Recovery Plan, Malaysia launched two initiatives focused on providing support to women and minorities. The first initiative included funding micro-financing schemes in collaboration with local private banks. The total financing reached around \$100 million, of which \$12.5 million were exclusively dedicated to businesses led by women and other vulnerable groups. The second initiative provided an additional \$125 million to be destined to MSMEs led by women.

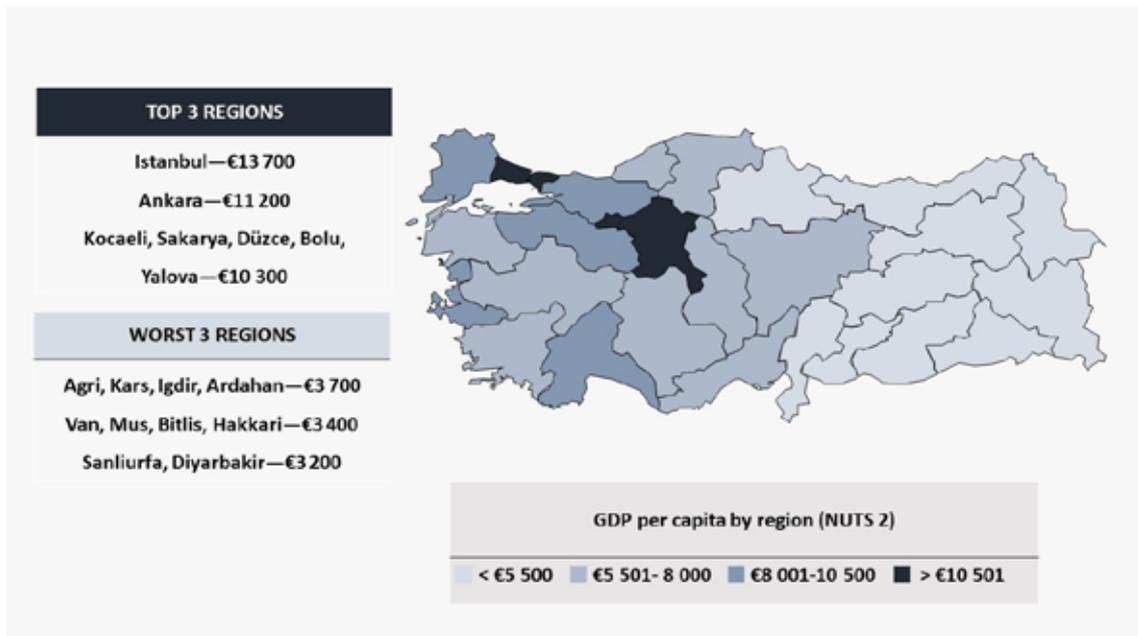
Despite remaining largely piecemeal interventions, these examples show some of the ways in which policymakers sought to address the specific needs of the most fragile segments of society. Building on this sort of initiatives and including targeted support to the most vulnerable will be essential for the Turkish 'build back better' strategy to be truly inclusive, leave no one behind, and ensure the full economic potential of its society is leveraged towards a more sustainable and resilient recovery.

*Source: OECD (2021)*

## 2.4. Context adaptability

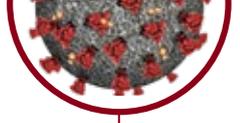
**Turkish regions and provinces exhibit disparities.** The reality of Turkey's economic development is multi-faceted. While some regions, namely the Western territories, have generally thrived, frequently becoming highly connected and technology-driven places, many of the Eastern regions have fared much worse, failing to catch up with the most dynamic regions. Across the OECD countries, Turkey has the largest regional disparities in terms of GDP per capita across provinces (OECD, 2018). In 2020, according to Eurostat the region of Istanbul reached a real GDP per capita of approximately €13,700 (roughly \$17,000), while Sanliurfa and Diyarbakir, some of the poorest Eastern territories, reported a GDP per capita of approximately € 3,200 (corresponding to less than \$4,000), equal to 23 percent of that of Istanbul (Figure 11) (Eurostat, 2021). Although Turkish real GDP per capita remains roughly 42 percent that of the EU average, some of its most developed regions, i.e., Istanbul and Ankara, have real GDP per capita levels comparable or superior to those of some EU countries, such as the Baltic republics and Eastern European countries like Poland, Hungary, and Croatia. The real GDP per capita of the poorest regions —frequently located in the East of Turkey— is, in contrast, more typical of developing countries in the Global South (Eurostat, 2021).

**Figure 11 | GDP per capita by region (NUTS 2) (2020)**

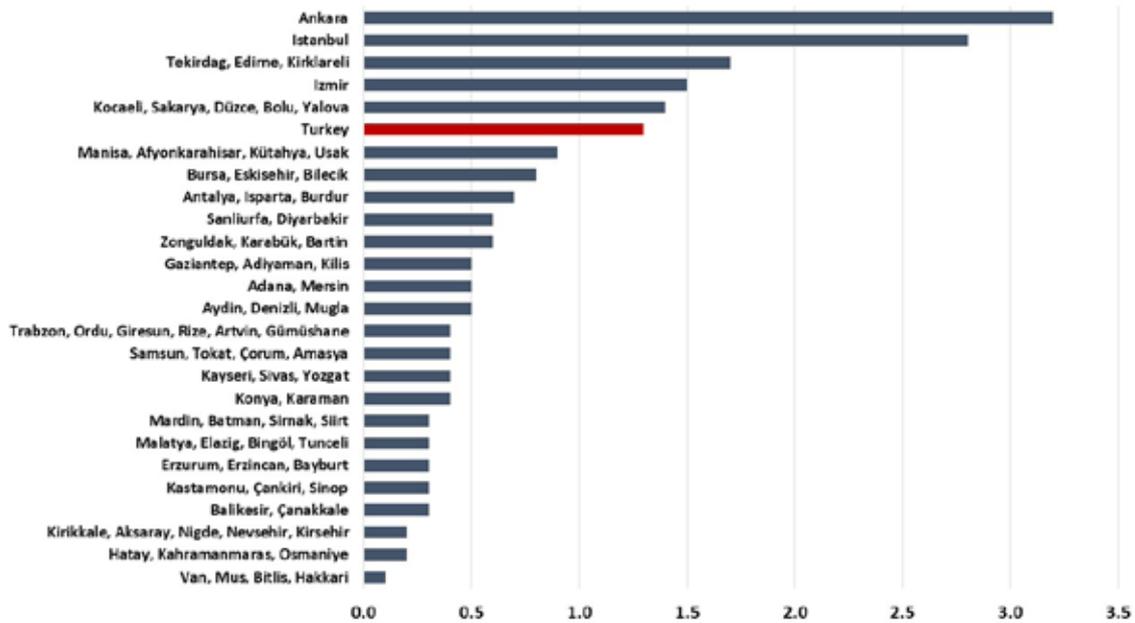


Source: Eurostat

Similarly, the youth unemployment rate in Eastern Anatolia (40 percent) is around four times higher than the rate observed in the West Black Sea region (11 percent). Eastern regions are highly reliant on industries with low technological content, such as the agriculture sector. Highly urbanised areas, like the provinces of Istanbul and Ankara, report high shares of economic activities in communication and information services, finance and insurance, and professional, administrative, and support service activities (TURKSTAT, 2021). Overall, the highest shares of employment in high-technology manufacturing and knowledge-intensive high-technology services can be found in city-driven territories such as Ankara, Istanbul and Izmir (Figure 12) (Eurostat, 2021). Whereas the top performing regions display similar shares compared to developed countries—for instance, the EU average share of employment in high-tech manufacturing and knowledge-intensive services stands at 4.6 percent in 2020—the Turkish regions at the bottom of the ranking are still far from reaching levels comparable to those of developed countries.

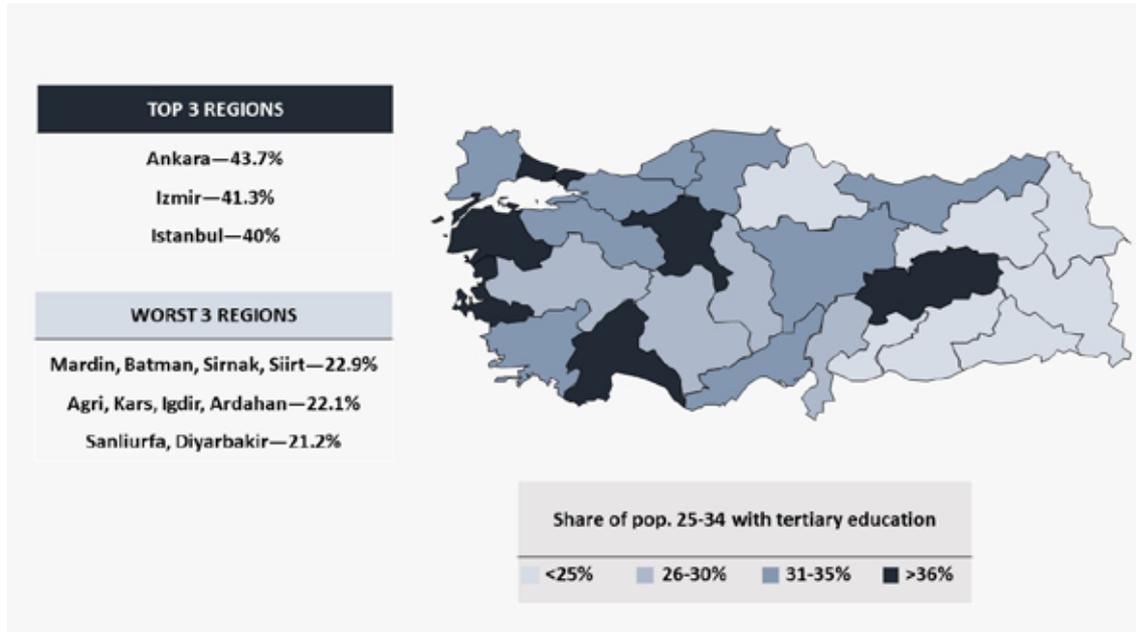


**Figure 12 | Share of employment in high-technology manufacturing and knowledge-intensive services by NUTS 2 (share of total employment) (2020)**

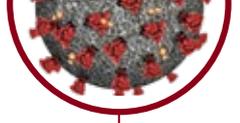


Sectorial specialisations also reflect different skills endowments of Turkish regions: over 40 percent of the population aged 25-34 has been educated at the tertiary level in the regions of Ankara, Izmir and Istanbul, while only around 20 percent in Eastern regions such as Mardin, Agri and Sanliurfa (Figure 13). Again, the top performing regions display similar shares compared to developed countries —the EU average share of population aged 25-34 with tertiary education stands at 40.2 percent in 2020— while the lowest performing regions are far from European and OECD countries.

**Figure 13 | Share of population 25-34 with tertiary education by region (NUTS 2) (2020)**

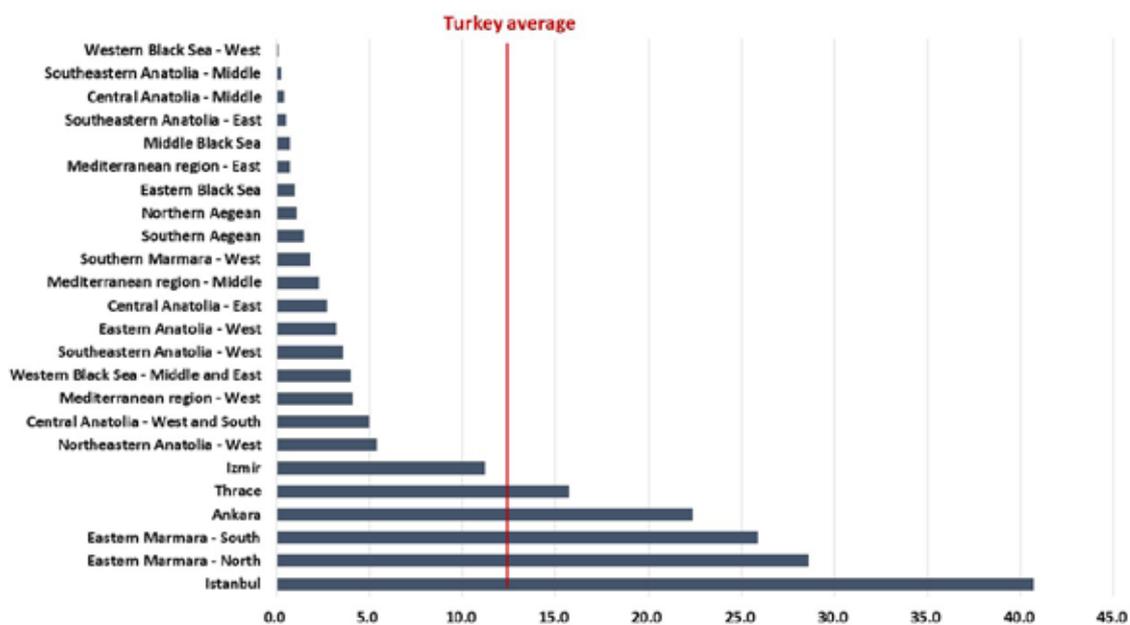


Source: Eurostat



Finally, Turkish regions also differ enormously in terms of innovation capacity. Whereas regions such as Istanbul, Eastern Marmara and Ankara are well above the Turkish average of 13.6 patents applications per million people, regions in the Black Sea and Eastern Anatolia exhibit virtually no patents applications. This reflects their limited innovation capacity and weak regional innovation systems (Figure 14). Importantly, the Turkish average patent application per million inhabitants made significant leaps forward in the past decades, increasing from 1.1 in 2001 to 13.6 in 2017 —the latest year for which OECD regional data are available. This improvement was mainly driven by Istanbul, Ankara, Izmir and Eastern Marmara. Other regions, i.e., the Aegean regions, reported stagnating applications, if not, in some cases, reductions in patent intensity (OECD, 2021). A quick comparison with other OECD countries indicates that the Turkish economy is still far from being innovation-driven: the majority of OECD countries report more than 100 patent applications per million people. China, on the other hand, exhibits around 25 patent applications per million inhabitants, with peaks above 200 application in its most urbanised territories (OECD, 2021).

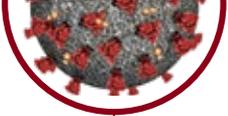
**Figure 14 | Patents applications per million inhabitants by OECD large regions (2017)**



Source: OECD

This evidence points to the fact that Turkish regions differ in the productive capabilities of their industrial fabrics, but also in terms of human and social capital endowments. Regional disparities unfold both between urban and rural areas, but also between West and East. Such wide-ranging differences in income levels, skills levels, innovation capacities, and productive capabilities, further exacerbated by the current pandemic, suggest that blanket policies that apply the same 'levers' across territories with very different characteristics are unlikely to be either efficient or effective. Instead, a territorial development strategy that takes into account the regional differences of Turkish regions is better placed to leverage the comparative advantages of each territory while also addressing the key bottlenecks that prevent the local economic fabric to become more competitive vis-à-vis international competitors.

**Regional inequality cannot be ignored or treated as inevitable.** Regional inequalities have oftentimes been considered as an inevitable part of the process towards economic development: disparities across regions of the same country, the argument goes, will eventually even out as the country develops (see, for example, Anand & Kanbur, 1993). However, this thinking has been put into question following the recent rise of inequalities in developed (i.e., the EU and USA) and developing countries (i.e., China) alike. More importantly, regional inequality can have detrimental impacts on the growth prospects of a country and could curtail, in the Turkish case, an equitable development across territories. Indeed, past research indicates that inequality

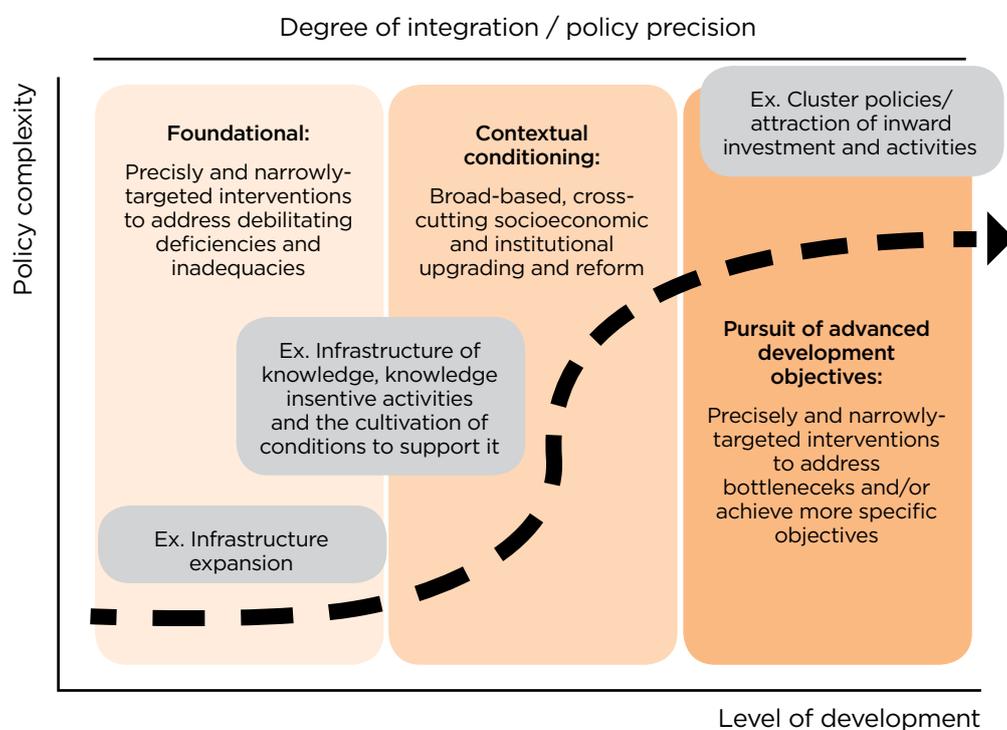


may harm a country’s overall economic performance (Easterly, 2007), and different levels of regional development, especially if featuring a vast territorial gap, can be both potential inhibitors of sustainable economic growth and catalysts of a range of socioeconomic and political ills (Rodríguez-Pose & Wilkie, 2019). Therefore, development interventions targeted to lift up lagging territories and favouring convergence between Turkish regions will be needed to reach the full potential of Turkish economic growth.

**The level of territorial development is likely to determine which pillar plays a greater role in the development strategy as well as the complexity and breadth of scope of the intervention.**

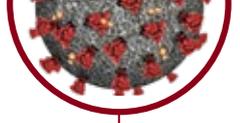
Recent research suggests that the returns of development policies are often conditional upon the inherent characteristics of the receiving region (Falk & Sinabell, 2008; Mohl & Hagen, 2010). For this reason, a “one-size-fits all” type of approach in designing and implementing development strategies is likely to result in significant variations in their degree of success. Figure 15 below illustrates a conceptual framework for adapting the territorial strategy presented in the previous sections to the diverse set of Turkish regions. Such a framework is also instrumental in tackling the differential impact of COVID-19 across regions.

**Figure 15 | Adapting the territorial development strategy to the local context**



Moreover, territorial development strategies, irrespective of the development axes they leverage, should differ based on their *complexity* —that is, a function of the number and diversity of the individual elements or interventions by which a broader strategic approach is composed— and their *breadth of strategic scope* —understood as the narrowness of the development outcomes or objectives by which a strategy is guided (Rodríguez-Pose & Wilkie, 2019). Such place-sensitive strategies would be key to strengthen Turkey’s strongest regions while also favouring convergence of the weaker clubs of territories in the reality of augmented regional inequalities resulting from the current pandemic (see Box VI for additional information on place-sensitive approaches) In particular:

- **For the most economically developed territories (i.e., Istanbul and Ankara regions) complex and narrowly focused approaches are more suited.** The most developed regions are often challenged by specific trends concerning their specialisation in high-wage and technology-intensive activities, such as the spread of high-wage activities in neighbouring regions with cheaper labour costs, the arrival of imitators, and increased automation. As a result, the focus of policymakers should shift from addressing broad developmental



challenges towards harnessing specific developmental opportunities, therefore identifying where opportunities lie, and design tailored strategies geared narrowly and explicitly towards their exploitation. Given the availability of resources that often characterise the most developed territories, integrated interventions should comprise several development axes, which, as shown in previous sections, are the most likely to yield greater returns.

- **For emerging territories (i.e., Mediterranean and Marmara regions) complex and broadly focused approaches are likely to have the highest returns.** Emerging territories are places that are not necessarily constrained by structural deficits or critical shortcomings in the underlying socio-economic fabrics, but rather they may be concerned with the avoidance of economic stagnation —or the so-called middle-income trap (Kharas & Kohli, 2011). Interventions in these territories may aim to transition local economies towards higher value-added and knowledge intensive activities. Multi-axis, complex and broadly focused interventions will therefore be needed to act upon structural, socio-economic, and institutional dimensions.
- **For less economically developed regions (i.e., Black Sea regions) simple and broadly focused interventions are most suitable.** As the level of development of regions decreases, the level of complexity of development strategies should be reduced given the lack of resources and technical capacity that often characterise less developed territories. The strategic scope of interventions, however, should be broad as the aim of such policies is to spark economic dynamism and cultivate a more conducive socio-economic context.
- **Finally, for the most disadvantaged regions (i.e., Eastern Anatolia) simple and narrowly focused strategies would have the greatest benefits.** The most disadvantaged regions are usually constrained by fundamental structural deficiencies that tend to be easily identifiable. Differently from regions pertaining to the previous group, the most disadvantaged regions experience developmental challenges relatively ubiquitous. A narrowly focused intervention, as a consequence, is posed to produce great returns if targeted specifically towards one of those wide-ranging constraints. Whether the bottlenecks lie in an underdeveloped infrastructural endowment or low levels of basic education - i.e., primary or secondary education - interventions should be kept simple in nature given the often limited technical capacity and resource availability of these territories.

## BOX VI

### Towards place-sensitive development strategies

The idea that different levels of regional development call for differentiated approaches has recently gained weight in policy discussions and design. Blanket policies or “one-size-fits-all” interventions have frequently underperformed, leaving, at times, territories worse off than prior to the intervention. In this sense, place-sensitive policies, guided by development theory and the structural opportunities and constraints of each club of regions, are needed to maximise the potential of each territory. Such an approach has been, for instance, recently advocated for the development of European regions. Given the disparities between the regions of Europe, especially in the traditional North-South divide, an approach that is more responsive to local needs and strengths is arguably better positioned to deliver greater returns.

Examples of successful place-sensitive policies can be detected both in developed and developing countries. A case of particular interest is that of Styria, an Austrian region which, following the fall of the Iron Curtain, experienced significant drops in industrial output due to increased competition from Eastern European countries. In order to reverse the trend of industrial decline, a thorough diagnosis of local conditions was carried out. From such analysis, three priority areas were identified: (i) increased cooperation and inter-firm linkages through the establishment of clusters; (ii) increase of innovative capacities through targeted R&D incentives, creation of universities and establishment of coaching programmes for SMEs; (iii) internationalisation of local firms through provision of support to exports.

Styria’s place-sensitive approach to the development of targeted, yet integrated policies helped the region transition towards a mid- to high-tech internationally competitive industry that has proven its resilience during global crises. Arguably, a similar approach to detect territorial underlying constraints and adopting tailored solutions can be of great help when designing developmental interventions across Turkish regions in the aftermath of the current COVID-19-induced economic slowdown.

Finally, in order to avoid copy-cat strategies, the strategic planning process assumes a vital role in designing balanced strategies tailored to the needs of different places. The planning process is frequently composed of four elements:

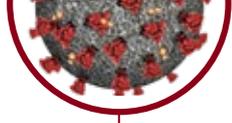
1. Assessment of local conditions and situation analysis
2. Local stakeholder engagement and participation
3. Delineation of strategy’s aims and objectives
4. Identification of suitable policies and initiatives

Each element requires collaboration and coordination across different levels of government, and needs adaptation to the institutional and technical capacity of each governance layer.

*Source: Kaufmann and Tödtling (2000); UN-Habitat (2005); Iammarino et al (2017); Rodríguez-Pose & Wilkie (2017)*

## 2.5. Logic of interventions by sector

**The pandemic is expected to accelerate sectoral and GVCs restructuring and this will demand tackling existing weaknesses and leveraging emerging trends.** The containment measures undertaken to limit the spread of COVID-19 have had a differentiated impact across sectors, with a number of sectors less amenable to remote working and requiring in-person interactions bearing the brunt of new work arrangements. Containment measures, however, are not the only disruptive forces. The pandemic has accelerated pre-existing trends, especially when it comes to the adoption of new technologies and digital tools. Against this backdrop, there is an ever-great need for Turkey to address some of its structural weaknesses, including

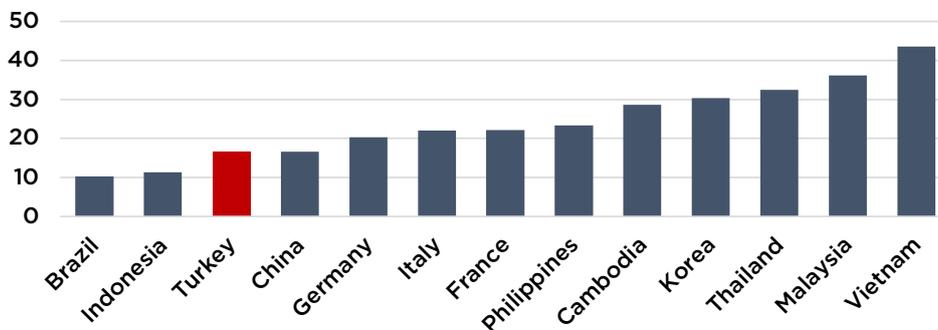


low levels of GVCs integration and innovation capacity and complexity of its sectors, in order to ensure the economy preserves existing comparative advantages vis-à-vis international competitors and, ideally, creates new ones. To do so, a related variety strategy is arguably best positioned to address the constraints that curtail Turkey's participation in GVCs, allowing the Turkish economy to avoid 'staying still' but rather playing to its strengths and leveraging internal strengths and external opportunities to find the right path towards greater economic dynamism and diversification.

### 2.5.1. Global Value Chains

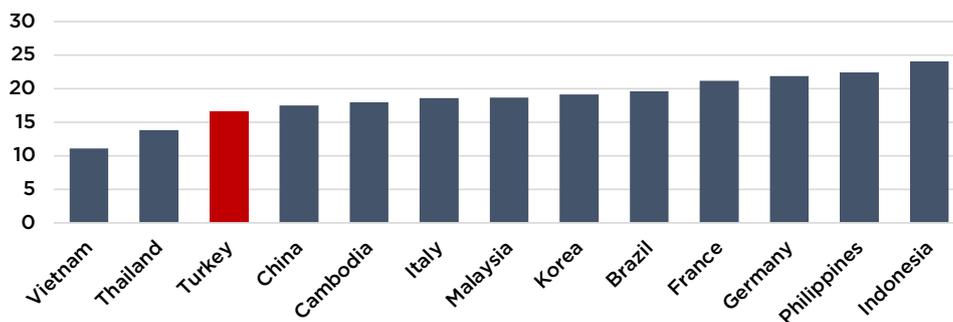
**Turkey, despite recent improvements, remains relatively peripheral to Global Value Chains (GVCs).** Despite considerable progress, Turkey still lags behind most comparable countries in terms of exported value added per capita (OECD, 2017). In particular, Turkey's growth in the last 15 years, though remarkable, has not been accompanied by gains in export market shares. More precisely, whereas the level of backward integration in global value chains has been increasing, with Turkey incorporating more and more foreign value added into its own exports, the ability of the Turkish economy to provide intermediate inputs to other countries' exports —forward integration— remains relatively limited (OECD, 2017). Both backward and vertical integration into GVCs is low in comparison to competitors, especially in the emerging world. While Turkey outperforms a number of developing countries (i.e., Brazil and Indonesia) when it comes to backward integration —measured as the share of imports in the country's gross exports—, the country lags behind many major European countries (i.e., Germany, France and Italy) and also many of the new emerging Asian economies, such as Malaysia, Vietnam, Thailand and even China (Figure 16). Turkey's forward integration in value chains is also lower with respect to many international competitors, both among developed and developing countries (Figure 17). Importantly, while backward integration has slightly improved since 2000, Turkey's forward integration into GVCs has been stagnating for the past two decades (OECD, 2017).

**Figure 16 | Backward integration: Shares of imports in country's gross exports (2017)**

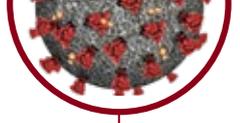


Source: OECD

**Figure 17 | Forward integration: Domestic value added in foreign exports as a share of gross exports (2017)**



Source: OECD



**Integration into GVCs can give rise to a plethora of positive externalities for Turkey.**

Achieving greater integration into GVCs does not need to be an end in itself for Turkey. Instead, being more integrated into global trade flows can improve the competitiveness of the Turkish economy, both directly and indirectly, in a number of ways. Greater trade openness favours exposure to international competition and incentivises local firms to align with best practices of global frontier firms. In particular, on the one hand backward integration often entails import competition, therefore enhancing the allocation of domestic resources to the most competitive firms. Backward integration also involves learning from suppliers through knowledge spillovers. On the other hand, forward integration leverages the use of Turkey's human capital and other production inputs and requires compliance with international best practices, therefore fuelling productivity, innovation, human capital development, and income levels (Ziemann & Guérard, 2016). For all these reasons, given the potential emerging from the still relatively limited integration of the Turkish economy into GVCs, working to increase the country's share of global exports can provide Turkey with several developmental opportunities, especially as the country works its way out of the current crisis sparked by the COVID-19 pandemic.

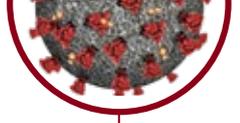
**Many of the root causes of Turkey's limited GVCs integration go back to the four development pillars outlined above.**

Why has Turkey failed to achieve the GVC integration levels of many Asian emerging markets? How can Turkey achieve greater integration? Research and empirical evidence point to a wide array of constraints that are impeding Turkey from reaching greater levels of backward and forward integration into GVCs. Those constraints, in most cases, refer back to the four pillars (plus two) that were outlined in the previous sections. Policy actions that act upon those elements are likely to also result in greater GVC integration. Turkey's participation in GVCs remains limited owing to a plethora of factors, including institutional features that hamper efficient allocation of capital and labour, obstacles inherent in bilateral trade agreements and entry regulations, relatively underdeveloped human capital with respect to some competitors, and insufficient investment in innovation, R&D and knowledge-based capital (Ziemann & Guérard, 2016). As can be observed from the wide-ranging nature of constraints that hampers Turkey's participation into GVCs, single-axis, mono-dimensional interventions (i.e., acting on one pillar) are unlikely to improve Turkey's integration into GVCs. Instead, an integrated, balanced strategy that aims to address various bottlenecks, from infrastructural to human capital- and FDI-related, is better placed to touch on the right levers to boost Turkey's performance. Indeed, successful integration into GVCs requires reforms to be implemented as coherent packages that can be influential in shaping the behaviour of both MNEs and local firms (Cusolito et al, 2016; Akileswaran et al, 2018). Although there is no blueprint for strengthening GVC integration, such horizontal strategies have also been functional to the development of GVCs in Asian emerging markets, such as South Korea and Malaysia (see Box VII).

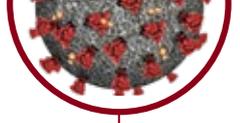
**A restructuring of GVCs following the pandemic may open opportunities for Turkey, although proactive initiatives will be needed.**

The current pandemic, coupled with pre-existing trends originating, for instance, from trade wars and the Fourth Industrial Revolution (4IR), is likely to lead to a reshuffling to GVCs, hence favouring some countries, while being a hindrance to others. According to UNCTAD, the COVID-19 will reinforce reshoring —largely driven by automation of production— and regionalisation trends, hence shortening GVCs as MNEs look at ways to mitigate risks (UNCTAD, 2020). Such trends will require proactive adaptation policies, were Turkey to fully reap the benefits from the changing reality. First, Turkey will have to shield itself from the reshoring of MNEs it hosts. Industrial activities most vulnerable to being relocated and automated in source countries are generally labour-intensive and low value-added, therefore diversification towards creative and digital economy sectors can help Turkey limit the impact of relocating and reshoring by MNEs. Here, the upgrading and conditioning of human capital and digital infrastructure can go a long way to ensure the Turkish economy remains competitive following the changes prompted by the COVID-19 (see next section on related variety). Second, Turkey could, in principle, emerge as a destination of choice for MNEs —mostly European— shifting out of farther markets (i.e., China) in the new, post-pandemic drive towards a potential shortening of GVCs,<sup>3</sup> especially as more developed countries considered the potential benefits

<sup>3</sup>Extra caution should be exerted in assuming that relocation and reshoring, especially from China, will occur automatically, or overnight. Although a number of developed countries, including the United States and Japan, have been offering incentives to domestic firms to shift out of China, early studies show little evidence of relocation, with most firms remaining committed to China, given the high costs of relocation and the level of development of Regional Value Chains in the East and Southeast Asian markets (Erchi et al. 2020).



of nearshoring. Indeed, research shows that Turkey could be considered by foreign investors as a destination of choice —especially in the textile sector— *if* they decide to diversify away from their current China- and, more broadly, Asia-based suppliers (Javorcik, 2020). The benefits that can accrue to Turkey, however, are in no way automatic, rather they will largely depend on the quality of the investment climate, the adaptation of investment promotion strategies, and, simultaneously, the ability to strengthen regional value chains through adaptation to regulations and standards and to leverage existing and future regional trade agreements and related trade preferences (Qiang et al, 2021). Greater integration with the EU —though requiring adaptation to and compliance with EU regulations such as the EU Green Deal and the ensuing environmental standards— can potentially be instrumental for the attraction of market-seeking investments that look at Turkey as point of entry to the whole European market, while offering cheaper labour costs and, potentially, adequate skills and infrastructural endowments. Ultimately, whereas only time will tell which international production pattern will prevail, the key here lies in the ability to constantly monitor and assess the length and the geographic distribution of GVCs, examine how Turkey’s most efficient sectors can adapt to leverage changes in these two dimensions of GVCs, and realign investment and industrial policies accordingly.



## BOX VII

### **The role of horizontal policies in greater integration into GVCs by Asian emerging markets**

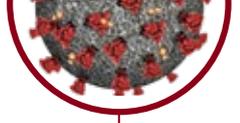
The rise of the Asian tigers, and more recently, of other Asian emerging economies, such as Malaysia and Indonesia, has sparked great interest by both academics and policymakers around the world that look at their trajectories to somehow replicate similar levels of success at home. A key steppingstone throughout the economic development of countries, such as South Korea, has been the high levels of integration into GVCs. The high participation into GVCs can be traced back to a wide-ranging set of interventions undertaken by national governments. Such interventions, once again, find a synthesis in the four pillars and the two cross-cutting elements that underlie the kind of territorial development strategies presented above.

First, the attraction of FDI through MNEs has been a crucial part of the strategy of many Asian countries. Many Asian emerging economies leveraged the attraction of FDI and foreign investors through the establishment of Special Economic Zones (SEZs), with, for instance, South Korea establishing its zone programme in 1970 and Taiwan in 1966. In these countries, however, zone-based policies were leveraged as much more than means for increasing FDI and exports. Whereas zones accounted for high shares of FDI and exports especially in the early phases of the Asian tigers' development —for example, in Taiwan SEZs accounted for more than 50 percent of total trade surplus until the mid-1980s and for almost 40 percent of total FDI inflows in 1972— proactive initiatives to foster backward linkages with domestic firms led to over 70 percent of domestic sourcing by MNEs in Taiwan by 1980. These linkages favoured the transfer of foreign technology and knowledge to domestic firms.

Second, complementary policies were essential to ensure an adequate absorptive capacity by the local workforce. In South Korea, for instance, horizontal human capital development initiatives (i.e., increasing the numbers of technical graduates) were key to ensure the spill over of foreign technology to domestic SMEs. Indeed, research shows that transfers of knowledge are more likely to take place where the local workforce is educated. Along the process, aggressive investments by governments for the upgrading of infrastructure have been essential to reduce trade costs and facilitate connectivity into GVCs. Infrastructure investment delivered greater returns when specifically targeted to the needs of a priority industry, such as in Singapore where the Economic Development Board provided vital infrastructure for the different phases of Singaporean industrial development. Industrial parks and cluster policies, such as the development of Singapore's first business park in 1981, have also been functional for boosting inter-firm collaboration and favouring greater competitiveness of domestic firms. In addition to this, improvements in institutional quality were crucial to attract FDI in the first place and, more recently, concerted efforts were undertaken to improve ESG standards of domestic firms to gain global export shares, such as in the case of South Korea and the EU-South Korea Free Trade Agreement.

The evidence stemming from the Asian Tigers and other Asian emerging economies showcases the importance of development cross-cutting, integrated horizontal development strategies for fostering a country's integration into GVCs. Attempts to address the limited participation of Turkey into GVCs, and possibly leverage new opportunities emerging from the reshuffling of GVCs prompted by the pandemic, should therefore be comprehensive in addressing the multi-dimensional determinants of GVC integration.

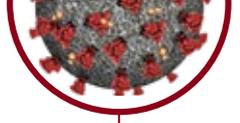
*Source: Chandra (2006); ADB (2010); Aggarwal (2012); EDB (2013); UNIDO (2018); Qiang et al (2021)*



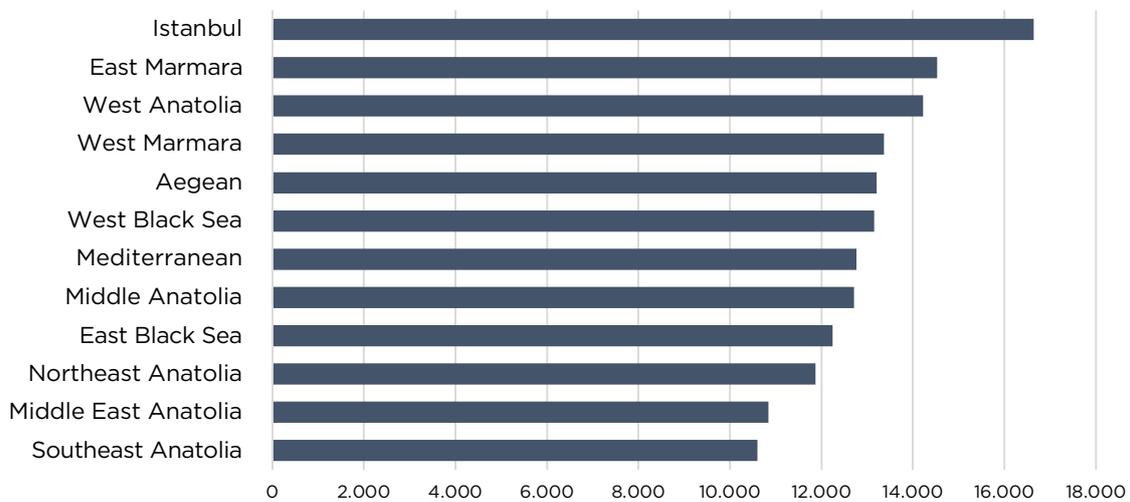
## 2.5.2. Industrial policies

**The pandemic has shown that industrial policies are needed more than ever.** Industrial policies have made a comeback following the economic slowdown propelled by COVID-19. The economic fallout, so differentiated across sectors, calls for the deployment of the kind of instruments often employed by industrial policy, including policies to support infant industries, trade policies, science and technology policies, and other initiatives aimed at fostering FDI and innovation. These initiatives often aim at solving specific sectors' market failures caused by externalities, imperfect information, and coordination bottlenecks (Taglioni & Winkler, 2016). Some sectors are also more vulnerable than others. For instance, according to the OECD, the sectors considered as most affected by COVID-19 include manufacturing of transport equipment, construction, wholesale and retail trade, air transport, accommodation and food services, real estate services, professional service activities, and arts, entertainment and recreation. These sectors are expected to experience a decline of output between 50 and 100 percent, hence requiring greater support by the government (OECD, 2020). Other sectors, more amenable to remote working, are generally less affected. That said, containment measures are not the only source of disruption caused by COVID-19. Changes in international production patterns and GVCs, as mentioned in the previous section, can also put in peril the most competitive and resilient sectors of the Turkish economy. Therefore, there is the need to develop interventions, although horizontal in their nature, targeted towards the different drivers of competitiveness of each sector through 'light-handed' industrial policies (Taglioni & Winkler, 2016). In this sense, although a selective firm-specific approach may have a significant allure in the eyes of policymakers, such vertical interventions have often been questioned given the possibility of distorting the playing field, i.e., favouring differential access to government support, therefore ending up in the inefficient allocation of national resources (Cheng, 2020).

**Labour-intensive industries can reduce large pockets of unemployment.** The pandemic has further exacerbated issues related to low levels of employment, especially in certain age groups, such as the young, and in certain regions. Eastern Anatolia, with some of the highest rates of unemployment across Turkish regions, is likely to face enormous challenges in absorbing its large pockets of unemployment, further widened as a consequence of the economic slowdown caused by COVID-19. In these areas, favouring the establishment of labour-intensive industries, through for instance the attraction of FDI and other complementary policies (i.e., infrastructural development) may provide a source of relief for the constrained regional and local socio-economic fabric. That said, labour-intensive industries also require some minimum pre-conditions for their successful development in lagging regions, and policymakers, as a consequence, will have to take these into consideration prior to pursuing strategies with little hope of success. For instance, attempts to establishing labour-intensive industries where labour costs are similar, if not higher, than regions in the EU —such as Istanbul and Marmara, where labour costs in 2016 were above €16,000 per year per employee— are likely to be doomed. In contrast, in the Southeastern Anatolia region, where labour costs are significantly lower, regions may possess the right comparative advantages for attracting mobile investment in labour-intensive activities (Figure 18). The logic of intervention on sectors will in the end be a product of the competitiveness drivers of specific sectors and the underlying regional endowments that could provide the adequate competitive edge vis-à-vis international competitors. In this sense, both pull (i.e., indigenous endowments and labour costs) and push (i.e., external economic trends) factors will determine the geography of production across Turkish regions. In the end, the choice of sectors is not about picking winners; instead, further specialisation in one industry is often the result of 'a country's long-term involvement in a specific sector that takes advantage of and builds on the country's unique combination of factor endowments and firm capacity' (Qiang et al, 2021).



**Figure 18 | Labour costs (€) per year per full-time employee across Turkish NUTS 1 regions (2016)**

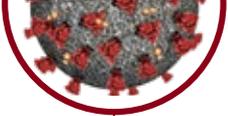


Source: Eurostat

**Hence, medium- to high-skill industries may be instrumental in achieving competitiveness vis-à-vis the Asian giants.** Although industrial policies targeting the drivers of competitiveness of labour-intensive sectors may be considered appropriate in regions with high unemployment rates and low labour costs, a thorough benchmarking with regional and international competitors is likely to have the last word. Indeed, as mentioned at various points of this report, the importance of labour costs is waning following automation trends and relocation away from China may be slower and milder than expected (Rodrik, 2018; UNCTAD, 2020). Indeed, interventions based on labour-intensive industries may fail to increase the competitiveness of Turkish firms, especially in those regions that exhibit middle-income levels. Surveys conducted with businesses active in different sectors in regions, such as the Marmara or Mediterranean regions, rarely report the cost of labour as one of their main challenges (MoIT DGDA, 2021). Rather, main bottlenecks arise with the availability of qualified personnel and low digital proficiency. With the purpose of addressing the most pressing challenges faced by domestic firms, interventions should aim to equipping the local force with enhanced educational endowments, i.e., through vocational and technical training and boosting innovation hubs through the involvement of universities and the development of inter-firm linkages, as outlined in section 2.2. Moreover, interventions targeting mid- to high-skill industries may be instrumental in achieving competitiveness vis-à-vis the Asian giants. Indeed, while Turkey and South Korea had the same income levels in the 1980s, today they are at two very different stages of development, with South Korea being an innovation-driven economy and Turkey still entailing several low-value added industrial activities (Erciş & Ünalın, 2016). Sectoral interventions focused on mid- and high-skill industries can therefore help Turkey close the gap with Asian emerging markets and, possibly, with OECD countries, while also avoiding of the middle-income trap.

**Industrial policies should, however, avoid falling into high-tech fantasies.** When referring to innovation, many expect highly technological processes usually involving electronics-based products, i.e., IT and semiconductors. This conceptualisation of innovation frequently led to the pursuit of so-called 'high-tech fantasies', isolated *entrepôts* of low-technology production usually in the form of industrial and science parks that contribute little to fulfil their stated goals or ending up being simply property-based initiatives with no development dimension (Massey & Wield, 2003). Innovation can be better understood as an interactive, cumulative and gradual process, significantly embedded into pre-existing forms of innovation and emerging from a progressive upgrading of the sectors that already benefit from comparative advantages (Iammarino, 2005). Therefore, whereas innovation policies that focus on mid- and high-skill industries may face difficulties building innovative environments from scratch, they can potentially play a leading role in shaping the evolution and progress of a particular regional innovation system, where they already exist (Rodriguez-Pose & Hardy, 2014).

**Related variety strategies can be effective at diversifying the economy, while ensuring no 'high-tech fantasy' is pursued.** Past research indicates that too much diversification or, in contrast, specialisation of regional economies can be equally harmful (see, for example, Frenken



et al, 2007; Boschma & lammarino, 2009). Regions that are too specialised may risk becoming 'locked-in' in certain industrial sectors and activities, therefore failing to effectively mitigate external shocks. Conversely, regions that are too diversified in unrelated economic activities may fail to achieve sustainable comparative advantage and an efficient allocation of public resources (Visser & Boschma, 2004). A **related variety strategy**, in contrast, can help regional economies to diversify into new directions while building on related assets, given that the higher the technological relatedness of knowledge bases across different economic activities present in a given region, the higher the potential for spillovers and structural change (Figure 19).

**Figure 19 | Related variety strategy: between diversification and specialisation**

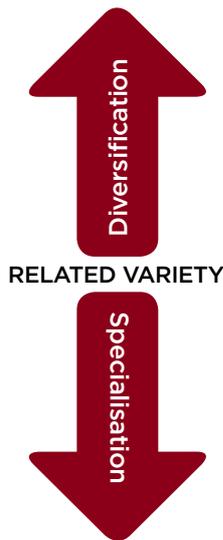
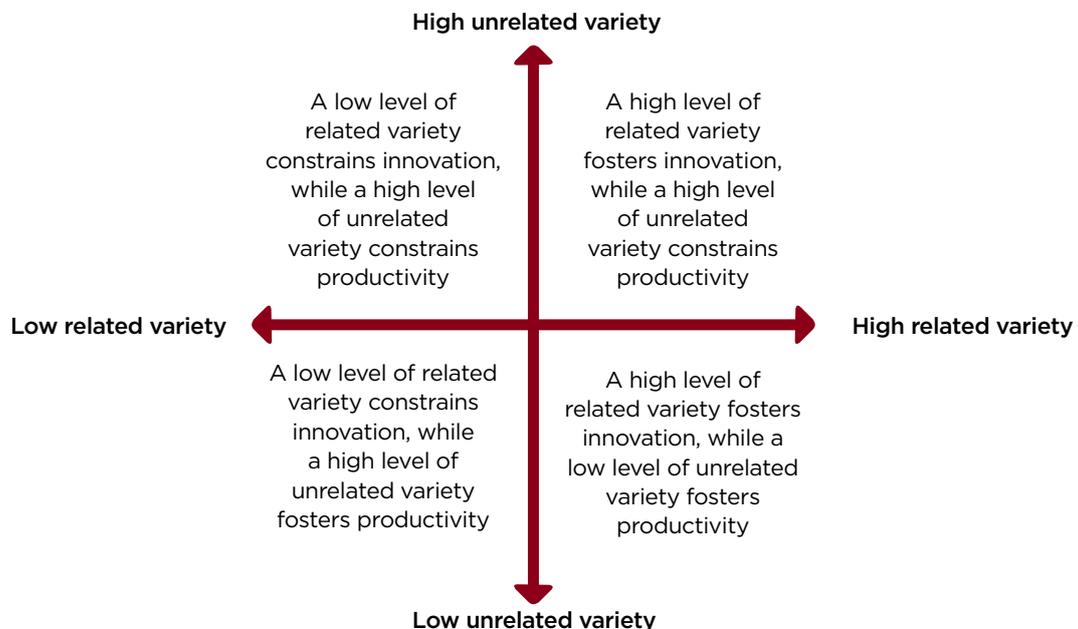


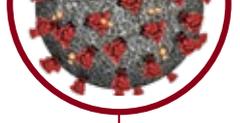
Figure 20 illustrates different outcomes emerging from varying combinations of related variety, that is, diversification within sectors, and unrelated variety, understood as diversification between sectors (Aarstad et al, 2016). In this framework, innovation and productivity are most maximised with high levels of related variety and low levels of unrelated variety. Related variety strategies have been crucial to foster employment growth and productivity across regions, such as in the case of the Netherlands, and help guiding the policy interventions towards industrial activities in which the territory holds pre-existing endowments, i.e., in terms of infrastructure, human capital, or presence of MNEs. This can lead to augmenting the potential of greater returns and mitigating the risk of pursuing incompatible sectoral activities —exemplified by the 'high-tech fantasies' discussed above (Frenken et al, 2007). A related variety strategy should not however be so internally and spatially focused to avoid considering the impact of exogenous factors and trends. For this reason, policy priorities should consider which related industrial activities will become essential in the future, therefore representing interesting venues to explore for policy action (see Box VIII).

**Figure 20 | The role of related and unrelated varieties in driving innovation and productivity.**

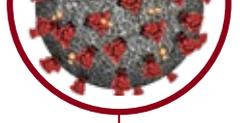


Source: adapted from Aarstad et al (2016)

**Increasing the complexity and innovation capacity of existing sectors can increase the competitiveness of the economic fabric.** The economic complexity of the Turkish economy, despite major improvements in the last 20 years, is still lower than international competitors, both OECD countries and Asian emerging economies, such as Malaysia, China and Thailand (OECD, 2021). Industrial policies, irrespective of the sectoral focus and/or development axis



they adopt, should therefore increase the complexity and innovation capacity of those sectors that already have weighty contributions in terms of employment, GDP, and exports, including textile and apparel, automotive, machinery and tourism, among others (MoIT DGDA, 2021). This assumes even greater importance given the detrimental impact of COVID-19, which limited the already constrained ability and liquidity of domestic firms—especially MSMEs—to invest in R&D towards higher levels of product and process innovation. In this sense, support provided to MSMEs, usually the weakest link in the innovation process, will be crucial to achieve greater complexity and innovation. Here, Turkey can extract important lessons learnt from the trajectory of those countries, who managed to successfully break into the developed countries club through increased economic complexity. South Korea, for instance, underwent rapid transformation via a gradual approach to upgrade its industrial activities with revealed comparative advantages. The developmental trajectory of South Korea can be divided into three distinct periods: from 1965 to 1975, the country increased the production of low-technology goods with comparative advantage, fuelling its growth based on labour-intensive sectors; from 1975 to 1995, the economy of South Korea became less diverse while the number of medium- and high-technology industries with comparative advantage rose; finally, from 1995 onwards, the country consolidated its structural transformation that fostered high economic complexity by increasing the share of the most efficient and internationally competitive medium- and high-technology manufactures in national exports (Britto et al, 2019). The evidence from South Korea highlights the importance of a gradual approach to diversification into related sectors retaining a focus on the sectors that are already more efficient, while pursuing related variety into those industrial activities that do not enjoy an international comparative advantage yet are relatively proximate—in terms of skills, infrastructure, linkages and networks—to the most competitive industries. A similar approach, adapted to the Turkish context with its regional inequalities, could potentially contribute to augment the complexity of the Turkish economy and, consequently, create a more prosperous, resilient, and competitive economic fabric in the aftermath of the COVID-19 pandemic.



## BOX VIII

### Developing a related variety strategy that leverages exogenous trends

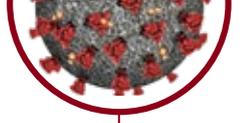
A related variety strategy offers governments —national and regional— the opportunity to strike a good balance between specialisation and diversification of the economy. Whereas a solid strategy would articulate an action plan based on the industrial capabilities that already characterise a territory, a strategy that incorporates considerations on those sectors that will be more capital for the future, hence having more growth potential in the years to come, will be more likely to leverage sources of sustainable growth.

A number of sectors may assume greater relevance in the coming years driven by exogenous, global megatrends such as the Fourth Industrial Revolution (4IR) and the sustainable development imperative. These cross-sectoral megatrends are expected to be a combination of technological leaps in the global society and environmental that will shape businesses, economies, and lifestyles. First, the heightened concerns towards sustainability will bring at the forefront of the global economy advanced manufacturing technologies for cleaner and more efficient production, in addition to new energy production systems and new forms of mobility increasingly relying on electrification. The technologies associated to production efficiency and clean energy are generally expected to grow in importance —in terms of exports, GDP and employment— and are likely to drive transformations in a wide array of sectors, including textiles, automotive, food, and machinery.

Second, digital trends will shape international production going forward. In particular, three trends can be singled out: robotics- and AI-enabled automation, enhanced supply chains digitalisation, and additive manufacturing (3D printing). Each of these trends will have different impacts on the length, the geographic distribution, and governance of GVCs. Automation, including the Internet of Things, e-commerce, and cloud platforms are set to reach a combined market of \$520 billion in 2021 —their growth being further accelerated by the pandemic— while the market size of additive manufacturing is expected to grow to \$50 billion by 2025 and reach \$350 billion by 2035 (a CAGR of 20 percent). Although these changes are likely to be more profound in developed countries at the technological frontier, emerging markets are also likely to experience a certain level of adaptation to retain competitiveness at the global stage.

The emergence of megatrends, such as digitalisation and sustainability, will arguably determine reshuffles of GVCs and modify the underlying competitive advantages that countries retain in specific sectors and industries. Whether or not this will be an opportunity for industrial upgrading for Turkey will largely depend on its ability to leverage these trends while designing and implementing industrial policies that draw upon the existing strengths of the economy.

*Source: UNCTAD (2020)*



### 3. Concluding remarks

The policy report has presented a territorial development strategy which defines new norms that could aid Turkey in the transition towards a more sustainable economic recovery in the aftermath of the COVID-19 pandemic. Although the crisis remains first and foremost a devastating health emergency, the related economic ramifications cannot be underestimated as they risk curtailing the positive track record of economic development that Turkey has experienced in the past decades. Against this backdrop, Turkey is confronted with non-negligible challenges which can be traced back to both its pre-COVID country-specific vulnerabilities and emerging trends that could potentially reshape international production patterns as we know them today.

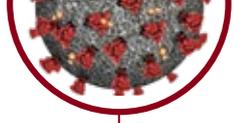
Although the pace of the recovery will also depend on non-economic factors, such as the speed and efficacy of vaccination campaigns, the sort of interventions that countries put in place as a response to the entrenched economic fallout can facilitate a faster and stronger recovery, which will need to encompass both the more short-term needs of firms and society, such as liquidity shortages, and the long-term targets for a more sustainable and competitive economy (Florida et al., 2021). In this context, channelling the fiscal stimulus and expansive public spending towards those interventions that are more likely to succeed and deliver becomes a priority to warrant not only an efficient allocation of public money, but also to leverage the current crisis as a launching pad towards improved socio-economic performance.

Nevertheless, developing sound development strategies that deliver on their intended goals is clearly easier said than done. The complexity of articulating effective strategies in the current climate derives from the multi-dimensionality and heterogeneity of the impact that the pandemic has exerted on the Turkish industrial fabric and, more broadly, its society. Territories, sectors and people have all been hit, yet at varying extents. As a consequence of COVID-19's differential impact, the recovery process risk being K-shaped, that is, being characterised by a restricted group of 'winners' capable of a faster and stronger recovery, and another cluster of sectors, regions, and segments of population that will fail to achieve pre-COVID living standards any time soon. Additionally, these negative effects do not occur in isolation. Although Turkey experienced high growth rates in the last decade, this growth has been unevenly distributed. This positions Turkey in a difficult but competitive spot vis-à-vis both developed and emerging countries and calls for new solutions to long-standing challenges.

The hit triggered by the pandemic is multi-faceted, as are the pre-existing fragilities of the Turkish economy and industrial fabric, and as such needs to be treated. Blanket policies and 'one-size-fits-all' strategies for the whole of the country will fail to be effective to prompt a positive response by territories that have been impacted in different ways and to different extents. On this matter, past attempts to revitalise entire countries or multiple regions, enduring a period of recession following global crises, through mono-axis interventions—that is, interventions that employ or focus on just one development lever, i.e., infrastructure—have mostly been ill-fated. The example of Spain and the indiscriminate drive towards infrastructural expansion pursued since the early 1990s, illustrated in this report, is representative of the potential pitfalls that such interventions may encounter.

In contrast, territorial development strategies that are built around multiple and interrelated development axes are better positioned to address the multi-faceted nature of the current crisis—and of the array of vulnerabilities that the Turkish economy endured prior to the COVID-19 pandemic. The evidence in support of horizontal strategies that entail a multitude of development levers stems from the experiences of developed and developing countries alike. The most successful strategies in Asian emerging markets and within the EU bloc have been balanced initiatives that mitigated the risks often associated with over-investing in one development axis. In contrast, *strategies of waste* heavily skewed towards one determinant of economic development have been either ineffective or counter-productive, giving rise to negative externalities such as skill migration (i.e., brain drain), rising regional inequalities, dependence on FDI, and the like.

Perhaps the most positive note is that Turkish policymakers do not have to start from a blank slate when designing and implementing *strategies of gain*. Despite the persisting vulnerabilities of the Turkish economy and the additional hindrances propelled by COVID-19, Turkey has a

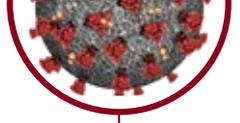


complex, sturdy, and consolidated socio-industrial fabric, not equally distributed across its regions, but certainly one that has experienced high growth levels in the past decades and that benefit from a plethora of strengths. Against this backdrop, recovery policies that play to Turkey's strengths, for instance in terms of infrastructural and human endowments, are more likely to be able to dynamise and revitalise the Turkish economy. This principle applies to virtually any initiative pursued by policymakers, but with particular emphasis when developing policies aimed at fostering GVC integration and industrial policies with the objective of rendering the Turkish economy more diverse and competitive. This does not equate to remaining still. Instead, it translates into a gradual and cumulative innovative process that leverages pre-existing endowments and comparative advantages to reap the gains of emerging opportunities stemming from changes in international production patterns and megatrends. In this regard, related variety strategies have been presented in this report as a viable operationalisation of such phased upgrading of socio-economic practices, and also as an effective *modus operandi* in order to avoid the pursuit of unrealistic expectations exemplified by the idea of 'high-tech fantasies'.

Along this process, context adaptability is key, especially in a country like Turkey. Horizontal interventions that 'play to the country's strengths' cannot look alike if those strengths are unevenly distributed and constituted by different elements across regions. The drivers of economic development and comparative advantage of a territory like Istanbul or the coastal regions are unlikely to be the same to the ones of Eastern Anatolia. As a result, the adaptation of initiatives to the diverse characteristics and potential of each territory will be crucial to ensure that the intended objectives are achieved. Such adaptation will require flexibility on both the breadth of interventions and their strategic scope.

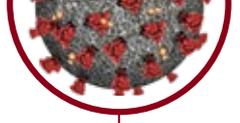
Moreover, the ability to adapt development strategies to the local context will require working with local governments in order to develop locally tailored solutions that efficiently and effectively respond to nation-wide priorities. Here, the quality of institutions will make or break attempts to carry out diagnostic exercises which interventions can be based on. The importance of a strategic regional assessment will be undermined by ineffective or poor-performing local institutions. For this reason, incorporating the institutional dimension, through for instance capacity building initiatives, alongside developmental strategies will be required not just in the inception phase, but also when implementing interventions, irrespective of their nature and focus. Doing so would enable a clear identification of the sources of regional comparative advantage that can subsequently be leveraged in government-sponsored initiatives, as well as of the constraining bottlenecks that are preventing the territory and its industrial fabric to reach higher levels of productive and innovative capabilities.

Ultimately, whether or not the devastating crisis caused by COVID-19 will be a window of opportunity, or rather the beginning of a period of economic decline, will depend first and foremost on the presence of a concerted, across-the-board effort by the government to leverage the current crisis to address existing deficiencies of the Turkish economy. Arguably the greatest opportunity that lies in the current crisis resides in the capacity to transition towards a more resilient, sustainable and inclusive economy, which, on the one hand, is capable of competing with international players on the global stage and, on the other, leaves no one behind on the national level. To achieve this, a whole-of-government approach that works across institutions, sectors and territories will be fundamental. Past evidence, also showcased throughout this report, shows that emerging from crises stronger than before and breaking into the club of the more developed countries is not just desirable, but also possible. Now, Turkey stands at a crossroad and the direction it decides to embark on, together with the extent to which the effort is prolonged and persistent, will define whether it will come out as a more competitive, resilient, sustainable, and equitable economy in the post-COVID era.

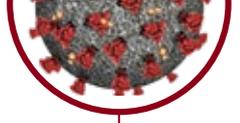


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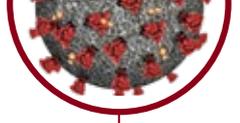
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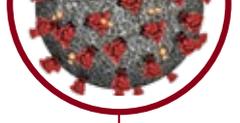
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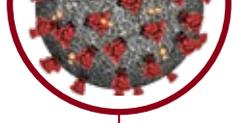
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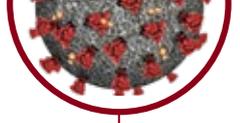
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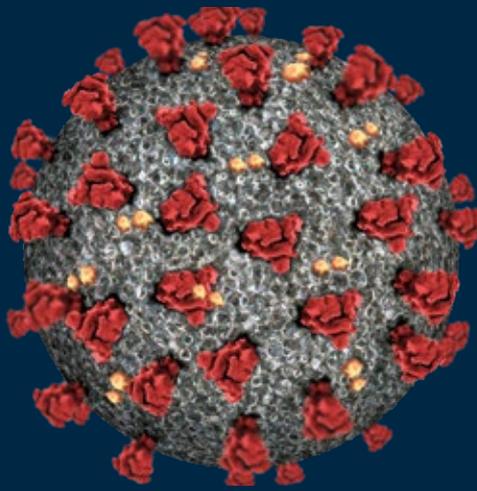
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Turkey post-COVID recovery  
Principles for a sustainable and resilient strategy



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