



International  
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# ► Productivity growth, diversification and structural change in the Arab States



- ▶ **Productivity growth, diversification and structural change in the Arab States**

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## ► Foreword

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Increasing productivity is a shared concern of ILO constituents, who view it as a catalyst for creating decent work, inclusive growth and shared prosperity. The ILO has returned a few times throughout its history to the issue of productivity and its relationship to decent work, building on the twin imperatives of productivity growth and commensurate gains for workers.

In recent years, the importance of placing productivity growth at the centre of development strategies has regained ground, fuelled by economists' consensus that a country's ability to improve its standard of living over time, including poverty reduction, depends almost entirely on its ability to raise its productivity. Achieving higher levels of economic productivity through diversification, technological upgrading and innovation is one of the strategic priorities of the 2030 Agenda, as part of Sustainable Development Goal 8. The ILO Centenary Declaration for the Future of Work, adopted by the ILC in 2019, emphasizes the need "to shape a future of work with full, productive and freely chosen employment", and identifies productivity as a cornerstone of achieving a human centred approach to the future of work.

This renewed focus on productivity growth is particularly relevant and timely, given the alarming performance of productivity growth at global level in recent years. The decade following the global financial crisis has witnessed consistent decline in productivity growth, a development that has been compounded by the Covid-19 pandemic, whose effects on productivity are still to be fully analysed.

When it comes to Arab States, weak labour productivity has been a persistent challenge across the Region. Here, in the last twenty years labour productivity growth has been constantly below the world average and featuring regional negative rates as from 2008; additionally, the contribution of structural transformation to productivity growth has slowed down and integration in global and regional value chains, which is key to boosting technology transfers, digitalization and improved management processes at enterprise level, has been also decreasing.

In this context, the report provides a comprehensive analysis of the productivity trends in the Region; identifies the main bottlenecks for productivity enhancements; assesses whether national development plans have addressed productivity growth as a fundamental means to foster socio-economic development. Finally, the report delineates a policy framework to illustrate policy options having the objective of increasing productivity.

The report finds that there is no silver bullet to rekindle productivity growth in the Arab States. Governments, employers and workers need to urgently put in place the necessary preconditions to seize the potential opportunities offered by the disruptions caused by the COVID-19 pandemic. This means policymakers need to develop pragmatic strategies and implement policies that would promote sustained productivity growth, with a long-term vision, to build forward better in the post-COVID-19 economic environment. Many actions will have to be at national level, but a more coordinated policy response at regional level would be essential to yield substantive improvement in the overall regional productivity growth. Diversification, privatization, investment in human capital and promotion of reforms to improve the business environment will be the highest priorities across the Region. Employers and Business Membership Organizations will have a key role in advising governments on policy design and implementation and in supporting companies, through consulting and training services, in upgrading management practices for better productivity outcomes.

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## ► Introduction

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The ILO has long recognised the role productivity plays in sustainable enterprise development and job creation. The conclusions concerning the promotion of sustainable enterprises adopted at the 2007 International Labour Conference include the notion that increased productivity is a key driver of business competitiveness, economic growth, and living standards. The ILO Centenary Declaration for the Future of Work, adopted by the International Labour Conference in 2019, underscores the importance of the private sector as the main source of economic growth and decent job creation by enhancing productivity growth, harnessing the fullest potential of technological innovation, and promoting a conducive environment to sustainable enterprise development, through social dialogue. Moreover, the ILO's global call to action for a human-centred recovery from the COVID-19 crisis<sup>1</sup> states that to foster a job-rich recovery with decent work opportunities, ensuring business continuity and raising productivity through innovation, diversification and structural change, are of the utmost importance.

This study was conducted during the COVID-19 pandemic. In this context, the development of coherent and comprehensive policy frameworks to raise productivity and generate employment and decent working conditions will be of the utmost importance for a swift economic and employment recovery. This is at the heart of the Building Back Better agenda with a human-centred approach.

This report has five specific objectives. First, analyse productivity trends in selected Arab states<sup>2</sup> during the 1950-2019 period. Second, assess the business environment and identify the main barriers to productivity growth and sustainable enterprise development for decent job creation. Third, examine the role of management practices in business performance. Fourth, analyse challenges and opportunities for diversification and structural change. Fifth, assess whether national development plans address productivity growth as a fundamental means to foster economic development and raise living standards.

Enterprises are heterogeneous economic units with diverse levels of complexity. Small and medium enterprises (SMEs) account for a high percentage of the total number of enterprises and create the bulk of employment worldwide. The ILO (2019) finds that small economic units create, on average, 70% of jobs globally. In the Arab States, SMEs account for 97% of total businesses, microenterprises being the predominant type of economic unit, and are a major source of employment<sup>3</sup>. Estimates suggest that their contribution to Gross Domestic Product (GDP) is between 4% and 40% in the Arab economies<sup>4</sup>.

SMEs have diverse performance patterns and operate at different stages of the business development cycle<sup>5</sup> (see Figure 1). Those at subsistence and survival stages tend to face challenges to reach a minimum efficient scale and economic viability, which has implications in terms of the quantity and quality of jobs they are able to create and maintain, wage levels, working conditions, savings and investment rates<sup>6</sup>, capital accumulation, and gross value added generation, to mention a few examples. Overall, enterprises

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1 ILO (2021). Global call to action for a human-centred recovery from the COVID-19 crisis that is inclusive, sustainable and resilient. International Labour Conference.

2 In this research, when we refer to the Arab states we include Bahrain, Iraq, Jordan, Kuwait, Lebanon, the occupied Palestinian territory, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic, the United Arab Emirates, and Yemen. Northern African Arab States are not included.

3 For instance, the IMF estimates that SMEs generate over 50% of formal employment in Iraq, Lebanon, Sudan, West Bank and Gaza, and Yemen (Stepanyan et al., 2019).

4 Stepanyan, V., Abajyan, G., Ndoye, A., & Alnasaa, M. M. (2019). Enhancing the Role of SMEs in the Arab World—Some Key Considerations. International Monetary Fund.

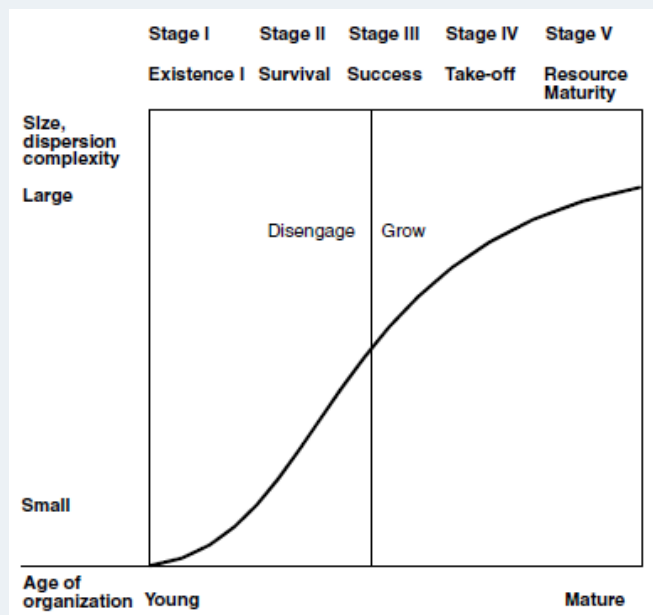
5 Escrivão Filho, E., Albuquerque, A. F., Nagano, M. S., Junior, L. A. P., & de Oliveira, J. (2017). Identifying SME mortality factors in the life cycle stages: an empirical approach of relevant factors for small business owner-managers in Brazil. *Journal of Global Entrepreneurship Research*, 7(1), 1-15. Also, see the seminal work: Churchill and Lewis (1983).

6 The role of the investment rate is key to fostering and sustaining the endogenous process of productivity growth driven by technological change and capital accumulation (Carlin and Soskice, 2018).



tend to face challenges to sustain growth rates. Empirical evidence suggests that half of enterprises that went through a high-growth period in the previous three years are likely to exit the market in the following three to six years, while more than 85% are unlikely to experience another high-growth episode<sup>7</sup>.

► **Figure 1. Stages of business development**



Source: Churchill and Lewis (1983).

The business environment and management practices are key drivers of enterprise performance, productivity growth, and employment outcomes. On one hand, enterprises are influenced by the business environment in which they produce and compete. A growing body of literature has shown that the quality of the business environment is a key determinant of enterprise performance<sup>8</sup>. Poor regulation and anticompetitive practices may hinder total factor productivity<sup>9</sup> (i.e. overall firm efficiency to transform inputs into output in a given period). Moreover, policy distortions appear to be associated with misallocation of resources across establishments, which hinders enterprise productivity. Correlated policy distortions are found to encourage smaller

businesses, lower aggregate output, and lower investment in productivity. The productivity elasticity of distortions, that is, the sensitivity or variability of productivity to policy distortions is estimated to be higher in poor countries<sup>10</sup>.

On the other hand, enterprise performance is also driven by management practices<sup>11</sup>, which have been found to vary considerably across enterprises. Differences in management practices are estimated to account for nearly a fifth of productivity differentials between enterprises within and across countries.

<sup>7</sup> Grover, Medvedev, and Olafsen (2019).

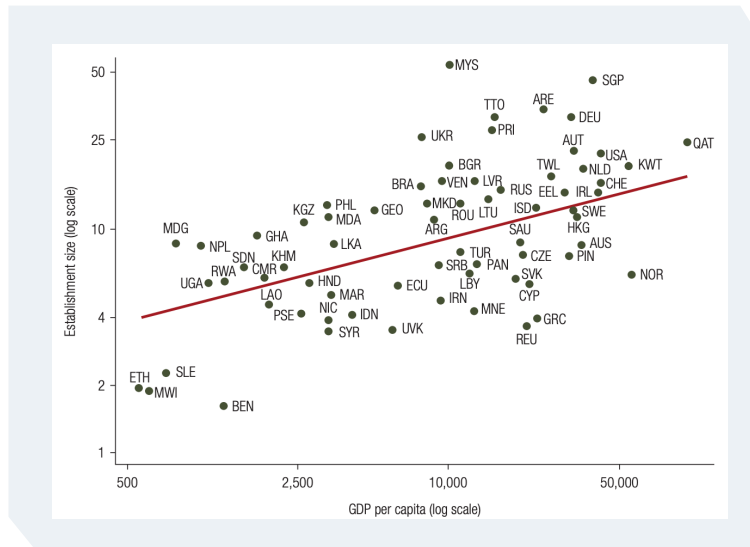
<sup>8</sup> For example, see: Kolarov et al. (2021); Gogokhia and Berulava (2021); Contractor et al. (2020); Cusolito and Maloney (2018); Farole et al. (2017); Głodowska (2017); Lopez-Acevedo (2017); Dollar et al. (2005); Hallward-Driemeier (2005).

<sup>9</sup> Cusolito and Maloney (2018).

<sup>10</sup> See Bento and Restuccia (2017). This study finds that GDP per capita and average establishment size are related to the productivity elasticity of distortions in 63 countries.

<sup>11</sup> Bloom et al. (2013 & 2016).

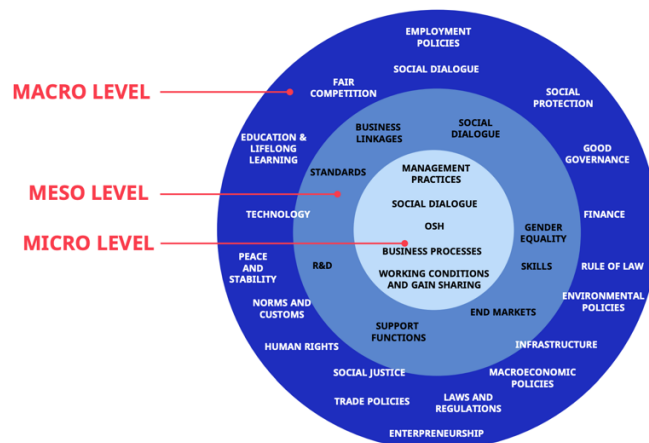
► **Figure 2. Establishment size and GDP per capita**



In addition, enterprise size has been found to increase with the level of development. The higher the income per capita, the larger the establishment size<sup>12</sup> (Figure 2). Per capita income, in turn, depends on the ability to increase output per working hour, that is, productivity. This underscores the importance of promoting productivity growth, as a fundamental means to enhance economic development and raise living standards.

Source: Bento and Restuccia 2017.

The wide range of factors that interplay to enhance productivity growth reveals the need to design and implement a long-term coherent and comprehensive strategy, including coordination and complementarity between policies, regulations and institutions, in a joint public-private effort. In this context, ILO has developed an integrated policy framework that includes macro (business environment), meso (sectoral) and micro (management practices) drivers of productivity growth for decent job creation (see Figure 3).

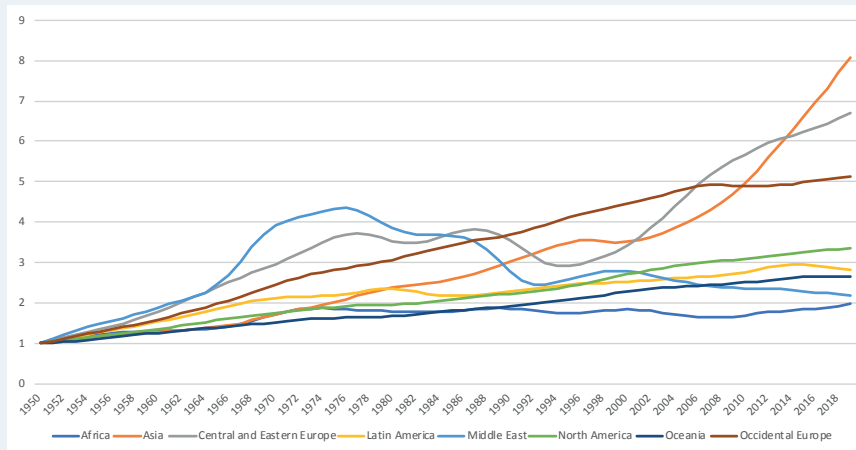
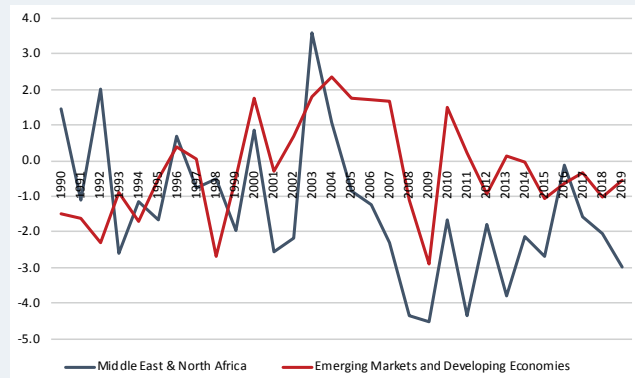
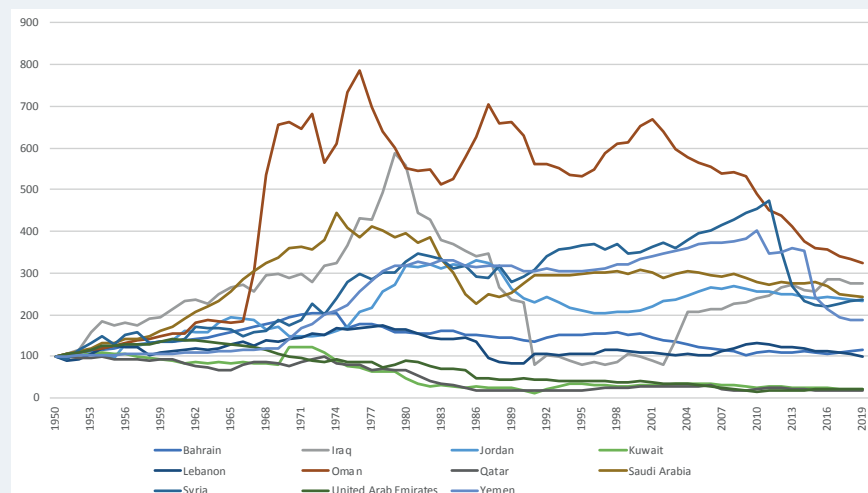


Source: ILO (2021).

In the Arab states, economic growth has mainly been driven by increases in employment rather than sustained productivity growth<sup>13</sup>. In fact, **labour productivity has consistently decreased since the late 1970s** while total factor productivity (TFP) has contracted since 2005 (Figure 4, Panels A and B). For instance, in Kuwait, Qatar and United Arab Emirates labour productivity has had a downward trend since the late 1970s, falling below levels observed in 1950. In Lebanon and Bahrain, after a period of modest growth, labour productivity decreased and returned to levels observed in 1950, and has remained stagnated over the last two decades. In the rest of the selected Arab states, although labour productivity has grown with respect to levels from 1950, it also exhibits a downward trend in the last two decades (Figure 4, Panel C). As a result, and not surprisingly, the overall labour productivity of the Region has had the worst performance worldwide.

12 Bento and Restuccia (2017).

13 van Ark, Erumban, and de Vries (2019). Prioritizing Productivity in the Gulf Region. A Path toward Sustained Growth through Smart Diversification. The Conference Board.

► **Figure 4. Labour productivity and total factor productivity.****Panel A. Cumulative growth of labour productivity, 1950–2019, (Reference Year = 1950)****Panel B. Growth of Total Factor Productivity, 1990-2019****Panel C. Cumulative growth of labour productivity in selected Arab states, 1950-2019**

Source: own elaboration with data from The Conference Board.

This has had a negative impact on the external accounts, generating important external imbalances that need to be fixed by conducting structural reforms aimed at improving the business environment, raising productivity, and promoting diversification and structural change<sup>14</sup>. In some countries of the region, structural transformation has not yet taken place to reallocate workers from low-productivity/low-wage economic sectors to high-productivity/high-wage ones. In other countries, internal conflicts and devastating financial and economic crises have interrupted and delayed such processes. Furthermore, the region is particularly vulnerable to oil price shocks. This vulnerability reveals the need to develop **alternative competitive advantages** in the Arab States and begin a process of diversification and structural change to build back better in the aftermath of the COVID-19 pandemic.

In this context, **this evidence-based research project is the first of its kind in the Region to implement the ILO Productivity Ecosystem**. The main research question aims at assessing the main constraints to productivity growth at macro, meso and micro levels. To this end, primary and secondary data are used to do the empirical analysis. An enterprise survey was conducted through Employers and Business membership organizations (EBMOs) in the context of the COVID-19 pandemic, to analyse the impact on the business environment and the extent to which persisting structural problems, identified using secondary data (enterprise surveys from the World Bank) and known before the ongoing global crisis, have deepened or what new challenges have emerged. In addition, an in-depth analysis of national development plans is also carried out to examine the extent to which countrywide strategies are conducive to promoting productivity growth, improving the quality of the business environment, and encouraging structural change and diversification.

This report is organized as follows. Chapter 1 is focused on a long-term analysis of trends in labour productivity growth, GDP growth, and per capita income in the Arab states. A comparative analysis of productivity levels with global frontiers and other major emerging economies is also conducted. It also examines the contributions of sectoral productivity growth, worker reallocation across sectors, and main drivers of labour productivity growth. Chapter 2 implements the ILO Productivity Ecosystem. It is divided into three sections to assess barriers to sustainable enterprise development that arise from the business environment (macro level), examine sectoral productivity gaps and constraints to decent job creation (meso level), and analyse management practices for productivity enhancement, respectively.

Chapter 3 presents results from the enterprise survey focused on challenges and opportunities for sustainable enterprise development for decent job creation and structural change in the context of the COVID-19 pandemic. Particular attention is paid to identifying the main skills needed by enterprises, which is relevant to devise skills development programmes, raise productivity, and prevent technological unemployment. Chapter 4 in turn is devoted to the analysis of national development plans and their potential to enhance productivity growth, diversification, and structural change to build back better. Finally, conclusions provide a summary of main findings and recommendations to policy makers and EBMOs to devise a policy reform agenda and improve or develop new services to support members in their pursuit to raise productivity and foster sustainable enterprise development for decent job creation.

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<sup>14</sup> Arezki, Lederman, Abou Harb, Fan, Nguyen, Mottaghi, and Wood (2019), Reforms and External Imbalances : The Labor-Productivity Connection in the Middle East and North Africa, World Bank.

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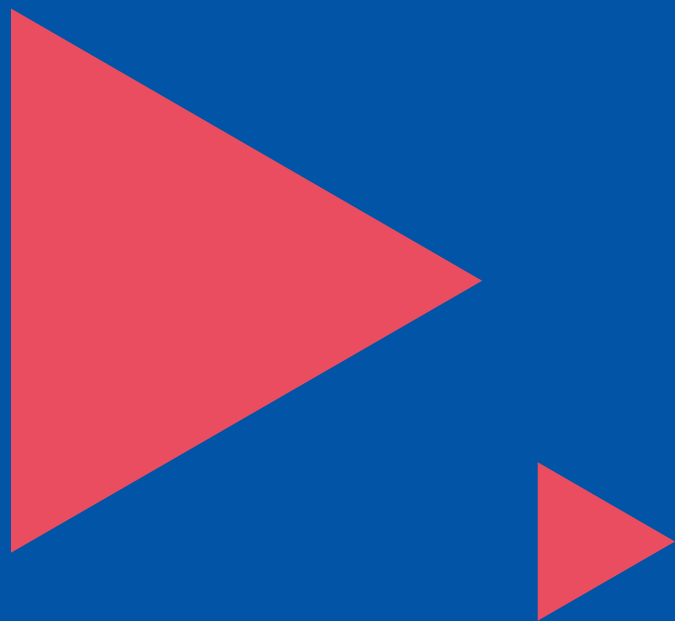
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# Chapter 1

Economic growth, income  
per capita and productivity  
trends, 1950-2019

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## ► Main findings

- The economic growth dynamics in the Arab region feature a high but falling income levels in the GCC's oil-rich economies and shallow yet falling levels in the other Arab nations.
- Taking 12 Arab countries (six GCC and six other Arab economies) in the region together, the period of high production, income, and productivity growth during the seven decades since 1950 was the first two decades following the oil discovery.
- The oil-supported economic boom did not sustain longer, as the GCC economies seemed to have caught up in the resource course, with no economic diversification.
- The rise in oil prices in the 1970s adversely impacted growth and productivity globally, but its initial positive effect on GCC economies was not sustained either.
- The decade of 1983-1993 was a period of substantial economic losses for the Arab countries, as the region lost income and productivity gains from the past years.
- GDP growth in the Arab economies improved in the 1990s (1993-2009), but not enough to offset the rise in population, thus witnessing continued erosion in per capita income and productivity, especially in the GCC economies.
- During the last decade, starting in 2010, the region continued to suffer from declines in productivity and witnessed a disconnect between productivity and per capita income growth, implying increasing reliance on less productive jobs.
- The fall in income and growth was fuelled by the region's excessive reliance on employment-driven growth, tapping the cheap foreign workers. While other regions of the world combined employment growth and productivity growth to drive GDP, both the GCC and the other Arab economies hardly prioritized productivity.
- Growth in output, per capita income, and labour productivity have also been quite volatile in the Arab region, particularly in the GCC economies, as these trends relied heavily on global trends in oil prices and oil demand.
- The region's weak and volatile productivity growth has caused a substantial erosion in relative income and productivity levels compared to frontiers across the board in the region.
- While the fall in relative income and productivity levels in the GCC economies is largely an inevitable outcome as they move from resource-dependent economies to more diversified ones, the fall in the other Arab economies is alarming.
- The challenge for rich GCC economies is to avoid further deterioration in their productivity level, and avoid divergence from the global frontiers, whereas the challenge for the other Arab economies is to catch up with the global frontiers of productivity.
- The slowdown in productivity is also a function of poor overall efficiency, but what is also alarming about the region is its inability to translate its capital investment into productivity.
- The lack of a solid manufacturing sector that can absorb semi-skilled and low-skilled workers and the lack of a vibrant private sector in both the GCC and other Arab economies adds to their challenges to excel productivity growth.
- The efforts to diversify the economies in the Arab world have not yet yielded a growth-enhancing structural change effect.



### ► Policy and business implications

- To achieve productivity-driven growth, the region needs to make the labour market more efficient by creating decent work opportunities for all, according to the needs of the private sector.
- Investing in knowledge capital, skills development, and technologies to improve the overall efficiency of input use is of the utmost importance to shift to a productivity-driven economic development paradigm.
- The region needs to focus on upskilling the native population to match the labour market's needs and improve workers productivity.
- The region also needs to continue its diversification efforts to absorb new entrants to the labour market and create productive employment by fostering private sector investment and promoting reforms to improve the business environment aimed at reallocating resources to the most productive sectors. For non-GCC economies, the potential for the manufacturing sector, which can absorb low-skilled workers, is large.
- While the challenges are plenty for the region, attempts to integrate the region's economies to act as a single market might help productivity growth. Regional integration would incentivize private sector enterprises to seize economies of scale and raise productivity.
- Increased engagement with governments, policymakers, business organizations, and educational institutions in stimulating a better-coordinated investment atmosphere is important for the private sector to develop productivity-oriented business strategies.
- Business organizations have an important role to play in raising awareness among members about the need to prioritize productivity growth. Moreover, support could also be provided to upgrade business strategies, improve management practices and productive efficiency, and to devise a policy reform agenda to improve the business environment for decent job creation.

## ► 1.1 Introduction

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This Chapter analyses the trends in and sources of aggregate labour productivity growth in the Arab economies and compares their productivity levels with global frontiers and other major emerging economies. The Chapter also traces the contributions of sectoral productivity growth, worker re-allocation across sectors and the proximate sources – total factor productivity and capital accumulation – to aggregate labour productivity growth. Before delving into the analysis of labour productivity and its sources, the Chapter first documents the long-term growth in GDP, and per capita income in the region.

Considering the importance of productivity for sustainable development, ILO has pursued a productivity ecosystem that underscores the need for sustainable productivity gain for and through decent jobs (see ILO, 2020).<sup>15</sup> This chapter considers productivity dynamics from an aggregate/macro perspective, which are likely to be influenced by the meso and micro level solutions featured in the productivity ecosystem. Several aspects of the productivity ecosystem, particularly the impact of work-life balance, workplace learning, and employee-employer relationships, have important implications for productivity which are beyond the scope of this Chapter. It is important, however, to note that the macro productivity trends, documented in this Chapter, are shaped in the economic, political, and social environment under which firms, industries, and economies are operating. Therefore, their importance in shaping productivity trends is inevitable. This is particularly true in most Arab economies, which feature both politically and economically distinct characteristics compared to, for instance, the Western economies that are at the frontiers of productivity levels.

The Chapter covers 12 Arab economies: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates (UAE), Iraq, Jordan, Lebanon, Syria, Yemen, and the Occupied Palestinian Territory (PSE, hereafter Palestine). Given the economic diversity and heterogeneity across countries in this group, we further divide them into two groups – Gulf Cooperation Council (GCC) economies (the first six countries) and other Arab economies. This grouping is also consistent with differences in the income levels across countries. According to The Conference Board Total Economy Database (TED), the median per capita income across the 12 countries is just above 26,000 \$ from 2020 purchasing power parity terms. While all the GCC economies are above the median income level – in the range of 1.5 times higher incomes compared to the median levels in Oman to 4 times higher in Qatar –, other economies are below that (see Appendix Table 1).<sup>16</sup> The income levels in the other Arab economies are in the range of 10 to 60 percent of the median, with Yemen being the poorest and Lebanon the richest. Throughout the Chapter, the reference to Arab economies corresponds to the aggregate of the GCC and other Arab economies. The period of the analysis is 1950-2019, wherever the data is available.<sup>17</sup> For convenience, this period is divided into several sub periods, after identifying break points in the region's economic growth (see next section). Most data used in the study are obtained from The Conference Board Total Economy Database (TED), World Bank World Development Indicators (WDI), ILOSTAT, and the United Nations National Accounts Statistics (UNNAS). Since the TED does not contain Palestine, we have extended the TED data using additional data from other sources, including the

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<sup>15</sup> The concept of decent work has been at the core of ILO's policy agenda for a long time and has been featured with a more precise definition in its Decent Work Agenda (DWA) approach. Broadly speaking, the DWA consists of four pillars, which are "promoting jobs and enterprises, guaranteeing rights at work, extending social protection and promoting social dialogue..., with gender as a cross-cutting theme" (ILO, 2017). The productivity ecosystem recognizes the need for sustainable productivity gain for decent job creation (see ILO, 2020).

<sup>16</sup> This has also been the case historically, since 1950, except for Lebanon joining the above-median group during 1950-1967 and 1974, and Iraq joining the above-median group during the 1978-1980 period. In 1974 and during 1978-1980, Oman was below the median level. Since 1980, the GCC economies have been consistently above the median income level.

<sup>17</sup> All data on per capita income and labour productivity are available for the entire period of 1950-2019 for countries other than Palestine, for which the data is available only since 1970.

Palestinian Central Bureau of Statistics (PCBS).<sup>18</sup>

The Chapter is organized into six sections. Section 2 provides an overview of the trends in economic growth, income per capita, and labour productivity in the Arab economies. In section 3, the Chapter delves into the occurrence of trade-offs between productivity and employment to see whether the region's employment-driven growth leads to productivity losses. Section 4 examines the "within industry" and between industry productivity effects on the aggregate labour productivity growth. Section 5 examines the role of capital deepening and total factor productivity in driving aggregate labour productivity growth. The last section concludes.

## ► 1.2 Economic growth, productivity and income per capita in the Arab economies

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In the neoclassical supply side perspective, growth in labour productivity is considered as a source of sustained long-term economic growth, achieved with exogenous technological change (Solow, 1957). The demand side explanations of the relationship between labour productivity and GDP growth, such as Kaldor (1966) and Verdoorn (1949, as cited in de Vries, 1980), focuses on the increasing rate of return especially in the manufacturing sector. The manufacturing output growth enhances productivity both in the manufacturing as well as non-manufacturing sector. Empirically, at the aggregate level, the correlation of labour productivity trends with GDP growth and per capita income growth is strong although not perfect. It should be noted that, empirically, the precision of this relationship crucially depends upon how employment, work force participation, and total population coincide (see Marattin and Salotti, 2011). In this section, we document the general trend in GDP and per capita GDP along with aggregate labour productivity (measured as GDP per worker).

### 1.2.1. Trends in GDP, per capita GDP and labour productivity growth in the Arab region

We analyse the region's economic growth and productivity trends during the last 70 years, and therefore it is useful to break the entire period into several sub-periods. Using the Bai and Perron (1998, 2003) structural break tests,<sup>19</sup> in the region's GDP, per capita GDP and labour productivity (GDP per worker) we identify five breaks during the entire period of 1950-2019. These were 1960, 1970, 1982, and 1992 for all the three variables: GDP, labour productivity, and per capita income, and 2008 for per capita income and labour productivity and 2009 for GDP.<sup>20</sup> Therefore, we divide the entire period of analysis into six

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<sup>18</sup> See appendix for more details.

<sup>19</sup> Bai and Perron's (1998,2003) method allows us to identify the phases of growth solely derived from the data, minimizing the residual sum of squares of the regression of the natural log of the relevant variable (e.g., GDP) on the time trend over several episodes of the data.

<sup>20</sup> It should be noted that the breaks in this analysis are identified using the aggregated data for the entire region, which includes the oil-rich GCC economies and other Arab economies. Therefore, the breaks may not necessarily be aligned with

distinct sub-periods, which are 1951-1960, 1961-1970, 1971-1982, 1983-1992, 1993-2009, 2010-2019. Note that despite the differences between GDP and the other two indicators (labour productivity and per capita GDP) in terms of the last break year, we take 2009 as the cut-off point for the last period, to keep the periodization consistent across all indicators. In our period averages, we do not include 2020 for two reasons. First, as the Covid-19 pandemic disturbed the global economy and the region

► **Box 1: Covid -19 and productivity in the Arab region**

The Covid-19 pandemic has disrupted the trends in productivity globally, and the Arab region is no exception. The region had a major setback in growth in 2020, with the other Arab economies witnessing a substantial contraction in GDP. However, the GDP growth in both the GCC and other Arab regions recovered in 2021, although at a much lower rate compared to the emerging

market in total. What is more important to notice is that the productivity growth in the Arab economies has decelerated throughout 2019, 2020, and 2021, with 2021 reflecting the severe impact of the pandemic. For the Arab region, the pandemic seems to have made their daunting productivity problem more complex, as it accelerated the pace of already slowing productivity in the region. Moreover, the possible decline in formal job creation and the disruptions in the global oil demand and prices might make the situation more challenging.

<b>GDP, per capita income and labour productivity growth, 2019-2021</b>			
	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>GDP growth</b>			
Arab economies	1.0	-6.2	2.1
GCC	0.7	-4.8	2.5
Other Arab Economies	2.3	-10.8	0.8
Emerging Markets	2.8	-2.7	5.1
<b>Per capita income growth</b>			
Arab economies	-0.8	-8.0	0.7
GCC	-1.2	-6.6	1.1
Other Arab Economies	0.7	-12.1	-0.7
Emerging Markets	1.9	-3.5	4.3
<b>Labour productivity growth</b>			
Arab economies	-2.6	-6.1	-1.3
GCC	-3.1	-5.3	-0.5
Other Arab Economies	-0.5	-8.4	-4.4
Emerging Markets	2.0	0.4	2.3

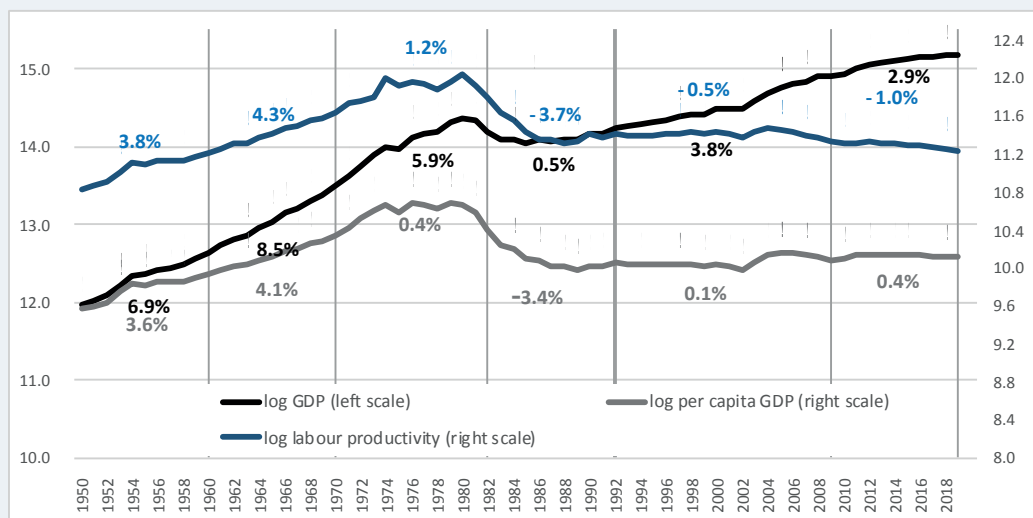
Source: The Conference Board Total Economy Database, April 2021.

country-specific events, and also, the impact of global events such as oil price rises may be lessened by the fact that we have countries with and without oil resources in the sample. For instance, countries like Saudi Arabia have benefitted substantially from the oil boom in the 1970s, which helped them invest heavily in infrastructure, likely providing an up-break in the growth. Similarly, the domestic instabilities in Syria since 2010 may have caused a down-break in that country. However, some of these events may also have a common impact on all the countries in the region, which is more likely reflected in the breakpoints identified. For instance, some of these breaks somewhat align with local and global disruptions in the region, such as the Iran-Iraq war in the early 1980s, the first Gulf War in the early 1990s, and the global financial crisis in 2008-2009. These disruptions appear to have caused shifts in the economic growth trend in the region. Although the earlier breaks are not precisely aligned with such events, the break in 1970 was just before the global oil and energy crisis years. It is also hard to predict what events are likely to have a common impact, except those disruptions that evoke a common shock to the region.

unprecedentedly by constraining economic mobility, the inclusion of this year distorts the average growth rates. Second, the data for 2020 is still preliminary for most countries. We, however, discuss how economic growth, per capita income, and labour productivity have been performing during the pandemic period in the region separately.

Figure 1 plots the natural log of real GDP<sup>21</sup> in the Arab economies on the left scale of the chart and the natural log of per capita income and labour productivity on the right scale. The figure marks the periodization we use in the Chapter, along with the average growth rates for the respective periods. The same Figure is replicated for the GCC and other Arab economies in Figure 1A. The aggregate picture shown in Figure 1 is mainly consistent with the trends in GCC (see the left panel of Figure 1A). However, despite having relatively lower levels of income and productivity, the growth trends in the other Arab group are also generally in alignment with these trends (right panel of Figure 1A). We discern several important trends from Figure 1, Figure 1A and Table 1, which are listed below.

► **Figure 1: GDP, per capita GDP and labour productivity in the Arab economies (log levels and growth rates), 1950-2020**



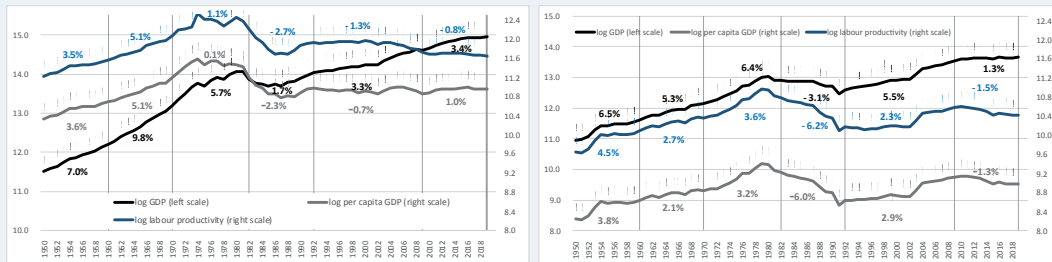
Note: Growth rates are calculated as log changes.<sup>22</sup> Arab economies consists of: the GCC economies (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and The United Arab Emirates), and six other Arab economies (Iraq, Jordan, Lebanon, Syria, Yemen and the Occupied Palestinian Territory).

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

21 The real GDP levels for the region is obtained by summing nominal GDP values across individual countries for the base year and extrapolating for other years using the weighted regional growth rates. Similarly, the ratio of base year real GDP and the sum of the population across countries is extrapolated using the weighted growth rate of per capita GDP. The weights in this aggregation are nominal shares of each country's GDP in the total GDP of the region (measured in PPP terms).

22 Note that all growth rates are calculated as annual log changes, and averaged across the period to obtain period averages. The cumulative growth rate of a variable Y can be obtained from the log changes using the relationship:  $y_g = \left( \frac{y_T}{y_0} \right)^{\frac{1}{N}} - 1 = e^{\frac{\sum_{t=0}^{T-1} \ln y_t}{N}}$ , where Y<sub>T</sub> is the end year value, Y<sub>0</sub> is the start year value, Y<sub>t</sub> is the value of any year t, between t = T and 0, and N is the number of years.

► Figure 1A: GDP, per capita GDP and labour productivity in the GCC (left panel) and Other Arab economies (right panel), log levels and growth rates, 1950-2020



Note: see Figure 1

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

- First, the period 1950-1970 was a period of rapid growth in GDP, per capita income, and labour productivity in the region, with the period 1961-1970 being the period of fastest growth. The growth acceleration during this period, which was even faster than the global growth rates, was driven by the GCC (Table 1). Previous studies also documented the impressive growth in the region during this period. For instance, Girgis (1973) had observed a very big growth in the Arab economies during 1958-1967, which was faster than the developed economies at the time, and even faster than the advanced economies' growth during the industrial revolution.<sup>23</sup> Continued economic spin-offs from oil discovery, resulting in substantial public investments in infrastructure, health, education, and public sector enterprises (Yousef, 2004), led to high growth in income and productivity in the GCC's oil-rich economies. The other Arab economies also seem to have benefitted from exporting labour and receiving remittances supporting consumption and production in their domestic economies in the early phases of oil discovery. Emigration to GCC's oil economies, which national governments of these countries have generally supported, has been a gainful opportunity to create jobs for citizens and gain remittance incomes in these countries (Kapiszewski, 2015), helping their domestic income, production, and consumption growth.

<sup>23</sup> It may be noted that his grouping of Arab economies was different from ours, as it consisted of some countries which are not on our list (Algeria, Libya, Morocco, Sudan, Tunisia, and Egypt) and some which are on our list (Iraq, Jordan, Kuwait, Lebanon, Saudi Arabia, Syria, and Yemen).

**Table 1: Growth rates of GDP, per capita income and labour productivity, 1950-2019**

	1951-1960	1961-1970	1971-1982	1983-1992	1993-2009*	2010-2019
<b>GDP growth</b>						
World	4.9	5.4	3.4	2.8	3.3 (3.6)	3.1
Advanced economies	4.8	5.2	3.0	3.0	2.3 (2.8)	2.0
Emerging & developing economies	5.1	5.7	4.1	2.4	4.5 (4.7)	4.2
Middle East	6.7	9.2	5.7	1.3	3.9 (4.1)	2.4
Arab Economies	6.9	8.5	5.9	0.5	3.8 (3.9)	2.9
GCC	7.3	10.4	6.4	1.9	3.4 (3.6)	3.4
Other Arab Economies	6.5	5.3	6.4	-3.1	5.5 (5.5)	1.3
<b>Per capita income growth</b>						
World	3.2	3.8	2.1	1.6	2.3 (2.6)	2.3
Advanced economies	3.5	4.1	2.2	2.3	1.6 (2.1)	1.5
Emerging & developing economies	2.7	3.4	1.7	0.6	3.2 (3.3)	3.1
Middle East	3.4	4.9	0.6	-2.4	0.7 (1.1)	0.2
Arab Economies	3.6	4.1	0.4	-3.4	0.1 (0.5)	0.4
GCC	3.6	5.1	0.1	-2.3	-0.7 (-0.1)	1.0
Other Arab Economies	3.8	2.1	3.2	-6.0	2.9 (2.9)	-1.3
<b>Labour productivity growth</b>						
World	3.4	3.9	1.7	1.3	2.1 (2.3)	2.1
Advanced economies	3.6	4.0	2.0	2.0	1.5 (1.8)	1.0
Emerging & developing economies	2.9	3.6	1.2	0.3	2.8 (2.9)	3.1
Middle East	3.8	5.2	1.4	-2.4	-0.1 (0.03)	-1.0
Arab Economies	3.8	4.3	1.2	-3.7	-0.5 (-0.2)	-1.0
GCC	3.5	5.1	1.1	-2.7	-1.3 (-0.9)	-0.8
Other Arab Economies	4.5	2.7	3.6	-6.2	2.3 (2.2)	-1.5

Note: \* Figures in brackets are the averages excluding the global financial crisis years 2008 and 2009 (i.e., the average from 1993-2007). For the list of countries in the global, advanced, and emerging groups, please see Appendix Table 4. The Middle East includes all the Arab economies (GCC and other Arab economies, see notes to Figure 1), and Iran. Regional growth rates are a weighted average of individual countries, using nominal value added weights. For other notes, see Figure 1.

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

- Second, the rise in oil prices in the 1970s negatively impacted growth and productivity globally, but its initial positive effect on oil-exporting GCC economies was not sustained either. The role of oil prices in influencing macroeconomic performance in the 1970s has been well documented in the literature (Blanchard and Riggi, 2013).<sup>24</sup> Table 1 suggests that the GDP and per capita income growth have fallen in the advanced and emerging economies from the previous decade. The hike in the oil prices in the 1970s did indeed help the GCC economies in the initial years during that period, but that was not sustained longer, making them witness a slowing growth during the 1971-1982 decade. More importantly, the per capita income growth was barely positive, showing stagnation in the standard of living that the GCC economies achieved during the fast pace of post-oil discovery growth. In addition to the massive pressure on the region's GDP in 1975 and 1982, the drop in per capita income was also driven partly by a rise in population growth. The fall in oil prices seems to have exerted a larger impact on GDP growth since 1982, offsetting

24 Indeed, the literature also acknowledges that the relationship between oil prices and GDP growth, in general, has weakened over the years, and its role as a pivotal factor in explaining the slowdown in growth and productivity in advanced economies like the US is waning (see, for instance, Barsky and Kilian, 2004).



the growth gains in the peak years of oil prices. The drop in growth was across the board in the GCC, with Kuwait being the hardest hit economy (see Appendix Tables 2 and 3). Since much of the Kuwait economy relied on the public sector, a severe fiscal deficit in the early 1980s, fuelled by erosion in oil revenues and the Gulf War, led to the retreat in income growth (see Kaboudan, 1988). Although labour productivity growth also fell drastically in the GCC, the magnitude of the fall was relatively less compared to that of per capita income. Other Arab economies, however, did see some improvements; their productivity and per capita income growth improved by about one percentage point from the previous decade.

- Third, labour productivity growth was generally slightly higher or the same as per capita income growth in all the regions in the first two periods, which has changed during the 1971-1982 period. While the productivity growth (although slowing) remained higher than per capita income growth in the Middle East –also in the GCC and other Arab economies–, productivity growth fell below per capita income growth globally.
- Fourth, 1983-1993 was a period of economic losses for the Arab countries – both the GCC and the other Arab economies –, as the region lost much of its previously made income and productivity gains. Productivity growth eased globally and remained lower than per capita income growth during this period. Although the GDP growth remained positive in the Arab economies, the per capita income and labour productivity levels dropped massively, deteriorating people's economic well-being, especially in the "other Arab economies" group. The fall in global oil demand and the subsequent decline in oil prices in the early 1980s swayed economic growth during 1983-1992 in all the GCC economies. Furthermore, with the Iraq War, the region's challenges during this period were high, and the Iraq economy shrank substantially. No single country in the other Arab economy group improved economic growth.
- Fifth, although the global financial crisis lowered the pace of long-term growth globally and in the region, long-term GDP growth improved in the Arab countries and emerging markets in general during the 1993-2009 period. However, the improvement in GDP did not help much in terms of average income levels and labour productivity, as the growth improvement in the GCC was not sufficient to offset their faster population growth. We observe that the average per capita income growth of the global economy from 1993-2009 is close to half a percentage point higher if we exclude the crisis years,<sup>25</sup> so is the case with the GCC, whereas it didn't change the growth in the other Arab economies. Regardless of the global financial crisis, however, per capita, income and labour productivity growth in the GCC economies continued to decelerate during this period. Other Arab economies, however, did see a softening from the contraction of productivity and incomes in the previous period, yet the growth rate remained lower than in the 1970s.
- Finally, in the most recent period, 2010-2019, income and productivity continued to suffer in the Arab economies, with minimal growth in per capita GDP and continued erosion in productivity. GDP growth rate remained largely the same as 1993-2009 period globally, and in both GCC and other Arab economies groups. It may be noted that some of the geopolitical situation and domestic instability in the other Arab economies did contribute to the significant volatility in its growth. **Productivity remains a challenge for the Arab economies in general, and the**

<sup>25</sup> In an earlier study, Erumban and van Ark (2018) documented more than one percentage point loss in global GDP growth due to the global financial crisis, from 4.2 per cent from 2000-2007 to 2.7 per cent from 2008-2015. Comparing the nine years after the global financial crisis, 2010-2019, with 1993-2007 (excluding the crisis years 2008 and 2009), Table 1 seems to suggest that even in the long-term growth, the impact has been quite substantial, that the crisis years per se have shaved off close to half a percentage point growth from the global economy.

**GCC economies in particular, since the 1980s until the present. This disconnect between productivity and per capita income growth might imply that jobs have become increasingly less productive in the region.**

## 1.2.2. Levels of per capita income

Since we see significant differences in the growth dynamics in the region, across countries, and over the years, it would be interesting to see how these differences reflect in the income levels of these economies. In Table 2, we provide the income levels of the Arab economies, expressed relative to the United States. These are computed in 2020 purchasing power parity (PPP) terms.<sup>26</sup> We analyse the productivity levels separately later in section 1.3.4.

The per capita income levels in the GCC economies have been quite high, thanks to their large oil revenues (See Table 3), which escalates the estimated per capita income. Currently, Qatar has the highest relative income, which is 65 percent higher than the average income of the United States. Kuwait and the UAE have average incomes slightly above the US levels, whereas the other GCC economies, Bahrain, Saudi Arabia, have their income levels between 75 to 80 percent of the US levels. Oman has the lowest relative income level among the GCC, yet it is close to 60 percent of the US level.

There are also interesting dynamics here, taking the income growth over the years into account. **Except in Oman, all the GCC economies have witnessed a fall in their relative income levels over years**, partly along with their diversification to non-oil activities. For instance, Qatar has seen a massive erosion in its relative income levels over the years, so has its oil share in GDP (see Table 3). Similarly, Kuwait, the UAE and Bahrain have seen a deterioration in their income levels over the years. Although Kuwait has seen improvements in the post-war reconstruction period, the gains have been marginal compared to its past income levels, and moreover, in recent years, it again shows a falling trend. Although Saudi Arabia saw consecutive increases in relative income levels until 1980, the gap relative to the US fell drastically in the 1990s, and that falling trend currently continues, reaching below the 1950 level in 2020. The share of oil in the region's largest economy fell rapidly from close to 3/4th of the economy in the 1980s to 1/4th by 2020. Oman is the only country that has improved its relative income levels over the years, which was substantially lower in the 1950s compared to other GCC economies. It had raised to more than 60 percent of the US levels by 2020. This rise in Oman's relative income levels happened amid a sharp fall in its reliance on oil, indicating possibly some success in economic diversification in that economy.

It appears that the large oil revenues in these economies helped them achieve higher income levels in the early years, and the transfer of oil rents to nationals in the form of public sector jobs or other welfare schemes, helped sustain the well-being of the native population. Moreover, these oil-rich countries also benefitted from the accumulated oil surpluses in terms of their ability to develop infrastructure, in particular the physical infrastructure. However, over the years, the distribution model that these economies pursued has raised the government burden, questioning the sustainability of their growth model, which along with the inevitable fall in income levels as the economic activities started shifting towards non-oil activities seemed to have lowered their income levels. The over-reliance on the oil

<sup>26</sup> The 2020 PPP are obtained by extrapolating World Bank's international comparison project (ICP) 2011 PPPs to 2020 using the relative price changes for each country. See de Vries and Erumban (2020).

sector seems to have pushed most countries into the trap of a resource curse. Many studies in the past have identified this resource curse as a major challenge for sustainable economic growth in the region, be it due to lack of macroeconomic stability or a lack of a well-developed financial market (see. Hausmann and Rigobon, 2003; Collier and Goderis, 2007; Beck, 2011).

The other Arab economies are relatively poor, with Lebanon scoring high at a quarter of US income

**Table 2: Relative levels of Per capita income in 2020 PPP \$ (US=100), 1950-2020**

	1950	1960	1970	1980	1990	2000	2010	2020
Qatar	1630.4	1465.3	1085.6	782.4	158.3	155.3	187.9	165.5
Kuwait	861.7	715.6	568.9	200.7	73.4	113.1	126.3	107.5
UAE	756.5	894.2	730.3	672.5	268.7	194.9	105.7	104.1
Bahrain	132.8	149.3	148.5	140.3	104.1	101.0	86.9	78.9
Saudi Arabia	87.0	120.8	184.7	253.6	103.4	84.6	81.8	75.0
Oman	16.1	20.1	60.8	53.2	67.1	63.7	64.7	59.6
Lebanon	64.1	52.5	47.8	47.1	20.5	31.6	43.2	25.2
Iraq	26.1	43.6	41.3	61.9	18.9	7.5	16.9	16.5
Jordan	23.7	27.6	21.2	32.3	21.7	18.9	22.6	15.8
Palestine	-	-	6.8	9.5	7.7	9.0	9.9	9.1
Syria	12.2	12.7	11.1	16.7	11.6	11.4	12.0	5.7
Yemen	10.8	9.5	9.0	13.7	10.8	10.9	11.3	4.6
<b>Median</b>	<b>64.1</b>	<b>52.5</b>	<b>54.3</b>	<b>57.6</b>	<b>44.4</b>	<b>47.6</b>	<b>54.0</b>	<b>42.4</b>
India	4.9	4.9	4.2	3.7	4.1	4.9	7.8	10.6
China	4.6	5.3	5.1	5.8	7.0	9.6	19.6	25.8

Note: See Table 1.

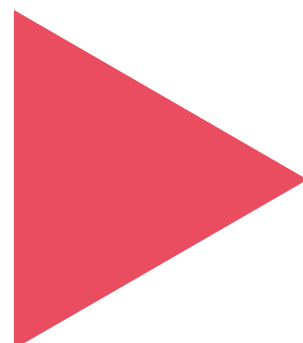
Source: The Conference Board Total Economy Database, April 2021.

**Table 3: Oil share in GDP**

	1980	1990	2000	2010	2019
Qatar	71.5	47.9	38.9	28.4	16.9
Kuwait	68.6	55.3	51.3	48.8	42.1
UAE	46.5	36.2	21.1	21.7	16.2
Bahrain	18.6	8.6	3.9	3.3	2.2
Saudi Arabia	71.4	47.3	41.3	41.3	24.2
Oman	56.5	51.6	45.5	37.2	24.9
Iraq	55.8	9.8	n.a	42.4	39.6
Syria	14.9	27.4	25.2	n.a	n.a
Yemen	n.a	29.7	42.2	22.2	5.3

Note: n.a. not available.

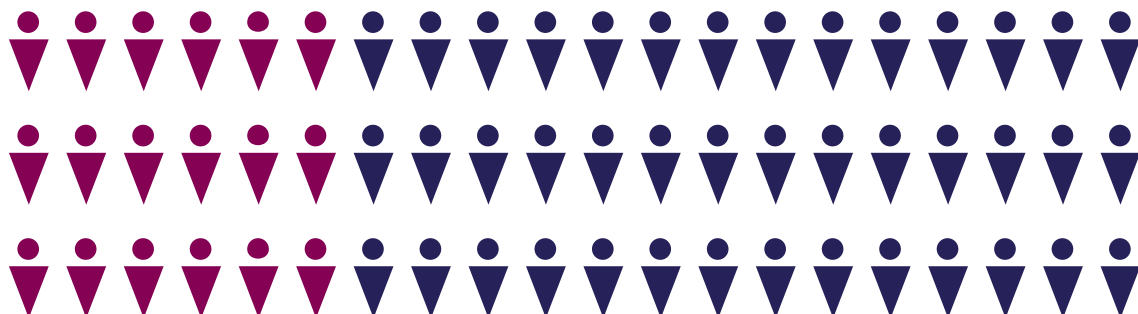
Source: WDI; The Conference Board Total Economy Database, April 2021.



levels, Iraq and Jordan in the range of 15-16 percent, and the remaining three below 10 percent of the US level of income. Yemen and Syria, in particular, have very low-income levels at about 5 percent of the US. These poorer countries in the region, most of which were also exposed to domestic unrest and conflicts, suffered from a low rate of infrastructure investments and weak capital markets, which constrained their ability to expand investment, jobs and incomes. Importantly, the relative income levels are lower today compared to 1950 in all countries except Palestine.

However, the intensity of decline was relatively lower than most GCC economies. Yet, it is to be noted that while the GCC economies' income levels fell from substantially higher levels, countries in the other Arab economies group fell from already abysmal relative levels. For instance, the income levels in Iraq and Jordan fell from about a quarter of the US levels in 1950 to about 16 percent in 2020, Lebanon from close to 65 percent to a quarter, and Syria and Yemen from 10-12 percent to 6-5 percent. Clearly, the erosion in relative income levels is across the board in the region, and while the fall in the GCC economies is largely an inevitable outcome as they move from resource-dependent economies to more diversified economies, the fall in the other Arab economies is more alarming. Indeed, some of the countries in this group, such as Yemen and Syria, are undergoing severe civil unrest, which contributes to their recent income decline, while others like Iraq and Palestine might have their setbacks from long-standing political and economic turmoil or unstable economic and political contexts.

Moreover, it is evident from the growth trends in the Arab economies that the growth rates, particularly in the GCC economies, have been quite volatile over the years. It appears that the reliance of their growth on global oil price and oil export has exerted extreme volatility in their growth rates, compared to other countries or the global economy (see Table 4), raising questions about the sustainability of these high-income levels. Not only the volatility remains high, but it has also increased in most countries in recent periods.



**Table 4: Volatility in GDP growth rate, Arab economies since 1970**

	1971-1992		1993-2019	
	SD	Global Rank	SD	Global Rank
<b>GCC</b>				
Bahrain	2.7	106.0	3.9	75.0
Kuwait	8.7	6.0	14.5	2.0
Oman	12.5	3.0	13.2	3.0
Qatar	7.4	11.0	8.2	7.0
Saudi Arabia	4.3	52.0	8.0	10.0
UAE	4.2	56.0	7.9	11.0
<b>Other Arab economies</b>	13.3	2.0	12.2	4.0
Iraq	5.9	17.0	7.3	13.0
Jordan	5.9	18.0	8.5	5.0
Lebanon	6.5	13.0	7.4	12.0
Palestine	8.3	8.0	8.1	8.0
Syria	5.2	27.0	4.1	66.0
Yemen				
World	2.1		2.1	
Unweighted global average	4.3		4.6	

Note: SD= standard deviation within the given country over the specified time period. Rank is computed in 133 countries in the TED database.  
Source: Author calculations using data from The Conference Board Total Economy Database.

In addition to the structural problems and the resource curse, the region in general also suffers from a number of internal and external challenges to sustain high-income levels, and foster economic growth. While the oil-rich economies are directly exposed to external trends in oil demand, the changes in growth dynamics in China, one of the highest oil consumers, and the rising share of alternative types of (non-fossil) energy, some of the other Arab states are undergoing civil unrest and conflicts. The rising labour market challenges in the Arab countries, with the entry of large pool of local aspirants, make the growth ambitions even more complex, as the labour market in the region is extremely segmented. Historically, imported workers largely supported the domestic labour demand in the GCC markets since the discovery of oil. In the early phases of oil discovery, a major portion of the migrant workers in the GCC's oil-rich economies were from other Arab nations. However, after the oil price rise in the mid-1970s, there has been a rise in the migrant inflow from Asian countries, which was initially driven by the urgency to meet the rapidly rising labour needs amid increasing development projects in the region. In the subsequent periods, however, there has also been a significant shift of migrant preferences towards Asians, apparently driven by several political and social reasons (Kapiszewski, 2017).

Evidence suggests that expatriate workers in the GCC are not only cheap but are also more productive than the native workers, which helps private sector firms lower the unit labour cost of production, helping them stay competitive in the market (Al-Mejren and Erumban, 2021). However, most economies are trying to pursue job nationalization to ensure jobs for locals, making the growth situation more complex for the private sector. The dynamics in the labour markets, the over-reliance on oil revenues, and the recent efforts to diversify the economy all have essential implications for worker productivity, an important indicator of welfare and competitiveness. The next section examines the relationship between employment labour productivity and GDP growth in the region.

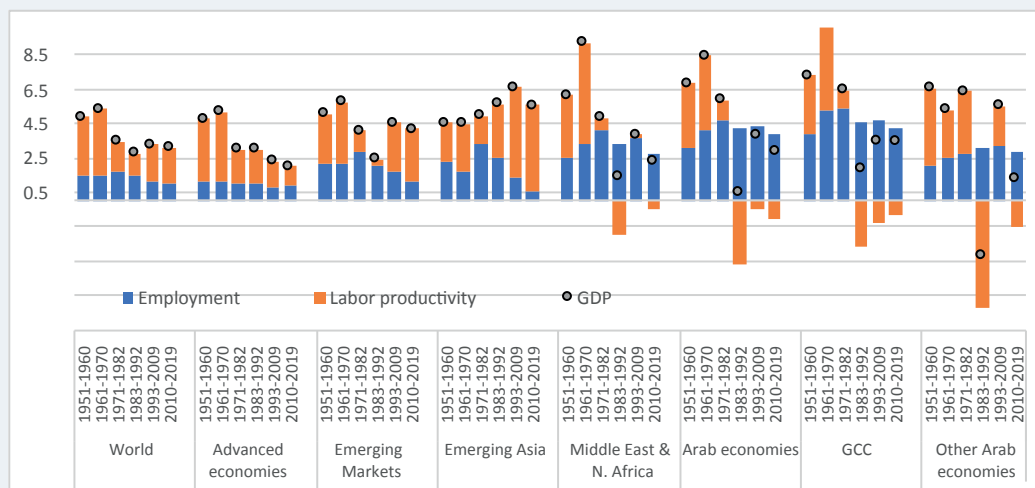
## ► 1.3 Productivity or employment: What drives growth in the Arab economies?

### ► 1.3.1. Breaking up GDP growth into employment and productivity growth

A country's GDP can be increased by adding more workers (or by increasing the working hours) or by raising the productivity of workers (the volume of output an average worker produces per working hour) as depicted in Appendix Figure 3. The latter can be raised by increased use of appropriate technologies, improved worker skills, or improved market or public sector environment, among others. If growth relies primarily on job creation while compromising heavily on productivity, it can affect the quality of work, competitiveness of the economy, and welfare loss. Instead, if a country's GDP expands with productive job creation, its growth path will be more sustainable and welfare-enhancing. Given that the growth of GDP and per capita income in the Arab economies have seen some volatility, and the labour market challenges in these economies, as documented by the previous literature, are mounting (Hertog, 2019; Al-Mejren and Erumban, 2021), it is helpful to examine the relative roles of labour productivity and job creation in creating economic growth in the region.

There is a significant difference between the rest of the world and the Arab economies regarding the composition of GDP growth in terms of labour productivity and employment. In Figure 2, we provide the region's GDP growth, broken up into the contribution from employment and labour productivity, compared to other major regions of the global economy.

► Figure 2: Contribution of labour productivity growth and employment growth to GDP growth, by region, 1950-2019



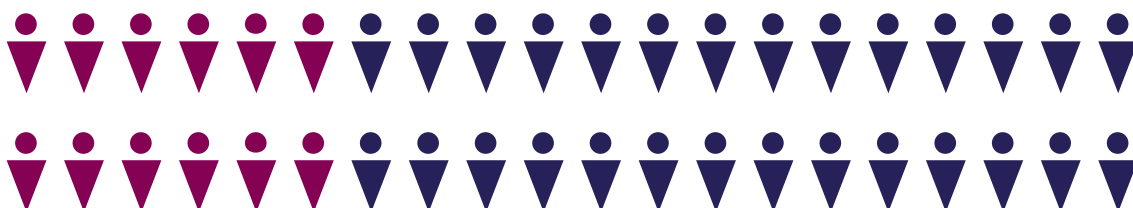
Note: Growth rates are in log changes, so that the sum of employment and productivity growth adds up to GDP growth. The MENA includes all the Arab economies plus Iran, and North African economies (Algeria, Egypt, Libya, Morocco, Sudan, and Tunisia). Arab economies is a sub-group of MENA, consisting of GCC and other Arab economies – the last two regions on the Chart. For other notes, see Figure 1.

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

While growth has been largely driven by improving productivity in both the emerging and advanced economies in the last seven decades, the Arab economies have not followed that model. Between 50 to 70 percent of GDP growth in the global economy, advanced world, and emerging markets are due to improvement in worker productivity. Asian economies, in particular, have had an important role in driving the productivity surge in emerging markets since the 1990s. The 1990s featured a rapid pace of globalization and the integration of many large emerging markets like China and India in the global economy. This, along with the diffusion of information and communication technologies created growth opportunities for many emerging markets. Asian economies, in particular, seem to have benefitted relatively more from these dynamics.

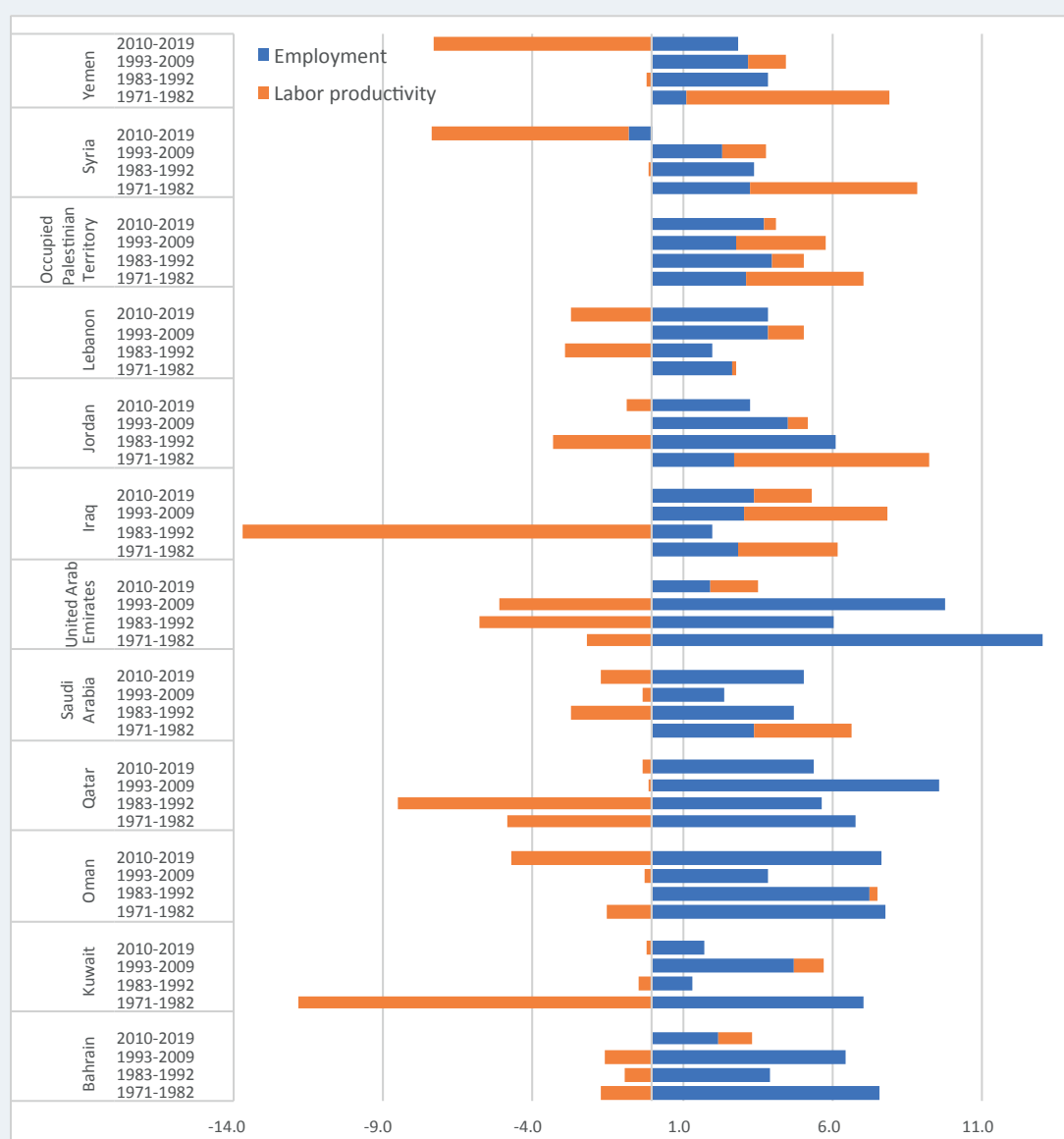
In contrast, the Middle East & North Africa (MENA) region witnessed a fall in the relative role of labour productivity since the 1970s, compared to the previous two decades. Even worse, productivity growth contracted in the 1980s through 1990s and since 2010. There were only moderate improvements in productivity in the 1990s until pre-crisis years of the 2000s. Almost all of the GDP growth in the region since the 1970s, on average, was driven by adding more workers to the labour force. Within the MENA region, Arab economies have fared extremely poorly, with productivity growth remaining a panacea since the 1980s. Although half of the region's GDP growth came from improved worker productivity in the 1950s and 1960s that dropped to less than 10 percent in the 1970s, and started eroding continuously since the 1980s. Productivity growth has not been positive in any of the three time periods we have considered since 1980. This was primarily driven by the poor performance of the GCC, where labour productivity growth was positive only during the 1950s and 1960s. Among other Arab economies, productivity growth contributed positively except during 1983-1992, and during the most recent period, 2010-2019. Overall, productivity did not contribute positively to growth in the Arab economies for almost four decades except 1993-2009 (in other Arab countries group) when they benefited from globalization and catch up.

The split between labour productivity and employment growth for individual Arab states is provided in Figure 3. The lower part of the Figure, where the GCC economies are portrayed, shows negative productivity growth across the board, except for the UAE and Bahrain in the most recent period, Saudi Arabia in the 1970s, and Kuwait in its post-war reconstruction period. In the upper section, where we have the other Arab economies, the picture is somewhat mixed. As one would expect, Yemen and Syria have had an extreme fall in their productivity in the recent period. Also, Lebanon and Jordan have lately shown productivity growth deceleration. The crisis in Syria is likely to have an impact on the economic dynamics in these economies. Historically, most economies have shown positive productivity growth in the other periods, although at varying rates, except for the 1983-1992 period in Iraq, Jordan, and Lebanon. This period included the years of the Iraq war, severe economic destruction in the country, and substantial instability in the region. The Other Arab economies in general and Iraq, in particular, have seen significant recovery effects since 1992.





► **Figure 3: Contribution of labour productivity growth and employment growth to, by country 1950-2019**



Note: see Figure 1 and Figure 2.

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

**Table 5: Growth rates of labour productivity in Arab economies, and their contribution to regional productivity growth, 1950-2019**

	1951-1960	1961-1970	1971-1982	1983-1992	1993-2009	2010-2019
<b>Labour productivity growth</b>				-		
<b>Arab economies</b>	<b>3.78</b>	<b>4.30</b>	<b>1.22</b>	<b>3.74</b>	<b>-0.48</b>	<b>-1.00</b>
GCC	3.45	5.10	1.08	-2.69	-1.29	-0.83
Bahrain	3.13	3.45	-1.76	-0.93	-1.57	1.11
Kuwait	-1.05	2.99	-11.78	-0.48	0.96	-0.22
Oman	4.46	14.44	-1.55	0.23	-0.28	-4.73
Qatar	-0.86	-1.85	-4.84	-8.51	-0.12	-0.36
Saudi Arabia	5.47	7.36	3.27	-2.69	-0.30	-1.70
UAE	3.53	-3.57	-2.17	-5.77	-5.12	1.59
<b>Other Arab Economies</b>	4.50	2.74	3.60	-6.19	2.34	-1.54
Iraq	7.54	3.05	3.28	-13.66	4.75	1.89
Jordan	3.31	0.54	6.52	-3.34	0.67	-0.88
Lebanon	1.10	2.46	0.07	-2.91	1.20	-2.74
Palestine	-	-	3.93	1.09	2.95	0.39
Syria	2.95	2.68	5.54	-0.10	1.49	-6.57
Yemen	0.70	2.84	6.78	-0.19	1.24	-7.30
<b>Contribution to labour productivity growth</b>						
<b>Arab economies</b>	<b>3.78</b>	<b>4.30</b>	<b>1.22</b>	<b>-3.74</b>	<b>-0.48</b>	<b>-1.00</b>
GCC	2.13	3.41	0.37	-2.10	-1.02	-0.66
Bahrain	0.05	0.05	-0.02	-0.02	-0.03	0.02
Kuwait	-0.14	0.43	-0.83	-0.12	0.04	-0.01
Oman	0.04	0.17	-0.02	0.01	-0.01	-0.17
Qatar	-0.04	-0.08	-0.15	-0.23	-0.03	-0.04
Saudi Arabia	2.01	3.09	1.61	-0.90	-0.13	-0.73
UAE	0.21	-0.24	-0.22	-0.84	-0.88	0.26
<b>Other Arab Economies</b>	1.66	0.89	0.85	-1.64	0.55	-0.34
Iraq	1.35	0.57	0.43	-1.47	0.34	0.18
Jordan	0.05	0.01	0.07	-0.08	0.02	-0.02
Lebanon	0.08	0.13	0.02	-0.09	0.03	-0.08
Palestine	-	-	0.01	0.01	0.02	0.00
Syria	0.15	0.10	0.15	0.00	0.07	-0.20
Yemen	0.03	0.07	0.17	-0.01	0.06	-0.22

Note: The contribution of individual countries are obtained by multiplying the individual country growth rates with their relative size in nominal GDP, all in 2020 PPP.

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

With their relatively larger share in the region's GDP, the decline in productivity growth in the GCC economies has a significant role in pulling down aggregate productivity growth in the region. Table 5, where labour productivity growth in individual economies for each of the 6 periods, along with their contribution to the region's productivity growth, is provided, clearly shows this dominant role of the GCC countries. During the first two sub-periods since the 1950s, when aggregate productivity growth was positive, 55 to 80 percent of the positive growth was due to the GCC. During the 1971-1982 period, when aggregate productivity growth fell drastically, yet remained positive, it was more of another Arab economies story, as the only GCC country where productivity growth was positive was Saudi Arabia, which consisted of less than 1/3rd of the total productivity growth of the region. In the subsequent periods of productivity failure, more than half of it was due to the GCC, except in the 1993-2009 period, where the GCC's productivity decline was more intense than the region's aggregate.

We learn from these trends the weakness of the Arab economies, particularly the oil-rich GCC economies, in translating their fortunes into productive jobs, ensuring the sustainability of their growth path. This was partly because of the limited potential for technological change and productivity in the highly capital-intensive oil sector, which creates only a very small portion of the total employment. However, these nations have not been able to tap the potential in the non-oil sectors in boosting productivity growth, and their failure to foster a solid and competitive private sector and an attractive investment climate conducive to private sector investment seem to have adversely affected their productivity performance. A segmented labour market with cheap expatriate workers also facilitated employment-driven growth, while productivity had a lower priority. The native population engaged in highly paid government jobs (Baldwin-Edwards 2011; Al-Mejren and Erumban, 2021), and the private sector economic activity relied primarily on the expatriate workers. In the next section we examine whether these extreme focus on employment, exploiting the availability of cheap foreign workers, have made these countries compromise on productivity.

### 1.3.2. The trade-off between jobs and productivity

As noted earlier, the relationship of GDP and per capita GDP with labour productivity depends on how changes in workforce participation and population coincide (Marattin and Salotti, 2011). Given that per capita income is the ratio of total GDP to the total population, growth in per capita income is the sum of the changes in the proportion of working population (or the changes in participation) and changes in output per worker (or labour productivity).

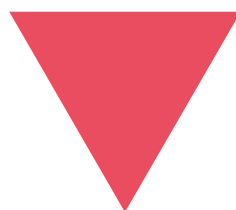


Table 6: Employment to population ratio (%), Arab economies							
	1951	1961	1971	1983	1993	2010	2019
<b>GCC economies</b>							
Bahrain	27%	26%	25%	36%	37%	51%	51%
Kuwait	37%	39%	31%	38%	46%	57%	56%
Oman	17%	16%	16%	28%	35%	46%	75%
Qatar	38%	45%	53%	53%	51%	73%	84%
Saudi Arabia	39%	37%	37%	31%	31%	33%	40%
UAE	26%	28%	43%	49%	52%	75%	68%
<b>Other Arab economies</b>							
Iraq	27%	25%	24%	22%	22%	23%	24%
Jordan	20%	20%	19%	17%	20%	25%	21%
Lebanon	24%	21%	20%	22%	26%	39%	43%
Syria	32%	30%	27%	26%	27%	24%	26%
Palestine			18%	18%	19%	18%	20%

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

Labour force participation rate, measured as employment to population ratio, has increased in most Arab economies, except Syria, implying faster growth in employment than population (Table 6). A number of factors, including the rising female participation, increases in the youth population, and the role of migrant workers, play a role in the surge in participation rates. In the strict neoclassical sense, rising participation can lower capital intensity and labour productivity due to decreasing returns to labour (Choudhry and van Ark, 2010). Increasing participation can also make it hard to embrace new technologies to foster productivity, a likely event in the Arab countries, especially in the GCC, given the availability of cheap expatriate workers. However, if the rise in participation is driven by the demand for workers, reflecting rising opportunities in the economy, it is unlikely to harm productivity. Therefore, an important question is whether the rise in participation rates is accompanied by growth in productivity or whether it happens at the cost of productivity losses. In other words, given that much of the growth in the region is driven by employment creation rather than productivity, whether the region's rising participation further leads to a trade-off between productivity growth and employment growth, and how the region fare compared with other major regions of the world.

This section examines the trade-off between labour productivity growth and labour force participation growth in the Arab economies compared to the rest of the world, using a panel data regression for the global economy. To estimate the trade-off, we use a modified version of the methodology suggested by Choudhry and van Ark (2010). We estimate the following regression equation using a panel of countries and years:

where  $y$  is labour productivity,  $ep$  is employment to population ratio,  $Reg.D$  is the regional dummies for advanced economies, GCC, and other Arab economies (so that the reference group is all

$$\Delta \ln y_{i,t} = \alpha + \beta \cdot \Delta \ln ep_{i,t} + \sum_{i=1}^3 \gamma_i \cdot Reg.D_i + \sum_{i=1}^3 \theta_i \cdot ep_{i,t} \cdot Reg.D_i + e$$

other emerging market economies). The model is estimated for the entire time period 1970-2019, and further for four sub-periods, 1970-1982, 1983-1992, 1993-2009, and 2010-2019. The interaction terms in the above equation help us understand the differing impact of participation rate on productivity growth in different regions. The model is estimated using panel data regression, as well as country clustered OLS. The results are provided in Tables 7 to 9. All panel data regression models are estimated using random-effects unless the Hausman test rejects the presence of random effects.

The baseline regression results presented in Table 7 suggest the presence of a significant trade-off in the global sample, and more importantly, a rise in the trade-off in the most recent period, compared to the 1983-2009 period. In Table 8, when we include the regional dummies and interaction terms, the trade-off coefficient shows a faster rise in the reference group. In this table, for the periods 1970-1982, 1983-1992, and 1993-2009, we also estimate the model with fixed effects as well, but the results are mostly similar. The interesting results are when we look at the regional dummies and their interaction with participation rates.

**Table 7: Panel data regression results (random effects) - dependent variable: labour productivity growth**

	1970-2019	1970-1982	1983-1992	1993-2009	2010-2019
$\Delta \ln ep$	-.496*** (0.02)	-.625*** (0.07)	-.432*** (0.05)	-.469*** (0.03)	-.715*** (0.08)
Constant	1.436*** (0.14)	1.473*** (0.24)	0.064 (0.26)	2.129*** (0.17)	1.737*** (0.23)
Observations	6517	1596	1330	2261	1330
R2 (within)	0.06	0.04	0.06	0.10	0.06
R2 (between)	0.03	0.07	0.01	0.10	0.12
R2 (overall)	0.06	0.05	0.05	0.10	0.07
Chi2	436.44	77.18	80.51	248.73	87.74
Hausman stat.	0.051	0.397	1.943	2.366	1.545

Standard errors are in parentheses.

\*\*\* p<.01, \*\* p<.05, \* p<.1.

For the advanced countries, the interaction term has a positive coefficient, which is larger than the coefficient of the participation rate in general, except during the 1970-1982 period and 2010-2019. There is no evidence of a strong negative trade-off between labour productivity growth and participation rate in the advanced economies during the two sub-periods between 1983 and 2009, which also includes the period of advancement in ICT and associated productivity gain in these economies in the 1990s. However, the trade-off has reversed after the global financial crisis.

**Table 8: Panel data regression results (random effects & fixed effects) - dependent variable: labour productivity growth**

	1970-2019	1970-1982	1983-1992		1993-2009		2010-2019
	RE	RE	RE	FE	RE	FE	RE
$\Delta \ln ep$	-.549*** (0.03)	-.692*** (0.10)	-.493*** (0.05)	-.5*** (0.06)	-.519*** (0.03)	-.52*** (0.03)	-.824*** (0.10)
<b>Regional dummies</b>							
Advanced	.497* (0.28)	1.48*** (0.47)	1.777*** (0.51)		-0.154 (0.38)		-.824* (0.48)
GCC	-2.462*** (0.61)	-3.346*** (1.03)	-2.14* (1.12)		-2.522*** (0.84)		-1.584 (1.07)
Other Arab	-0.584 (0.61)	2.397** (1.08)	-3.043** (1.18)		0.116 (0.84)		-4.509*** (1.04)
<b>Interaction terms (regional dummies and <math>\ln ep</math>)</b>							
Advanced	.561*** (0.07)	.549*** (0.21)	.669*** (0.14)	.554*** (0.15)	.564*** (0.10)	.613*** (0.10)	.594*** (0.21)
GCC	-0.075 (0.07)	0.086 (0.16)	-0.13 (0.16)	-0.212 (0.17)	-0.032 (0.10)	-0.033 (0.10)	-0.073 (0.22)
Other Arab	-0.088 (0.13)	-1.788** (0.91)	0.696 (0.76)	0.084 (0.83)	-0.004 (0.14)	-0.006 (0.15)	0.235 (0.26)
Constant	1.389*** -0.16	.987*** -0.27	-0.25 -0.29	0.081 -0.18	2.25*** -0.22	2.09*** -0.10	2.216*** -0.27
Observations	6517	1596	1330	1330	2261	2261	1330
R2 (within)	0.07	0.05	0.08	0.08	0.12	0.12	0.06
R2 (between)	0.22	0.29	0.21	0.04	0.13	0.06	0.26
R2 (overall)	0.08	0.10	0.10	0.07	0.12	0.11	0.10
Chi2	536.85	127.32	132.26		297.02		120.75
Hausman stat.	4.045	0.322	24.57***		7.703*		3.317

Note: RE stands for random effects, and FE stands for fixed effects. Standard errors are in parentheses; \*\*\* p<.01, \*\* p<.05, \* p<.1.

In the case of the GCC, the coefficient of the interaction term is negative except for 1970-1982, during which it was positive but substantially smaller than the absolute value of the negative participation coefficient. Thus, taking the main effect of participation and the interaction effects together, the productivity-participation trade-off was negative throughout the entire period. What is even more important to note is that it has worsened in the most recent period, even worse than the rest of the emerging markets group. The trade-off remains negative in the other Arab economies group but less pronounced than the GCC and worse than the advanced economies. It is also relatively lower than the reference group except for the 1970-1982 period.

**Table 9: Clustered OLS estimates with region dummies - dependent variable: labour productivity growth**

	1970-2019	1970-1982	1983-1992	1993-2009	2010-2019
$\Delta \ln ep$	-.541*** (0.05)	-.677*** (0.12)	-.489*** (0.18)	-.518*** (0.04)	-.856*** (0.09)
<b>Regional dummies</b>					
Advanced	.496** (0.23)	1.483*** (0.38)	1.78*** (0.42)	-0.129 (0.33)	-.859** (0.37)
GCC	-2.479*** (0.60)	-3.343* (1.92)	-2.2 (1.60)	-2.524** (0.97)	-1.585*** (0.42)
Other Arab	-0.581 (0.35)	2.37*** (0.82)	-3.209 (2.13)	0.115 (0.60)	-4.527*** (1.36)
<b>Interaction terms (regional dummies <math>\times \Delta \ln ep</math>)</b>					
Advanced	..564*** (0.09)	.544*** (0.18)	.734*** (0.22)	.487*** (0.12)	.667*** (0.12)
GCC	-0.068 (0.08)	0.074 (0.19)	-0.075 (0.20)	-0.032 (0.14)	-0.049 (0.12)
Other Arab	-0.1 (0.20)	-1.888** (0.73)	1.004*** (0.32)	-0.001 (0.14)	0.28 (0.33)
Constant	1.387*** (0.19)	.98*** (0.30)	-0.25 (0.31)	2.25*** (0.25)	2.228*** (0.32)
Observations	6517	1596	1330	2261	1330
R-squared	0.08	0.10	0.10	0.12	0.10
Adj R2	0.08	0.09	0.10	0.12	0.09
F-stat	69.85	27.31	14.70	42.34	51.26

Standard errors are in parentheses.

\*\*\* p&lt;.01, \*\* p&lt;.05, \* p&lt;.1.

The clustered OLS estimates with region dummies, presented in Table 9, echo similar conclusions. **It appears that the Arab economies' excessive reliance on job-led growth costs significant productivity losses in the region.** This has been particularly more pronounced in the oil-rich GCC economies, while the other Arab groups also tend to trade jobs with productivity at a lesser pace. Understanding this trade-off will be more insightful if the quality aspects of labour productivity, for instance, the differences in the skill levels of workers, are taken into account. Such an attempt requires data on the skill distribution of workers and is not considered in the present analysis. In section 1.5, where we examine the growth accounting contributions, we consider labour quality and its contribution to labour productivity growth.



### 1.3.3. Productivity in the Arab economies: are they diverging from the global frontiers?

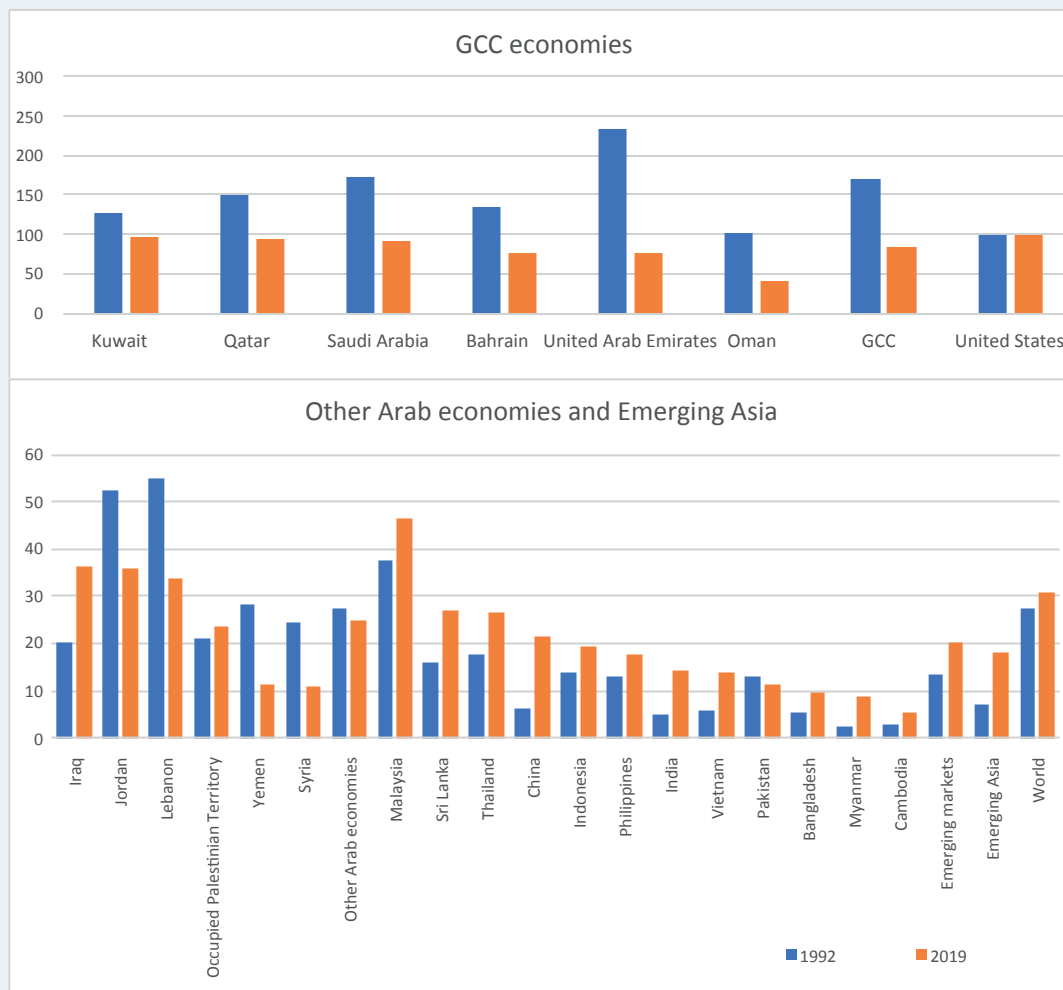
How does the productivity in the Arab countries compare with other countries, and how does their weak productivity performance affect their relative productivity position? The question of whether the income and productivity gap between countries decline over the years causing a convergence of income and productivity is quite popular in the economics literature (e.g., Baumol, 1986; Barro and Sala-i-Martin, 1991, 1992; Mankiw et al., 1992; Bernard and Jones, 1996; Sorensen and Schjerning, 2003). The basic premise of the convergence hypothesis is the long run tendency of equalization of income and productivity levels (Abramovitz, 1986). There are two main views on convergence – the neoclassical view, pioneered by Solow (1956), emphasizing the role of capital deepening and diminishing returns, and the technology gap view, which stresses the importance of the level of technological development in a country (see Fagerberg, 1987).

Two dominant empirical approaches to convergence are *absolute convergence* and *conditional convergence*. The former is based on the premise that poorer countries will grow faster than their richer counterparts with similar saving rates, leading to a negative correlation between initial income or productivity levels and the subsequent growth rates within a country (Islam, 2003). The *conditional convergence*, which is more likely to happen among countries with comparable institutional setting – often called a *conditional convergence* –, is thus a measure of poorer countries catching up with the richer ones. It, however, does not necessarily imply a reduction in the dispersion of the cross-country distribution of productivity (Barro and Sala-i-Martin, 1991; Quah 1993), which is what the *absolute convergence* tries to achieve. The implied assumption is that the standard deviation of log of GDP or productivity declines as production techniques become similar.<sup>27</sup> Although the question of the reliability of the underlying assumptions of convergence is largely unsettled, recent developments in the literature, such as the notion of convergence clubs, provides more insightful ways to approach the question (Phillips and Sul, 2007 and 2009). In this section, we merely compare the productivity levels across the Arab countries with some global frontiers and examine the simple standard deviation across the countries to see whether the cross-country deviation has been falling - or the so-called convergence is occurring.

In Figure 4, we plot the relative levels of labour productivity in the Arab economies for 1992 and 2019. In the upper panel, we have the labour productivity levels relative to the United States in the GCC economies. The lower panel is the same for other Arab economies along with select emerging economies and global average. We keep the GCC economies separate, as these countries have very high labour productivity levels, due to the persistence of oil revenues. Clearly, the productivity levels in most GCC countries are far above any of the emerging Asian economies. During the last three decades the relative levels of labour productivity has fallen drastically in all the GCC economies, even in countries like Kuwait where productivity growth has been positive in absolute terms, as the US productivity grew faster than the GCC countries.

<sup>27</sup> It may be noted that the previous literature has shown that a convergence is a sufficient condition for *absolute convergence* (Quah, 1993; Lichtenberg, 1994).

► Figure 4: Relative levels of labour productivity, 1992-2019



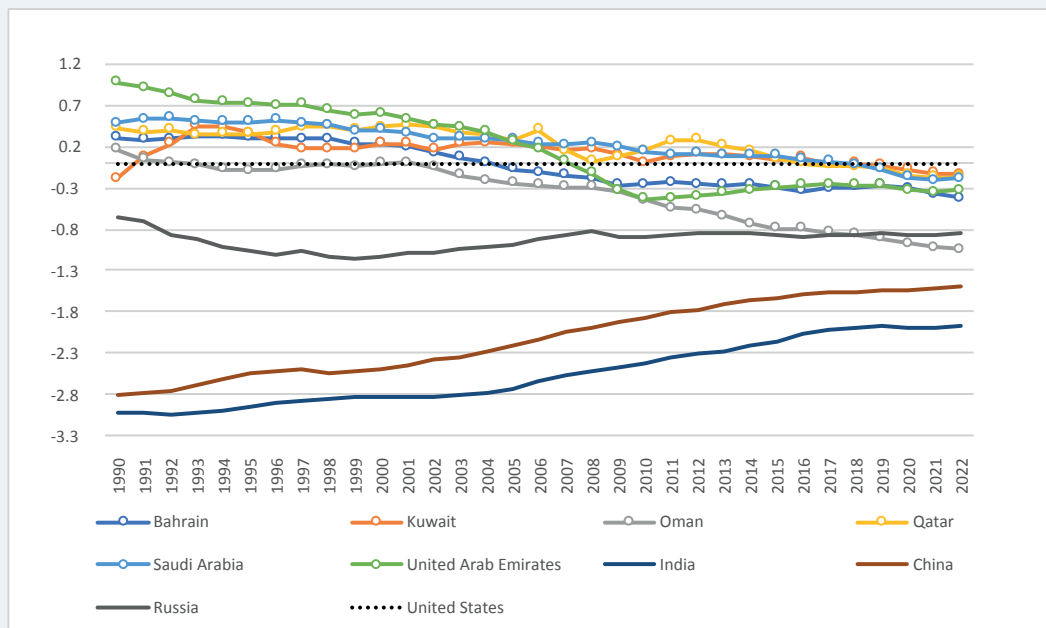
Note: Productivity levels are calculated in purchasing power parity terms for individual economies, and are expressed as a percentage of productivity level in the United States.

Source: The Conference Board Total Economy Database, April 2021.

From the lower panel, it is evident that only Iraq and Palestine had improved their relative productivity levels, with relatively faster growth than the US during this period, while the relative levels declined in all other countries. In particular, Syria and Yemen had low productivity levels compared to other Arab economies. Overall, the GCC's productivity levels fell from 170 percent in the US to 83 percent in about 30 years. They dropped from 27 to 25 per cent in the other Arab group. This fall in relative productivity in the region happens when the global economy has improved its relative productivity levels 27 to 31 percent, with emerging Asia making a substantial catch-up from just seven per cent of the US to 18 per

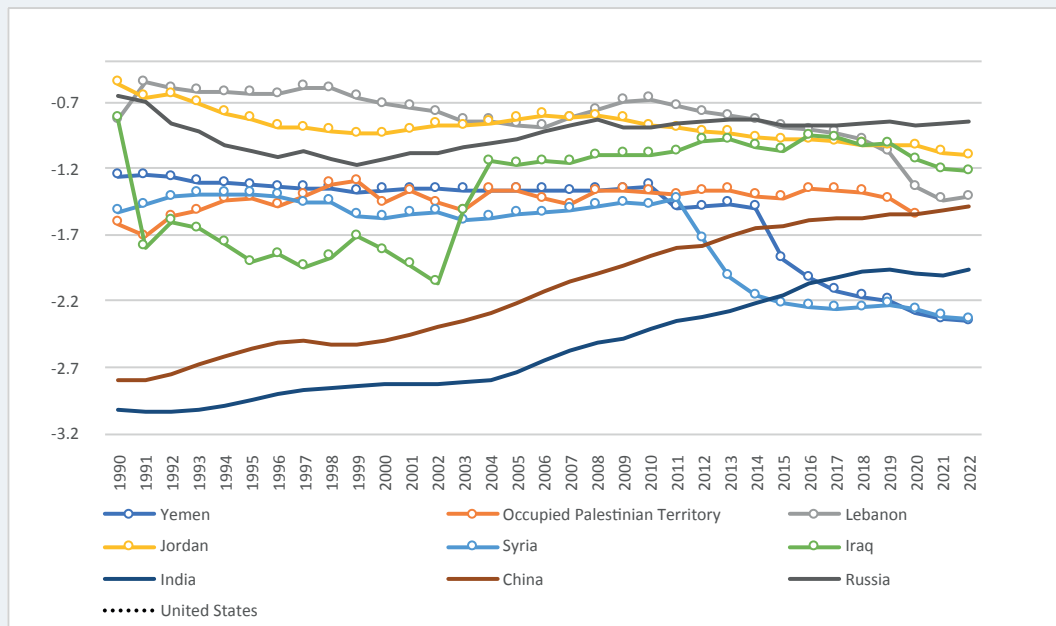
cent. China is a crucial factor in lowering the productivity void between emerging Asia and the global frontier. Yet, almost all countries in the Asian region had also experienced a substantial productivity upgrade during the last three decades. It is the opposite dynamics that we find in the Arab economies. Although the relative levels of other Arab economies are still higher than most Asian economies, their distance to the frontier is still quite large, and the weak productivity growth in the region can only expand the gap further. In the GCC, the fall is not solely due to the oil sector. The region's efforts to diversify the economy have been challenging due to the absence of a solid private sector, and more importantly, the lack of a competitive labour market (See Hertog, 2012). Earlier studies have observed that the productivity slowdown persists in general, even if one excludes the oil sector (van Ark et al., 2019).

► Figure 5: log levels of labour productivity in the GCC relative to the United States



Source: The Conference Board Total Economy Database, April 2021.

► Figure 6: log levels of labour productivity in other Arab economies relative to the United States



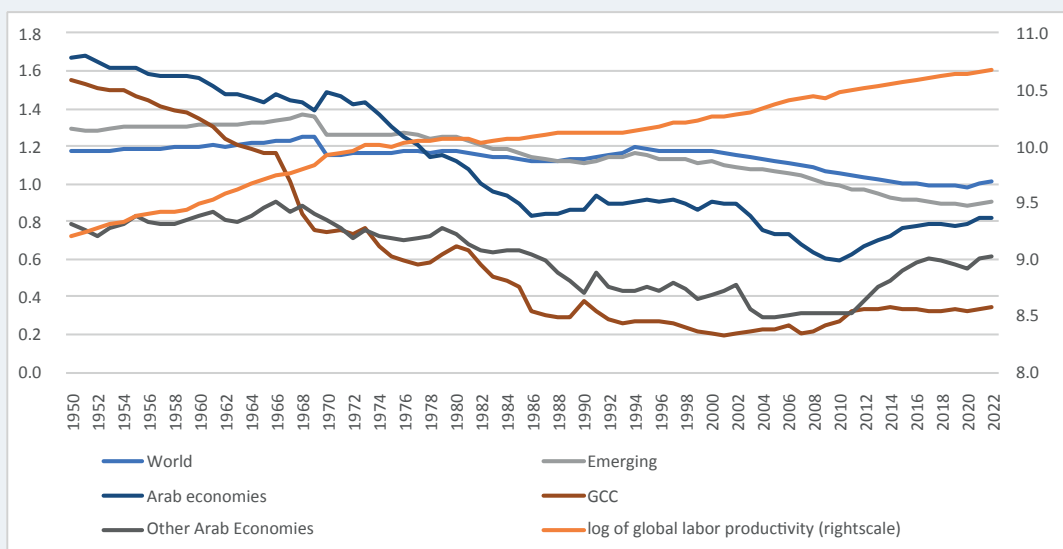
Source: The Conference Board Total Economy Database, April 2021.

The picture becomes even clearer when we look at Figures 5 and 6, where we plot the annual productivity levels in individual economies relative to the United States over the years 1990-2020. Considering the United States as the global productivity frontier, which witnesses a continued expansion in productivity, although the growth rate has eased lately, all the GCC economies show a consistent fall, with Oman showing the most severe decline. In contrast, we also see that other major emerging markets, India and China, consistently climb up their productivity ladder. In the other Arab group, the picture is more mixed. Most countries show a stagnant level of productivity relative to the US, suggesting a continued failure to catch up with the frontier, the region's two troubled economies Syria and Yemen, have lost their productivity substantially in recent years, since 2011.

Despite the slowing in the pace of expansion since the 2000s, and especially after the global financial crisis (see Erumban and van Ark, 2018), productivity levels in the global economy continue to rise at a slow rate. Globally, we observe a fall in the standard deviation of productivity across countries, indicating a decline in the differences in productivity between countries, especially since the 1990s (Figure 7). In the most recent years, however, it does show a reversal in that trend. Considering the pace of global productivity expansion, the fall in the deviation measure does not suggest strong evidence of global productivity convergence. Looking at the standard deviation across countries in the emerging markets, we find a similar trend, which shows productivity differences between emerging markets are slowly falling again.

**On the other hand, the Arab economies - both within the GCC and other Arab groups- see a rise in the standard deviation, indicating rising productivity differences across countries within the region in recent years.** For instance, the GCC countries do not show any converging trend since the 1990s, and we even see a rise in the standard deviation in the immediate years after the global financial crisis. In the other Arab economies, the divergence has been even more rapid since 2010, suggesting that the slow and varying pace of productivity growth in different economies widens the productivity gap between them.

► **Figure 7: Standard deviation of log labour productivity across countries, by region**



Note: Each line is the standard deviation across countries within that region. For instance, GCC is the standard deviation across the 6 GCC economies over the years, 1950-2020, and the World is the standard deviation across 134 countries.

Source: Author calculations using The Conference Board Total Economy Database, April 2021.

Thus, **we see that the Arab states lag substantially behind the global frontiers in advancing technology and aggregate productivity.** As the GCC countries are diversifying to non-oil sectors, they also face an erosion in their aggregate productivity levels, which if continued can lead to creating a productivity gap with frontier countries. In the other Arab economies, productivity catch-up has been relatively slow. In general, the productivity gap between several emerging markets is falling, but that does not appear to be the case among the GCC and other Arab economies. While the productivity gap between the GCC economies remains rather unchanged in recent years, especially since 2010, albeit with a small standard deviation, it seems to have arisen in the other Arab economies. The weak productivity growth, rising participation, and the challenges to economic diversification in the region seem to make its catch-up with the global frontier hard and worsen the regional disparity in productivity across countries.

## ► 1.4 Structure of the Arab economies, structural change and aggregate labour productivity

### ► 1.4.1. Changes in the structure of Arab economies

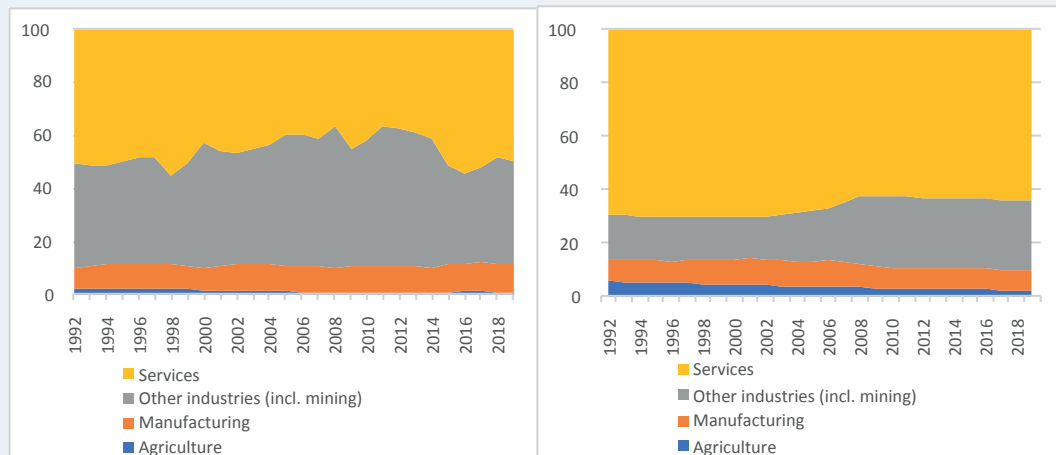
The trends in productivity traced in the previous sections are at the aggregate level, which conceals several sectoral heterogeneities. The aggregate productivity trends can be affected by sectoral dynamics, which is also at the core of the ILO productivity ecosystem. In this regard, structural change or the relocation of workers from low productivity sectors to high productivity sectors of the economy is an essential feature of the process of economic development (Lewis, 1954; Kuznets, 1966; Chenery & Syrquin, 1975; Denison, 1967). The nature and speed of structural transformation are very important in enhancing and sustaining aggregate economic growth and productivity (Lin, 2011; McMillan & Rodrik, 2011). The evolution of an economy from traditional low productivity sectors to modern high productivity sectors is an essential feature of this process (Naude et al., 2016; Szirmai, 2013; Lin, 2011; McMillan & Rodrik, 2011). Despite its importance for aggregate productivity growth, our understanding of structural transformation in the Arab economies is limited, largely due to the lack of adequate data by sector of the economy. Even in cross-country studies that consider African and Middle East economies, Arab economies are often excluded due to a lack of data (McMillan and Rodrik, 2014)<sup>28</sup>. One recent study that extends the productivity analysis to include structural change, specifically from the perspective of policy-induced diversification efforts in the GCC countries, is van Ark et al. (2019). Their results show that the efforts to diversify the economy - say from oil to non-oil and from public to private-although reflect an effort to structural change, did not help much to ease the region's productivity decline. The dominance of the oil sector in most GCC countries left them with limited potential for further productivity expansion in the sector. This is due to the fact that the levels of productivity in the oil sector, which dominated the aggregate productivity levels, have already been quite high due to the high capital intensity of the sector. The potential for further productivity improvement in this sector has been limited, and hence the aggregate productivity unless these economies achieve substantial sectoral diversification targeting productivity-enhancing sectors of the economy.

Similar to van Ark et al. (2019), we examine the structural change bonus to aggregate productivity growth in the Arab economies during 1992-2018 period by combining industry level GDP data from the UNNAS with ILOSTAT's modelled employment estimates for seven broad sectors of the economy.

First, we examine the changes in the structure of the Arab economies in terms of output and employment in the traditional three-sector framework- agriculture, industry (divided into manufacturing and other industries), and services. In Figures 8 and 10, the share of main sectors of the economy in output (left panel) and employment (right panel) respectively for GCC and other Arab economies are provided.

<sup>28</sup> In their paper on structural change and productivity, McMillan and Rodrik (2014) include several African countries, but Turkey is the only middle-eastern economy in their sample.

► Figure 8: Output (left) and employment (right) share of industries, GCC



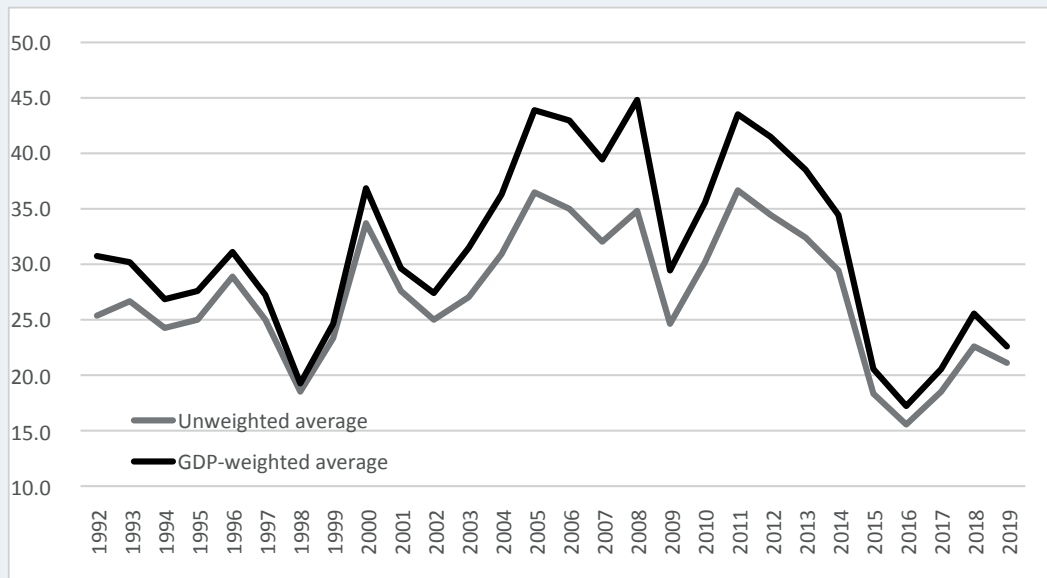
Note: Note: Other industries include the mining sector, which consists of a large oil sector in the GCC economies.

Source: UNNAS, ILOSTAT.

In the GCC, the relative size of other industries in total value added is high and volatile because of the large mining sector. Despite the recent fall, oil rent as a percentage of GDP is still quite high in the GCC, at above one-fifth of the economy (Figure 9). At the same time, the employment share of other industry groups, which includes the oil sector, is relatively low as this sector is heavily capital intensive. It also explains the high labour productivity levels in the GCC's aggregate economy, as the oil revenues are part of the output, with less job creation. The job share of other industries, made up of mining, utilities (electricity, water, and gas), and construction sectors, have been relatively stable.



► Figure 9: Oil rents as a share of GDP, GCC

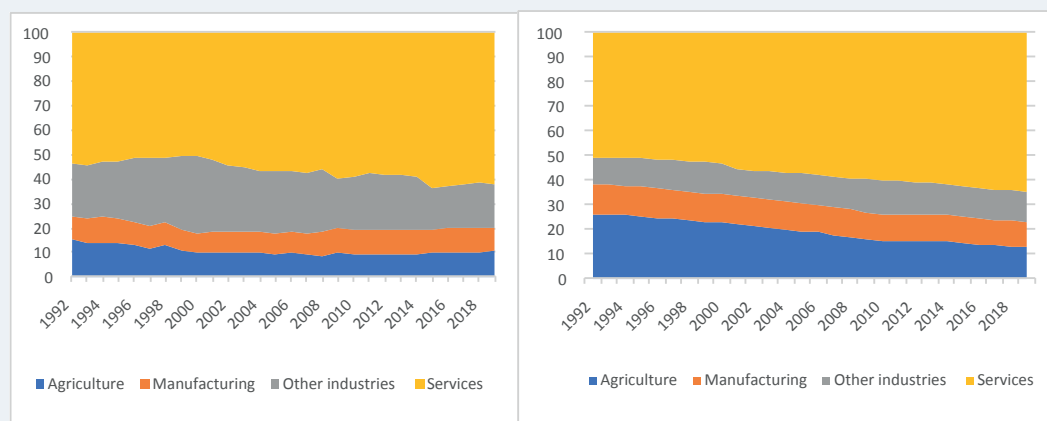


Note: Unweighted average is the simple average of oil rent as a percentage of GDP across the six GCC countries. Weighted average is the ratio of total value of oil rents and total nominal GDP both in current purchasing power parity terms, obtained by summing across the six GCC economies. Oil rents are measured the difference between the value of crude oil production at regional prices and total costs of production.

Source: WDI, The Conference Board Total Economy Database, April 2021.

The GCC and other Arab economies fail to create jobs in the manufacturing sector, while they make marginal tide in expanding output to this sector. While the GCC's manufacturing job share remained somewhat stagnant at about 8 per cent, it has fallen from 12 per cent to 10 per cent in the other Arab economies group. The agriculture sector is losing its share in both regions, although it remains relatively high in the other Arab group.

► Figure 10: Output and employment share of industries, Other Arab economies



Note: Other industries include the mining sector.

Source: UNNAS, ILOSTAT.

The volatility in the mining sector output, as is visible from the oil rent shares in Figure 9 (as is the share of other industries) for the GCC, has been reflected in its service economy share with significant volatility, output share in services remaining about half of the economy. Even though its employment share fell rapidly from 70 per cent in 1992 to 62 per cent in 2010, some recovery has taken place lately. The fall in the share of agriculture and other industries in the other Arab economies has also been levelled by a rapid rise in service share in output and employment, which increased from just above half to more than 60 per cent of the total production and total employment.

Tables 10 and 11 respectively show the distribution of value-added and employment across broad sectors of the economy in the 12 Arab economies, averaged over two periods, 1992-2009 and 2010-2019. The falling share of agriculture in terms of output and employment is visible across the board. However, the sector remains a valuable job provider in other Arab economic groups, especially in Iraq, Yemen, Lebanon, and Syria.

**Table 10: Industry share in value added, Arab economies**

	Agriculture		Manufacturing		Other industries (incl. Mining)		Services	
	1993-2009	2010-2019	1993-2009	2010-2019	1993-2009	2010-2019	1993-2009	2010-2019
Bahrain	0.6	0.3	12.9	16.5	26.3	28.0	60.2	55.1
Kuwait	0.4	0.4	8.2	5.7	46.5	51.0	44.9	42.9
Oman	2.2	1.7	7.2	9.7	47.8	47.1	42.8	41.6
Qatar	0.5	0.1	8.7	9.1	54.3	53.4	36.6	37.4
Saudi Arabia	4.6	2.4	9.9	11.5	43.9	41.8	41.6	44.4
UAE	1.6	0.7	9.7	8.3	39.8	41.4	48.9	49.6
Iraq	8.1	4.0	1.3	2.3	66.5	51.5	24.1	42.2
Jordan	4.0	4.6	18.9	20.6	8.2	7.6	68.9	67.1
Lebanon	4.7	4.0	8.1	8.3	17.2	7.9	70.1	79.8
Palestine	11.6	9.0	13.3	13.1	11.9	8.3	63.3	69.6
Syria	24.5	20.5	5.2	4.7	22.8	25.5	47.4	49.3
Yemen	13.3	16.4	7.1	9.6	28.6	19.3	51.0	54.6

Note: Other industries include the mining sector, which consists of a large oil sector in the GCC economies.  
Source: UNNAS.

**Table 11: Industry share in employment, Arab economies**

	Agriculture		Manufacturing		Other industries		Services	
	1993-2009	2010-2019	1993-2009	2010-2019	1993-2009	2010-2019	1993-2009	2010-2019
Bahrain	1.6	1.0	15.2	12.0	14.8	23.3	68.4	63.7
Kuwait	2.4	2.1	4.9	4.3	17.4	18.7	75.3	74.9
Oman	7.6	4.6	5.3	4.7	9.3	29.3	77.8	61.4
Qatar	3.0	1.3	9.7	7.4	30.0	46.4	57.3	44.9
Saudi Arabia	5.6	4.2	7.5	7.6	14.1	15.9	72.8	72.3
UAE	6.6	2.2	11.0	10.9	23.2	23.9	59.3	62.9
Iraq	28.0	20.6	9.9	9.2	9.8	13.6	52.3	56.5
Jordan	4.2	2.9	13.4	12.1	9.6	13.0	72.8	72.0
Lebanon	18.2	12.9	13.6	12.1	11.3	13.3	56.9	61.8
Palestine	14.7	9.1	13.3	11.8	16.6	16.6	55.4	62.4
Syria	26.1	12.3	13.9	13.8	14.2	11.5	45.9	62.4
Yemen	39.2	27.8	5.2	5.5	9.5	8.1	46.1	58.7

Note: Other industries include the mining sector.  
Source: ILOSTAT.

The manufacturing output share has been rising in most economies, although it remains relatively low compared to emerging economies like China or advanced economies like the US in its fast-growing phase. However, two GCC economies, Kuwait and the UAE, and two other Arab economies, Palestine and Syria, did not see a rise in manufacturing output share. Jordan is the most manufacturing-intensive economy in the entire region, with 1/5th of its output emanating from the sector. On the contrary, except for Saudi Arabia and Yemen, no other country has successfully created more jobs in manufacturing. Manufacturing job share declined in all countries, except those two, where it mostly stagnated. While the non-GCC economies generate about twelve per cent of their total jobs in the manufacturing sector (Iraq and Yemen are low at 9 and 5.5 per cent respectively), the GCC countries have less than ten per cent during 2010-2019, except Bahrain and the UAE. Bahrain and UAE are the most manufacturing-intensive economies within the GCC in terms of job creation.

There is a notable fall in the output share of the services sector in the GCC economies, Bahrain, Kuwait, and Oman. The remaining three economies had their service presence improved. The rise in the service sector is more prominent in the countries in the other Arab economies group, with all economies except Jordan seeing a rise and the magnitude of increase varying from two per cent in Syria to 18 per cent in Iraq. Even more interesting dynamics are the service sector employment share, which fell drastically across the GCC economies, with the fall being more intense in Oman and Qatar. In contrast, the service jobs increased considerably in the other Arab group, again Jordan being an exception here. Syria and Yemen, in particular, have seen a rapid expansion in service jobs.

Thus, we document a fall in agricultural output and employment share across the board in both regions and a moderate rise in manufacturing share in most economies. The service output share fell in half of the GCC economies, and employment fell in all, whereas the service sector expanded in all countries, except in Jordan, in the other Arab groups. The pattern that we observe here is similar to the premature de-industrialization phase that has been observed in the literature in the context of emerging markets (Rodrik, 2016). Although the improvement in manufacturing productivity seems to have helped expand the sector's output share in some countries, this has been accompanied by a lack of job creation in the sector. As predicted by the traditional structural transformation theories (Lewis, 1954), the reliance on primary sector jobs has been falling, yet has not shifted towards the manufacturing sector. Also, while the previous literature has documented a worker movement from the primary sector to services during the missing manufacturing phase. That does not seem to be true in the GCC economies, where other industries bring in several jobs. In the other Arab group, however, we see a similar pattern: jobs are directly moving towards services rather than manufacturing.

## 1.4.2. Structural change and aggregate productivity

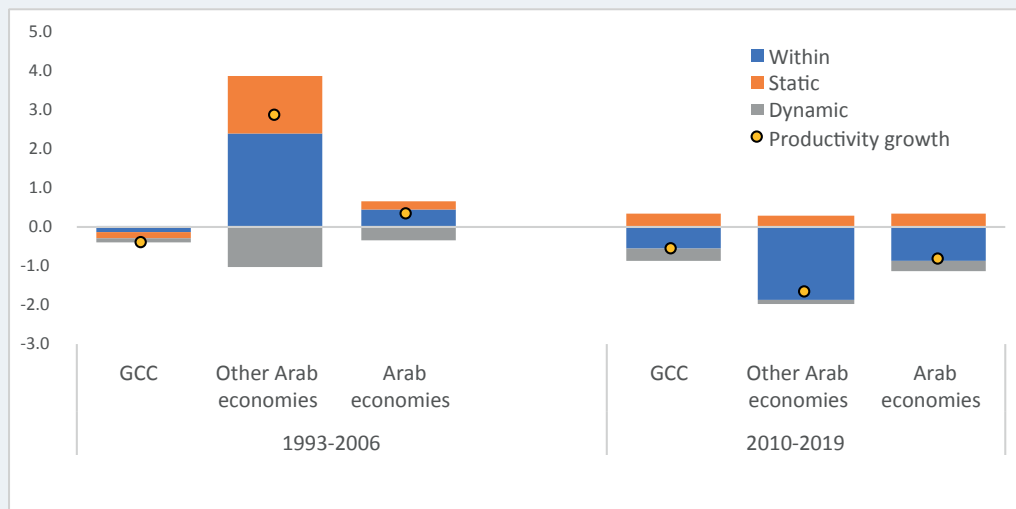
What do these changes in the employment and production structure mean to aggregate productivity? Although the structural change analysis is more insightful at the detailed industry level (de Vries et al, 2012), the lack of data constrains our ability to do such an analysis for this group of economies. In such instances, past studies have often relied on the conventional three-sector model in the context of emerging markets like China and India (Bosworth and Collins, 2008). In our analysis we use a seven-sector classification - agriculture; manufacturing; other industries (including mining); trade, hotels & restaurants; transport, storage & communication; and other activities- to examine the impact of structural change on aggregate productivity.

We use the standard shift-share decomposition method based on Fabricant (1942) to distinguish the contributions of sectoral productivity growth from the contribution of employment shifts across sectors to aggregate labour productivity growth. Assuming the additivity in real output across sectors, we obtain aggregate labour productivity ( $y_t$ ) as the ratio of the sum of sectoral value-added and the sum of sectoral employment (see Erumban and Das, 2019). Then, following de Vries et al. (2015), we break up the change in aggregate labour productivity levels ( $\Delta y_t$ ) into within sector productivity change and a between sector worker reallocation effect using the following breakdown:

$$\Delta y_t = \sum_i \Delta y_{i,t} \cdot s_{i,t-1} + \sum_i \Delta s_{i,t} \cdot y_{i,t-1} + \sum_i \Delta s_{i,t} \cdot \Delta y_{i,t}$$

where  $s_i$  the share of sector  $i$  in total economy employment. The symbol  $\Delta$  indicates a change over the previous year. The first term on the right hand side of the above equation called the **within sector productivity effect**, is the product of the relative employment size of a sector and the change in its productivity - thus reflecting the productivity contribution of that sector to the aggregate economy. The second term, which is the product of the change in sectoral employment share over the two-time points and the level of labour productivity in the sector in the previous year, captures the expansion of employment in sectors with various productivity levels - a positive value thus indicates an expansion of employment in sectors with relatively high productivity levels. This term is considered a measure of static worker reallocation or structural change effect. The third term is the product of the change in employment share and change in productivity, thus capturing the expansion of jobs in sectors with different rates of productivity change. If positive, it implies an expansion of employment in sectors with faster productivity growth, thus a dynamic worker reallocation. The final results discussed in the subsequent parts of this section are presented in growth rate forms, which are obtained by dividing both sides of the equation by aggregate productivity levels in the previous period. We calculate the structural change effect using data on seven broad sectors of the economy for the period 1993-2016 (excluding the global financial crisis years 2007-2009, as it might distort the analysis due to

► **Figure 11: Within sector and structural change contribution to aggregate labour productivity growth.**



Source: Author calculation using data from UNNAS, ILOSTAT and TED.

any temporary impact on worker reallocation), for all the 12 Arab economies using data on real value-added from the United Nations national accounts, and employment data from ILO's modelled estimates.

The results are quite interesting and suggestive of the **weakness of the region in thriving for a growth-enhancing economic diversification** (Figure 11). During the 1993-2006 period, when the aggregate productivity growth in the Arab economies was positive, within-industry productivity growth and static gains (the shift of jobs from low productivity to high productivity) were positive as well. However, dynamic (the shift of jobs from slow-growing to fast-growing sectors) productivity gains were absent. But the positive within and static gains were solely due to the other Arab economies. In the GCC, productivity growth has eroded within industries, but also, the static and dynamic effects were negative. This suggests that the GCC's worker reallocations were not growth-enhancing, rather growth-reducing.

In the Other Arab economies group, in contrast, there has been much happening during this period. Both within sector and static reallocations were positive and large in magnitude, indicating the productivity advancement in individual industries and the creation of jobs in more productive sectors. The dynamic effects, however, were negative.

However, in the post-2010 period, the GCC and other Arab regions suffered hurting declines in within-industry productivity growth. The dynamic effect continued to be negative everywhere, whereas the static result was positive, albeit lower in magnitude in both regions. Indeed, there has been some positive momentum in these countries because more jobs have been created in sectors with relatively high productivity levels. Nevertheless, the dynamic effects and within-industry technological improvements have not improved. In an earlier work, Van ark et al. (2019) have shown a similar positive static effect and negative dynamic in the GCC during the 2010-2017 period.

However, when removing the oil sector from the analysis and examining the workers' movements across sectors within the non-oil economy, we find that the results differ. The within-industry productivity growth appears to be positive, suggesting productivity advancements in some of the non-oil sectors of the economy, which is perhaps offset by the productivity decelerations in the oil sector. The structural change effects, both static and dynamic, however, disappeared completely, suggesting that the inter-sectoral workers' movements within the non-oil economy have not been growth-enhancing. Our results tend to reiterate that the weakness of structural change in delivering growth is present in the GCC and is a feature of the region in general. These results signify the need for a continued effort to diversify the domestic economies of the Arab countries. This might require promoting a competitive labour market, stimulating private investments, and initiating reforms that facilitate an investment climate for businesses to move resources to the most productive sectors.

## ► 1.5 Proximate sources of labour productivity growth: Total factor productivity vs. capital accumulation

In the previous section, we looked at the industry origins of aggregate labour productivity growth and the role of inter-sectoral worker movements in driving productivity growth. This section further examines the role of factor accumulation and total factor productivity in driving aggregate labour productivity growth. In order to understand the relative roles of capital deepening (the growth of capital per worker) and total factor productivity growth in driving labour productivity growth in the Arab states, we use the standard growth accounting framework, which breaks up labour productivity growth into the contribution of capital per worker, labour quality and total factor productivity, i.e.

$$\Delta \ln y_t = \bar{v}_K \Delta \ln K + \bar{v}_L \Delta \ln LQ + \Delta \ln TFP$$

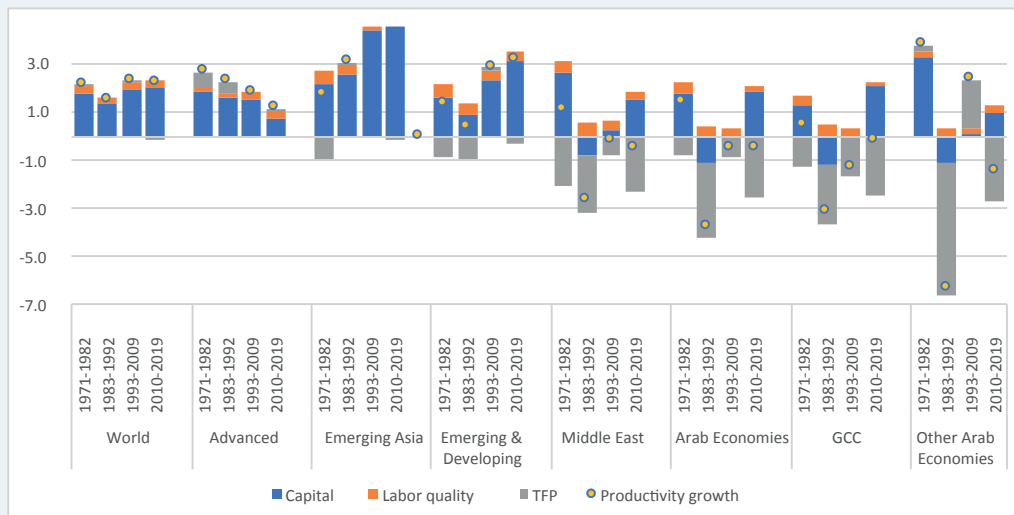
where K is capital input, measured as capital services,<sup>29</sup> LQ is a measure of labour quality, approximated by accounting for differences in educational composition of total employment, and TFP is the total factor productivity (see de Vries and Erumban, 2020, for more details regarding the measurement of each variable used in the growth accounting). In Figure 12, we compare the contribution of capital deepening, labour quality (or the changes in the educational composition of the work force) and total factor productivity growth to labour productivity growth in Arab economies with averages for the global economy, advanced economies, and emerging markets. A few interesting patterns emerge.

First, although capital deepening - capital stock per worker - is a consistently dominant source of labour productivity growth in the global economy, advanced economies, emerging markets, and emerging Asia, it is not always the case in the Arab economies. If workers are given more machines to work with, they show better productivity. **In the Arab countries, investment in physical capital has been falling short of a rise in employment, lowering productivity growth in the 1980s and 1990s.**

<sup>29</sup> Aggregate capital service growth rates are obtained as user cost weighed sum of individual asset specific capital stock growth rate.



► Figure 12: Sources of labour productivity growth, by region



Note: Arab economies consists of: the GCC economies (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and The United Arab Emirates), and six other Arab economies (Iraq, Jordan, Lebanon, Syria, Yemen and the Occupied Palestinian Territory). The MENA includes all the Arab economies, Iran, and North African economies (Algeria, Egypt, Libya, Morocco, Sudan and Tunisia). See Appendix Table 4. Capital is the growth rate of capital services per worker, and labour quality is a measure of skill compositional differences between workers.

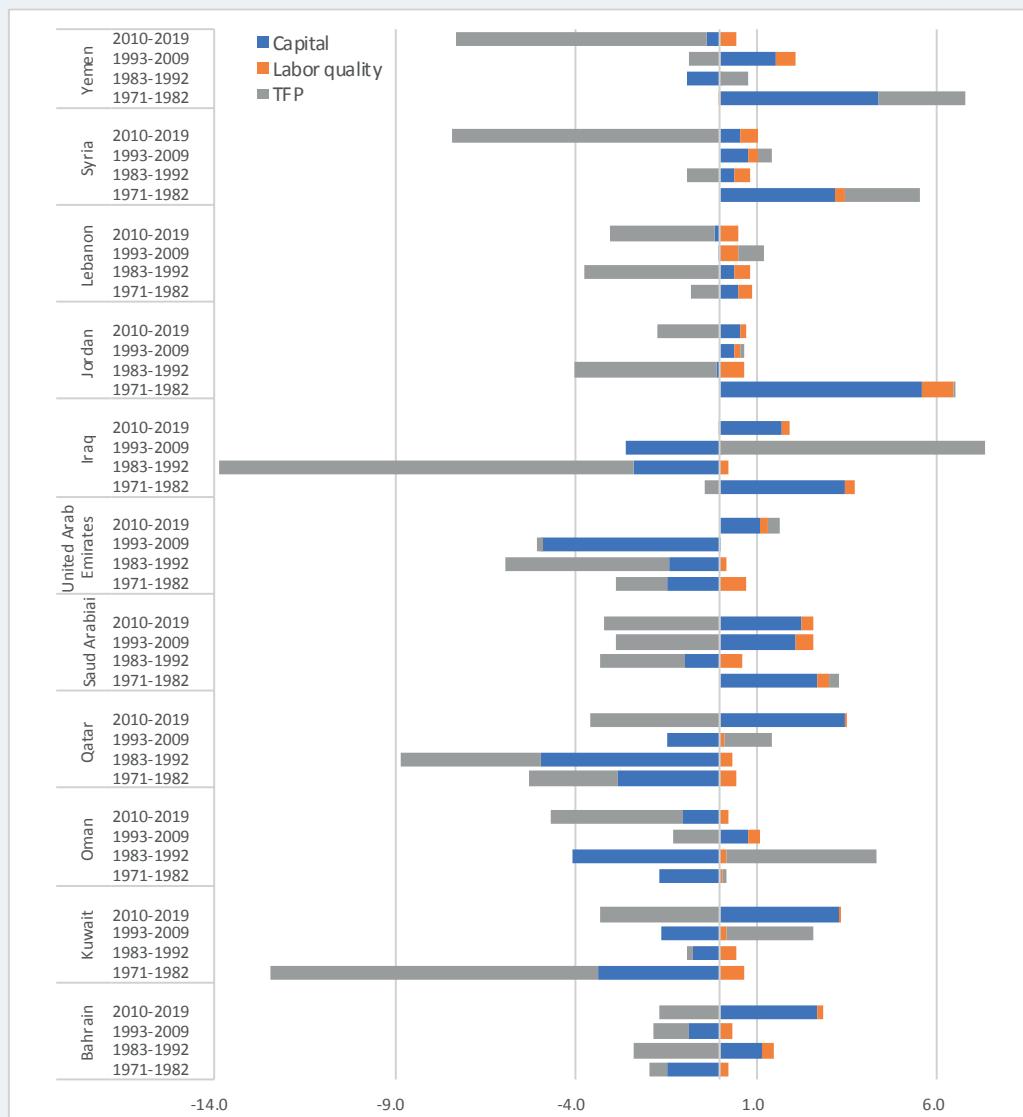
Source: The Conference Board Total Economy Database, April 2021.

Second, taken together, the Arab economies group never had positive TFP growth in any of the four periods depicted on the Chart. Furthermore, **the losses in TFP have been consequential over the years, in Arab economies as a whole and the GCC in particular.** In general, TFP growth has been modest in the global economy, yet it was positive and relevant in the 1970s and 1980s in the advanced economies. Globally, during 1993-2009 it was positive in less than 0.1 per cent, and it became negative during the post-global financial crisis decade. In the advanced economies, TFP growth has been generally positive, suggesting a relative improvement in overall production efficiency in these economies. TFP growth was negative only during 1993-2009, when the global average was also negative, primarily due to the global financial crisis. When the crisis years are not considered in the average chart, the TFP growth for 1993-2007 was positive in both cases. This period also includes the impact of the major ICT revolution in the advanced economies, where the acceleration in investment in ICT goods has created spill-over productivity gain. TFP growth was positive in emerging Asia during 1993-2007, whereas it was negative during the 1970s and close to zero in the other two periods.

Moreover, while TFP eroded, whenever it happened, in the global and emerging Asia aggregates were relatively moderate, this was not so in the Arab economies. The decline in TFP growth has been quite steep in general, particularly during 1993-1992 and 2010-2019. The trend in the GCC is quite similar to the aggregate Arab economies story. In the other Arab economies group, however, there were substantial productivity gains during the 1993-2007 period, which, as we will see in Figure 13 and Table 12, was primarily the effect of reconstruction in Iraq after the war. The TFP growth contribution

in Iraq was quite high during this period, even when the capital contribution was nearly zero. The other Arab economies group also had positive TFP growth in the 1970s. Third, over the last half a century, the quality of workers has improved across the board, including in the Arab states, although at varying rates, contributing positively to labour productivity growth.

► Figure 13: Sources of labour productivity growth, by country



Note: See Figure 12.

Source: The Conference Board Total Economy Database, April 2021.

Fourth, the negative TFP growth is a wide-spread phenomenon in the Arab states. In Figure 13, we look at individual economies in the Arab region. Except in Kuwait, during its post-war reconstruction, Qatar, and UAE during 1993-2007, the TFP growth has been negative across the board in the GCC economies. More importantly, in the most recent period, 2010-2019, the TFP has eroded drastically in the range of 2-4 percentage points. Most countries in the other Arab economies group generally had positive productivity growth from 1993-2007. While Yemen was the only exception during this period, all countries had negative TFP growth in the most recent decade. The severe slump in TFP growth in the region's two most troubled economies, Syria and Yemen, has played an important role in the overall decline in the region's TFP.

**Table 12: TFP growth in Arab economies: comparison with Emerging Asia**

	1993-2007	2010-2019		1993-2007	2010-2019
<b>Arab economies</b>	-0.3	-2.5	<b>Emerging &amp; Developing economies</b>		
GCC	-1.0	-2.5	Emerging Asia	0.4	-0.3
Bahrain	-0.4	-1.7	Malaysia	-0.7	0.2
Kuwait	3.9	-3.3	Sri Lanka	2.0	-1.2
Oman	-1.0	-3.7	Thailand	1.4	1.9
Qatar	1.7	-3.6	China	0.1	-1.3
Saudi Arabia	-2.5	-3.2	Indonesia	-1.0	-0.1
UAE	1.1	0.3	Philippines	0.8	0.4
Other Arab Economies	2.0	-2.7	India	1.9	2.1
Iraq	8.0	0.0	Vietnam	-1.2	1.4
Jordan	0.2	-1.7	Pakistan	0.8	0.7
Lebanon	0.3	-2.9	Bangladesh	-0.1	0.5
Syria	0.1	-7.4	Myanmar	2.4	-2.4
Yemen	-0.6	-7.0	Cambodia	-0.9	-1.6

Note: Arab economies consist of: the GCC economies (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and The United Arab Emirates), and six other Arab economies (Iraq, Jordan, Lebanon, Syria, Yemen and the Occupied Palestinian Territory). The MENA includes all the Arab economies, Iran, and North African economies (Algeria, Egypt, Libya, Morocco, Sudan and Tunisia). See Appendix Table 4.

Source: The Conference Board Total Economy Database, April 2021.

Finally, the region's productivity slack is more visible when compared with the rate of productivity advancement in emerging Asian economies. In table 12, we compare the TFP performance of selected emerging Asian economies with the Arab countries. We see most Asian countries had positive TFP growth in the 1993-2007 period, with notable differences across industries. On average, the region had a 0.4 productivity growth compared to 0.3 per cent contraction in the Arab economies. Among those which observed a significant fall in TFP are Malaysia, Indonesia, Vietnam, Bangladesh, and Cambodia, and the TFP growth in the region's largest economy, China, was quite negligible.<sup>30</sup> However, in the decade after the global financial crisis, productivity growth has fallen, with some major countries, including China and Indonesia, losing productivity. On the other hand, Thailand, India, and Vietnam

<sup>30</sup> Note that these estimates are based on the Conference Board's alternative estimates of China's GDP, and are substantially different from the official estimates (see Wu, 2014).

are among the countries that registered impressive TFP growth during this period. Even in countries where productivity growth turned negative in Asia, the magnitude of the decline was relatively smaller than in most Arab countries. The Arab economies evidently have a productivity challenge. But it is not merely a productivity challenge, but their ability to translate investment in physical capital to productivity is limited, as the heavy reliance on less productive jobs to sustain output growth seems to be an important factor (Al-Mejren and Erumban, 2021). They seem to be failing to translate the massive investment and oil resources into productivity advantage, especially in the GCC countries.

The weak TFP performance in the Middle East economies in general, or GCC in particular, is established by the previous literature as well. Although such studies have hardly paid specific attention to Arab states, as we have here, the results we have obtained are in accordance with previous findings regarding the region (Abu-Qarn and Abu-Bader, 2007; Van Ark et al., 2008; Espinoza, 2012; Andreano et al., 2013; Behar, 2013; Ackgoz and Ben Ali, 2019; van Ark et al., 2019; Al-Mejren and Erumban, 2021). Even if the oil sector is removed from the analysis studies, the TFP performance of the GCC economies remains weak, although it is slightly better than in the oil sector, suggesting the productivity lowering effect of the oil sector (IMF, 2015; Espinoza, 2012).

## ► 1.6 Summary and conclusions

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Analysing the macro trends in income and productivity in the Arab countries, this Chapter brings out the need for increased attention to improve productivity, sustain long-term growth and well-being, and foster sustainable enterprises in the Arab region. This section summarizes the main observations documented in the Chapter, lists some major challenges the region faces in addressing productivity growth and derives some important takeaways for policies and businesses.

### 1.6.1. Summary of major findings

The economic growth dynamics feature high but falling income levels in the GCC's oil-rich economies and shallow yet falling levels in the other Arab nations. The region as a whole had its best growth performance - in terms of income, productivity and growth - during the 1960-1970 period, following the oil discovery. While the oil-rich economies benefitted directly from the export of oil and the resulting oil revenues, other Arab nations exported workers to support various new projects financed by the oil revenues in the GCC economies. Both groups seem to have benefitted directly or indirectly from the oil revenues. However, the oil-supported economic boom did not sustain long, as the GCC economies seemed to have caught up in the resource curse, with nearly no economic diversification. Indeed, the oil revenues helped the economies develop their infrastructure, but the lack of focus on non-oil sectors did not sustain the long-term growth impact.

The fall in the region's income and growth was also partly fuelled by the region's excessive focus on employment-driven growth, tapping the cheap foreign workers. Although the inflow of migrant workers from other Arab nations helped those countries in the early stages, the gradual shift in preference for Asian workers eroded their potential in exporting workers to the oil-rich nations. Our findings suggest that while other regions of the world advanced employment growth and productivity

growth to drive GDP, GCC economies hardly prioritized productivity. The same happens to be the case in the other Arab economies, particularly in recent periods. The excessive focus on job creation admittedly came at the cost of productivity. The trade-off between productivity and employment is negative and more pronounced in the Arab countries compared to other parts of the world. Looking ahead, from a firm's perspective, relying on low wages to create comparative advantages, and continue compromising on productivity might appear attractive. However, that is only a short-sighted solution, which is not sustainable, as wages will eventually rise, leading to loss of competitiveness unless matched with productivity improvement. This has become more apparent in the region, as the region's native workforce is increasingly entering the labour market, adding pressure to raise the overall wages. The situation becomes even more challenging as the productivity of the native population is relatively lower, on average (Al-Mejren and Erumban, 2021), making it essential to focus on technology and innovation to create more productive jobs than relying on wages alone. That, however, does not imply shedding off the migrant workers but rather making the labour market more efficient with decent work opportunities for all workers, according to the needs of the private sector.

The productivity slack in the region has caused a significant divergence between the region and the global productivity frontiers, particularly for the GCC. For the other Arab economies, the challenge is to catch up with the global productivity, yet there are plenty of hurdles. As, unlike the GCC countries, these countries have not fully developed their infrastructure or institutions. The lack of a solid manufacturing sector that can absorb semi-skilled and low-skilled workers and the lack of a vibrant private sector in the GCC and other Arab economies adds to their challenges to excel productivity growth. Many countries in the region are increasingly trying to diversify their economies away from oil. But so far, such attempts and the resultant shift in economic activity across sectors have not turned growth-enhancing. Productivity growth within individual industries has been negative or minimal, and workers' movement across sectors has been mostly growth-reducing.

The slowdown in productivity is also a function of poor overall efficiency. But what is also alarming about the region is its inability to translate its capital investment into productivity. The overwhelming importance of labour seemed to have lowered the amount of capital per worker in the region, reducing the productivity effect of capital investment. The historical availability of cheap expatriate workers in the GCC seems to have halted the private sector incentive to invest in technologies and management capabilities that help enhance productivity.

## 1.6.2. Productivity in the Arab economies: Challenges and way forward

Overall, the region does have a significant productivity problem, and the problem is a complex one. The nature of the problem is different between the GCC and other Arab economies - even quite different across countries, especially among the other Arab countries. Addressing these problems is challenging for the region as a group as well as within individual countries.

The GCC economies seldom have the common problems that developing countries face, like poverty, scarcity of capital, and lack of physical infrastructure. Still, they share such characteristics as high population growth, lack of female empowerment, and weak human capital. Although the region has a long way to go to help its human capital and worker quality, it has indispensably improved its workforce

over the years. Some of the GCC economies, for instance, are among those that registered the highest human development improvement during the last decade (UNDP, 2020 - human development report). Moreover, the increasing changes in their labour market policies have helped reduce gender gaps in the labour market. Yet, they have rising challenges from a lack of economic opportunity for the youth and rising unemployment in their highly segmented labour market, which features the co-existence of cheap expatriate workers and expensive local workers. While the population in the region continues to grow, the region generally lacks economic activities that can absorb the new entrants. A commonly adopted policy to address these challenges is mandatory nationalization policies aiming to replace migrant workers with the natives (see Hertog, 2012), which have clear productivity implications. The productivity premium of low-wage immigrant workers is relatively high compared to the native workers (Al-Mejren and Erumban, 2021). Unless the cost differences are satisfied by productivity, the competitiveness of the private sector and the region's productivity will further suffer. Moreover, if the substitution of cheap expatriate workers with natives leads to wage escalation, it can lead to inflationary pressure. Currently, the long-term inflation rate in the region is in the range of 1-3 percent<sup>31</sup> except in the troubled economies of Syria, Yemen and Lebanon.

Moreover, the GCC economies also face severe external stress from volatility in oil prices, slow global growth, and the increasing shift of global energy demand towards renewable/green sources, which weakens the sustainability of the oil-based distributive system that these economies have been following.

The second set of countries, which we call 'Other Arab economies' on the other hand, has limited oil reserves and features the characteristics of other developing economies. These countries have relied on exporting workers to the GCC's oil affluent economies to support their domestic markets in the early phases. In addition to the lack of a solid manufacturing sector in both the GCC and the other Arab economies, the latter group also suffers from the presence of the informal sector, challenging their productivity-driven growth. Available estimates suggest that 1/5th to 1/3rd of GDP in the Arab economies (Schneider and Abuehn, 2007), is generated in the informal sector, and 1/3rd to half of the non-GCC economies' total non-farm employment is informal (Charmes, 2012).

Another common challenge for the region is developing a vibrant private sector that can foster productivity growth. The private sector in the region is either small<sup>32</sup> or less developed partly due to the constraints enterprises face that arise from a faulty business environment and partly due to the fragmented market in the region. Enterprises are unable to enjoy scale economies and are bound to cater to small retailers. As Malik and Awadallah (2013) argued, boosting private sector investment, which is key to developing a productivity-oriented growth path for the region, is a regional and political challenge for the Arab economies. The development of the private sector has been hindered drastically by the dominance of the public sector driven by the rent distribution model, forcing the private sector to operate under more stringent investment conditions, relying heavily on imported labour. Addressing this challenge will require an economic initiative that incentivizes private sector participation in economic activity and a change in the attitude of native workers to shift their preference from public sector jobs to private-sector jobs (see Al-Mejren and Erumban, 2021). Regionally, the

31 During the post-global financial crisis decade, inflation rates in the GCC, measured using consumer price indices obtained from the World Bank, ranges from 1.2 per cent in Qatar to 2.8 per cent in Kuwait. The inflation rate in the other Arab economies (excluding Syria and Yemen) ranges from 1.6 per cent in Palestine to 3.1 per cent in Lebanon. Comparable numbers for major emerging markets India and China are respectively 6.9 per cent and 2.6 per cent. We do not have data for Syria and Yemen for the entire period, but the available data suggests a two-digit inflation rate in these economies.

32 Recent evidence suggests that private sector businesses in Arab economies such as Jordan and Lebanon are extremely skewed towards small firms employing less than 20 employees (Baduel et al., 2019).

fragmented markets limit the potential to achieve economies of scale and relocate activities to regions with the most appropriate resources to improve efficiency and productivity (see Malik and Awadallah, 2013). Furthermore, market fragmentation also raises the cost of capital and lowers the productivity of investment. The economic potential for integration is vast in the region, which shares a common language and culture unlike, for instance, the ASEAN or European ones. In the absence of economic integration, private sector firms' incentive to operate on a large scale is likely limited, as the size of these individual markets is small, especially when weighed against the challenges they offer. The GCC's population consists of less than 1/5th of the US, and the other Arab economies consist of 1/3; together their population is half of the US, which gives an indication of the need for economic integration in the region. While the challenges are plenty for the region, attempts to integrate the region's economies to act as a single market (e.g., ASEAN) might help productivity growth, as it will help reduce several labour market constraints, ease distortions and create scale economies.

For enterprises, the weak macro-level productivity is indicative of the institutional weakness under which they operate. However, businesses must realize that the continued compromise on productivity is not sustainable, and the need to upgrade business strategies, improve management practices and productive efficiency. They adopt technologies to improve competitiveness should be given priority. In this respect, business organizations play a vital role in raising awareness among members about the need to devise productivity-enhancing business strategies with specific targets, incentives and metrics. Business organizations may revise or develop services and training for members' capacity building to boost productivity growth.

Increased engagement with governments, policymakers, business organizations, and educational institutions in establishing a conducive environment for sustainable enterprise development is of the utmost importance to raise business productivity. As the labour market in the GCC economies is increasingly targeting the localization of the workforce, enterprises are likely to face escalation in wages and loss in productivity, as the expatriate workers are cheaper and more productive (see Al-Mejren and Erumban, 2021).

Previous studies have observed that few natives are equipped to work in a private sector environment, especially in professional and management fields, even in large countries like Saudi Arabia (Hertog, 2012). Therefore, the region will need to focus more on upskilling its population. The private sector enterprises might resort to moving ahead, tapping the potential for automation, knowledge-based technologies, and capital intensity and improving overall production efficiency. However, it is relevant to realize that given the region's cultural history and political milieu, this process is somewhat likely to happen at a modest pace rather than a radical one. As the localization process continues, enterprises will have to adopt strategies to improve their technologies and train their workers to upskill the local workforce, a key aspect identified by the ILO productivity ecosystem, to enhance productivity and raise the living standards of society.



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## ► Appendix

### ► A.1 Notes on Data

#### ► Palestine

GDP in national currency current and constant price series are obtained from the WDI for the period 1994-2020. These are converted to PPP \$ using the ICP 2011 PPPs, converted to The Conference Board Total Economy Database (TED) base year using the relative price changes between West Bank and Gaza and the United States. For the period 1970-1994, the real GDP in PPP terms is extrapolated using the growth rates from the Penn World Tables (PWT). The nominal GDP series in PPP terms is then calculated using the US GDP deflators for the entire period 1970-2020.

The population is obtained from the World Bank World Development Indicators (WDI) for the period 1990-2020 and extrapolated backwards to 1970 using trends from the PWT data. Employment is calculated using the employment to population (15+ ages) data multiplied by the sum of the population aged 15-64 and population aged 65+. The latter two indicators are also collected from the WDI for 1991-2020. For 1990, the trend in PWT was applied. Since there was no data in the PWT prior to 1990, we use a previous estimate of UNCTAD (Abu-Shokor, 1995) to set employment series back to 1970. We use their estimates of employment to population ratio for the years 1970, 1975, 1980, 1985, 1988, and 1989 together with the estimates of the population from the WDI to derive employment data for these years.<sup>33</sup> For the years in between, we linearly interpolate the employment/population ratio. This way, we have a complete series on nominal GDP, real GDP (both in PPP terms), population, and employment for 1970-2020.

#### ► Sectoral data on employment and value added

Not many databases provide consistent sectoral data on value added and employment across countries. Exceptions are the UNU-WIDER Economic Transformation Database<sup>34</sup> and GGDC 10-sector database.<sup>35</sup> However, both these databases contain no data for the countries we consider in this study. To build the sectoral estimates of employment and GDP, we combine the United Nations National Accounts (for GDP) and ILO data on employment.

<sup>33</sup> They provide data on employment and population (both population 14+ and total population), for which we compute the employment of total population rates, which are then multiplied with the total population data from WDI for the period 1970-1989.

<sup>34</sup> <https://www.wider.unu.edu/database/etd-%E2%80%93-economic-transformation-database>.

<sup>35</sup> <https://www.rug.nl/ggdc/structuralchange/previous-sector-database/10-sector-2014>.

**Appendix Table 1: Per capita income in 2020 PPP \$ (in order of 2020)**

	1950	1960	1970	1980	1990	2000	2010	2020
<b>GCC economies</b>								
Qatar	279,537	301,827	299,648	264,672	67,551	82,174	108,050	103,985
Kuwait	147,733	147,402	157,025	67,891	31,313	59,834	72,601	67,505
UAE	129,707	184,186	201,589	227,510	114,626	103,151	60,756	65,383
Bahrain	22,767	30,762	40,980	47,475	44,401	53,435	49,977	49,551
Saudi Arabia	14,920	24,875	50,990	85,780	44,130	44,768	47,054	47,124
Oman	2,754	4,132	16,790	17,999	28,638	33,690	37,204	37,450
<b>Other Arab Economies</b>								
Lebanon	10,985	10,821	13,191	15,937	8,758	16,739	24,864	15,828
Iraq	4,480	8,985	11,408	20,950	8,076	3,962	9,742	10,379
Jordan	4,057	5,684	5,844	10,929	9,251	9,985	12,974	9,897
Palestine	-	-	1,870	3,200	3,275	4,750	5,707	5,689
Syria	2,088	2,622	3,070	5,643	4,943	6,009	6,906	3,555
Yemen	1,846	1,953	2,492	4,641	4,604	5,755	6,496	2,861
<b>Median</b>	<b>7,732</b>	<b>9,903</b>	<b>14,991</b>	<b>19,475</b>	<b>18,945</b>	<b>25,214</b>	<b>31,034</b>	<b>26,639</b>

Source: The Conference Board Total Economy Database, April 2021.

**Appendix Table 2: Growth rates of GDP in Arab economies, and their contribution to regional growth, 1950-2019**

	1951-1960	1961-1970	1971-1982	1983-1992	1993-2009	2010-2019
<b>GDP growth</b>						
<b>Arab economies</b>	<b>6.9</b>	<b>8.5</b>	<b>5.9</b>	<b>0.5</b>	<b>3.8</b>	<b>2.9</b>
GCC	7.3	10.4	6.4	1.9	3.4	3.4
Bahrain	6.1	6.2	5.8	3.0	4.9	3.3
Kuwait	7.0	10.0	-4.7	0.8	5.7	1.5
Oman	6.1	16.6	6.2	7.5	3.6	2.9
Qatar	6.7	9.2	1.9	-2.8	9.4	5.0
Saudi Arabia	7.1	9.8	6.7	2.0	2.1	3.4
UAE	7.2	9.7	12.1	0.3	4.7	3.5
<u>Other Arab Economies</u>	6.5	5.3	6.4	-3.1	5.5	1.3
Iraq	9.7	5.6	6.2	-11.6	7.8	5.3
Jordan	7.5	6.0	9.2	2.8	5.2	2.4
Lebanon	2.5	4.9	2.8	-0.9	5.1	1.1
Palestine			7.1	5.1	5.7	4.1
Syria	4.9	4.8	8.8	3.3	3.8	-7.4
Yemen	2.6	4.3	7.9	3.6	4.4	-4.4
<b>Contribution to GDP growth</b>						
<b>Arab economies</b>	<b>6.9</b>	<b>8.5</b>	<b>5.9</b>	<b>0.5</b>	<b>3.9</b>	<b>2.9</b>
GCC	4.4	6.8	4.4	1.4	2.6	2.6
Bahrain	0.1	0.1	0.1	0.0	0.1	0.1
Kuwait	1.0	1.3	-0.3	0.0	0.4	0.1
Oman	0.0	0.2	0.1	0.2	0.1	0.1
Qatar	0.3	0.4	0.1	-0.1	0.3	0.3
Saudi Arabia	2.6	4.1	3.3	1.1	0.9	1.4
UAE	0.4	0.6	1.1	0.0	0.8	0.6
<u>Other Arab Economies</u>	2.4	1.7	1.5	-0.8	1.3	0.3
Iraq	1.8	1.0	0.8	-1.2	0.5	0.5
Jordan	0.1	0.1	0.1	0.1	0.1	0.1
Lebanon	0.2	0.3	0.1	-0.04	0.1	0.04
Palestine			0.02	0.02	0.04	0.03
Syria	0.2	0.2	0.2	0.2	0.2	-0.2
Yemen	0.1	0.1	0.2	0.1	0.2	-0.1

Note: Contribution of individual countries are obtained as the product of country growth rates and country share in the region's nominal GDP. For other notes, see Figure 1.

Source: Author calculation using The Conference Board Total Economy Database, April 2021.

**Appendix Table 3: Growth rates of per capita GDP in Arab economies, and their contribution to regional income growth, 1950-2019**

	1951-1960	1961-1970	1971-1982	1983-1992	1993-2009	2010-2019
<b><u>Per capita GDP growth</u></b>						
<b>Arab economies</b>	<b>3.62</b>	<b>4.08</b>	<b>0.44</b>	<b>-3.37</b>	<b>0.08</b>	<b>0.41</b>
GCC	3.58	5.07	0.07	-2.31	-0.67	0.95
Bahrain	3.01	2.87	1.28	-0.44	0.45	0.79
Kuwait	-0.02	0.63	-10.52	1.44	2.31	-0.21
Oman	4.06	14.02	1.95	3.62	1.17	0.92
Qatar	0.77	-0.07	-4.84	-8.92	2.24	0.75
Saudi Arabia	5.11	7.18	1.57	-2.17	-0.41	0.87
UAE	3.51	0.90	-0.55	-5.57	-3.49	1.59
<b><u>Other Arab Economies</u></b>	<b>3.84</b>	<b>2.10</b>	<b>3.17</b>	<b>-5.99</b>	<b>2.88</b>	<b>-1.30</b>
Iraq	6.96	2.39	2.75	-13.96	5.17	2.30
Jordan	3.37	0.28	5.51	-2.24	2.11	-2.35
Lebanon	-0.15	1.98	0.60	-1.46	3.73	-1.58
Palestine	-	-	4.14	1.45	2.61	1.74
Syria	2.27	1.58	5.42	-0.11	0.94	-5.81
Yemen	0.56	2.44	5.35	0.38	1.37	-7.03
<b><u>Contribution to Per capita GDP growth</u></b>						
<b>Arab economies</b>	<b>3.62</b>	<b>4.08</b>	<b>0.44</b>	<b>-3.37</b>	<b>0.08</b>	<b>0.41</b>
GCC	2.20	3.39	-0.31	-1.76	-0.57	0.70
Bahrain	0.05	0.04	0.01	-0.01	0.01	0.01
Kuwait	0.00	0.12	-0.78	-0.01	0.14	-0.01
Oman	0.03	0.17	0.03	0.10	0.04	0.03
Qatar	0.03	0.00	-0.15	-0.24	0.07	0.04
Saudi Arabia	1.88	3.01	0.69	-0.78	-0.23	0.36
UAE	0.21	0.05	-0.12	-0.82	-0.60	0.26
<b><u>Other Arab Economies</u></b>	<b>1.42</b>	<b>0.69</b>	<b>0.75</b>	<b>-1.61</b>	<b>0.65</b>	<b>-0.29</b>
Iraq	1.24	0.45	0.36	-1.53	0.36	0.22
Jordan	0.05	0.01	0.06	-0.05	0.05	-0.06
Lebanon	-0.01	0.11	0.04	-0.05	0.11	-0.05
Palestine	-	-	0.01	0.01	0.02	0.01
Syria	0.11	0.06	0.15	0.00	0.05	-0.19
Yemen	0.03	0.06	0.13	0.01	0.07	-0.23

Note: Contribution of individual countries are obtained as the product of country growth rates and country share in the region's nominal GDP. For other notes, see Figure 1.

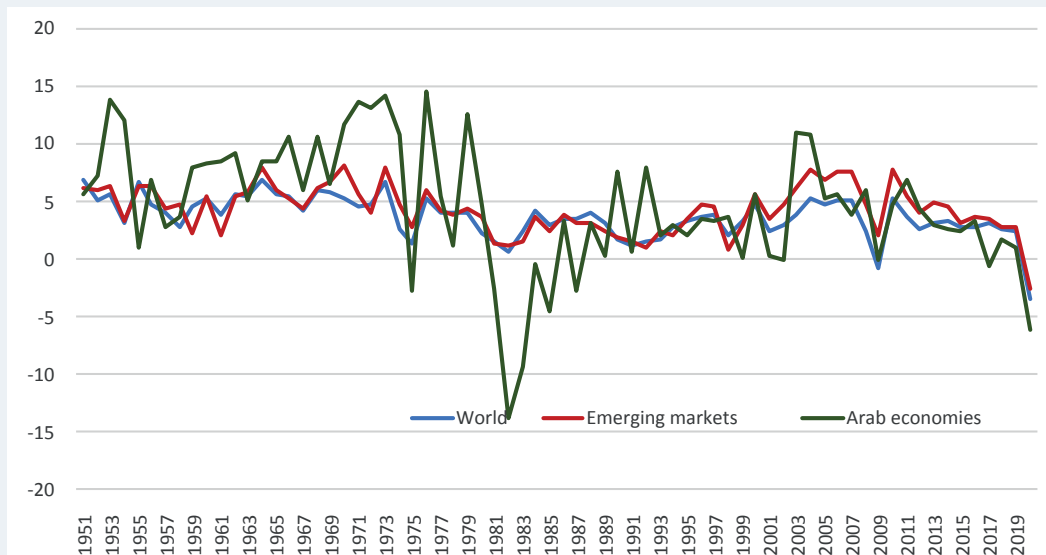
Source: Author calculation using The Conference Board Total Economy Database, April 2021.

**Appendix Table 4: Countries and regions**

Advanced economies	Emerging & developing economies	
	<b>Emerging Asia</b>	<b>Other merging &amp; developing economies</b>
Austria	Bangladesh	Turkey
Belgium	Cambodia	Albania
Cyprus	China (Alternative)	Armenia
Denmark	India	Azerbaijan
Finland	Indonesia	Belarus
France	Malaysia	Bosnia & Herzegovina
Germany	Myanmar	Georgia
Greece	Pakistan	Kazakhstan
Iceland	Philippines	Kyrgyz Republic
Ireland	Sri Lanka	Macedonia
Italy	Thailand	Moldova
Luxembourg	Vietnam	Russian Federation
Malta		Serbia
Netherlands	<b><u>Middle East and North Africa</u></b>	Tajikistan
Norway	<b>Middle East</b>	Turkmenistan
Portugal	Arab economies	Ukraine
Spain	<u>GCC</u>	Uzbekistan
Sweden	Bahrain	Argentina
Switzerland	Kuwait	Bolivia
United Kingdom	Oman	Brazil
Canada	Qatar	Chile
United States	Saudi Arabia	Colombia
Australia	United Arab Emirates	Costa Rica
New Zealand	<u>Other Arab Economies</u>	Dominican Republic
Bulgaria	Iraq	Ecuador
Croatia	Jordan	Guatemala
Czech Republic	Lebanon	Jamaica
Estonia	Syria	Mexico
Hungary	Yemen	Paraguay
Latvia	Occupied Palestinian Territory	Peru
Lithuania	Iran	Trinidad & Tobago
Poland		Uruguay
Romania	<b>North Africa</b>	Venezuela
Slovak Republic	Algeria	Angola
Slovenia	Egypt	Botswana
Hong Kong	Libya	Burkina Faso
Japan	Morocco	Cameroon
Singapore	Sudan	Chad
South Korea	Tunisia	Congo, Republic
Taiwan		Côte d'Ivoire
Israel		DR Congo

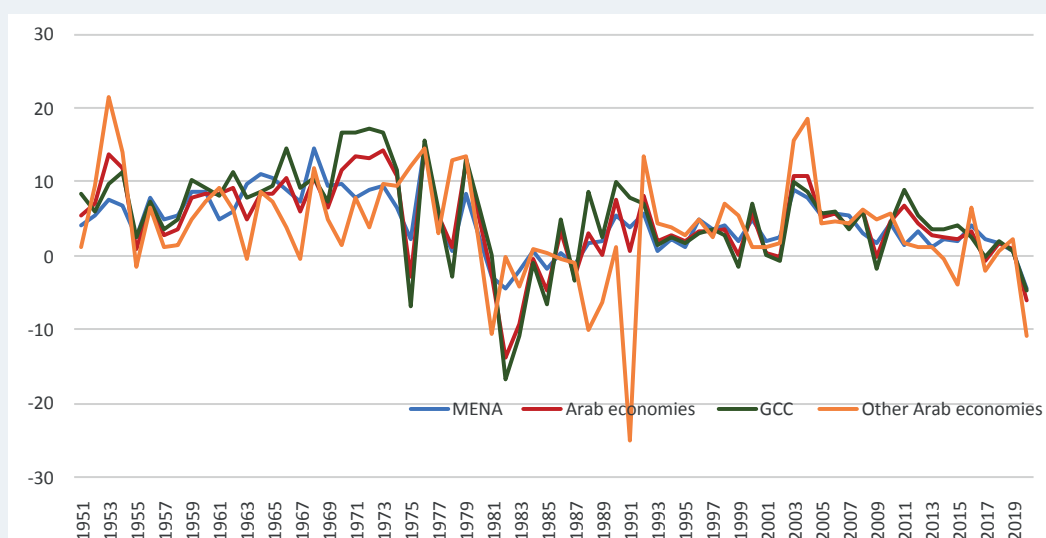


► Appendix Figure 1: Regional GDP growth rate (log changes), 1950-2020



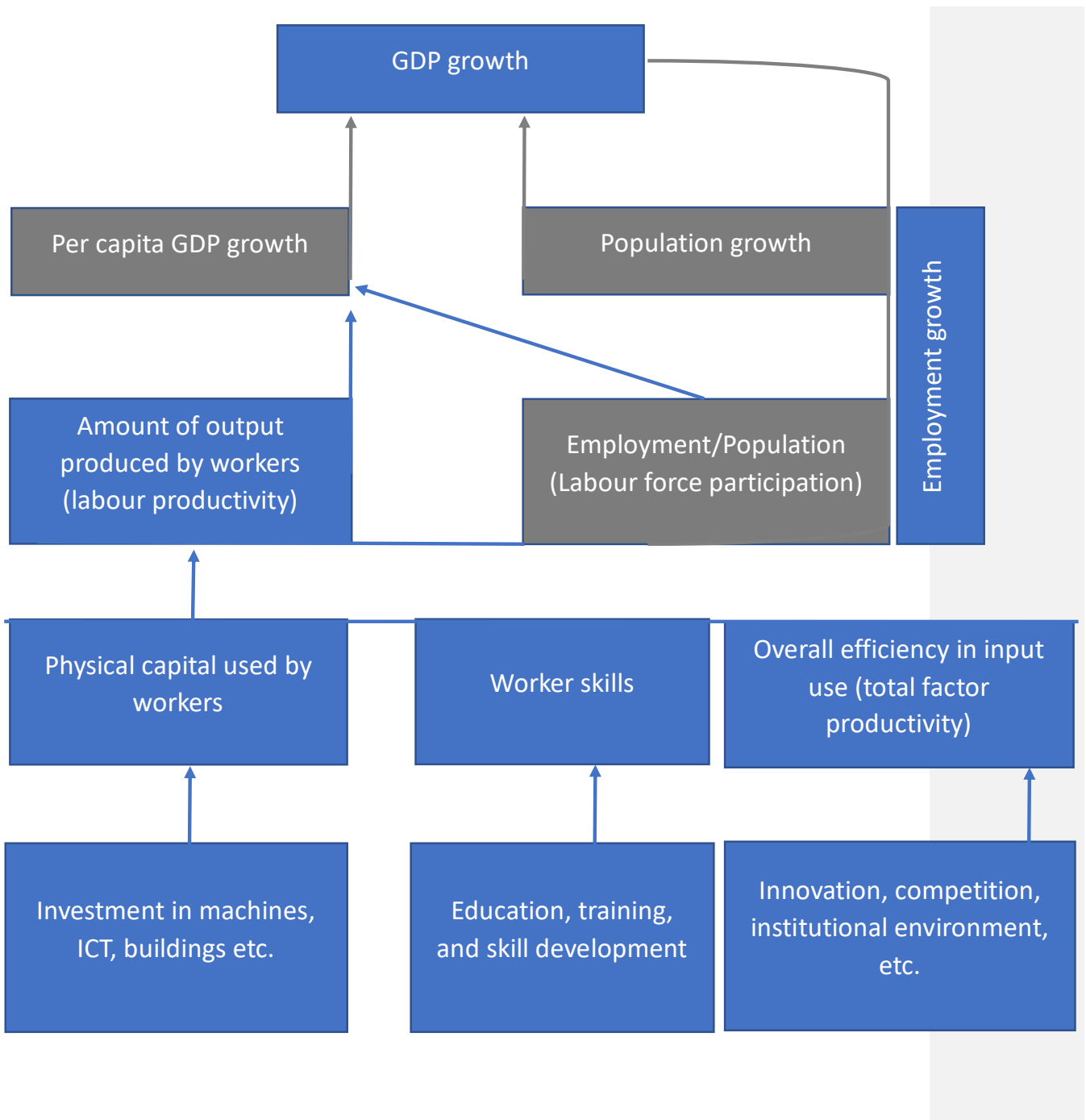
Source: The Conference Board Total Economy Database, April 2021.

► Appendix Figure 2: GDP growth rate in the Middle East and North Africa (log changes), 1950-2020



Source: The Conference Board Total Economy Database, April 2021.

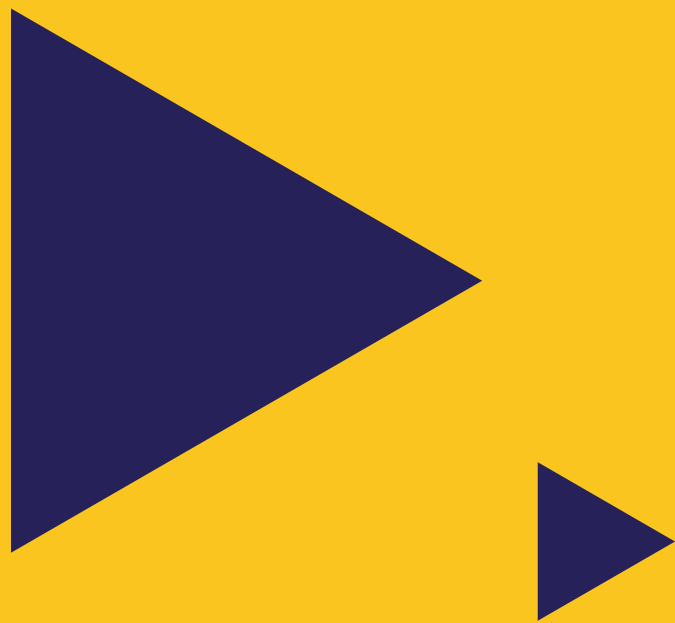
► Appendix Figure 3: Growth accounting framework



# Chapter 2

**Assessment of barriers  
to sustainable enterprise  
development for decent job  
creation in selected Arab  
States**

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### ► Main findings

- The most important obstacles to sustainable enterprise development are political instability, access to credit, access to electricity, and tax rates. Economies could benefit from improving the business environment, including labour regulation, infrastructure, ICT adoption, financial deepening and inclusion.
- The institutional framework does not facilitate access to credit for investment and working capital, which mainly affects SMEs. Firms have adjusted their funding strategies to rely more on internal and recently on private equity financing.
- The analysis suggests that firms with adequate access to credit grew (in terms of employment) and sold more products and services.
- Credit-constrained enterprises tend to be smaller, exhibit larger employment reduction and are less productive than non-credit constrained ones.
- During 2020, liquidity needs and cash flow constraints increased significantly but were not matched with loan supply from banks and other financial institutions.
- The region's exports are estimated to be around only a third of their potential. Business environment should be more conducive to importing and exporting, which could encourage the internationalization and growth of SMEs.
- Enterprises that reported tax-related obstacles as a major constraint exhibit lower productivity.
- Services is the main economic sector. Small enterprises are mainly working in retail while large firms in other services (e.g., finance, insurance) that exhibit higher productivity.
- There is a wage gap between large enterprises and SMEs rather than across sectors. Large enterprises tend to pay higher wages compared to SMEs.
- Larger and/or more mature (over 5 years) enterprises are more productive than microenterprises and/or young businesses.
- Enterprises with more experienced managers, exhibit higher productivity.
- Enterprises that innovate and exhibit good management practices can deal with political instability in a better way than those which do not innovate or have poor management practices.
- Business dynamics is low in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory. The COVID-19 pandemic has led to the contraction of enterprises.
- Enterprises still struggle to adopt to remote work, adapt their operations to online services and incorporate digital solutions to their processes.
- Disparities in access to internet, informality and other factors affect the ability of lower-income economies to work from home and adopt digital solutions.
- Medium- and low-tech sectors have considerable room for improvement toward the technological frontier.

## ► Recommendations

- While some improvements have been achieved, establishing a conducive environment for sustainable enterprise development remains of the utmost importance, by tackling persisting barriers such as inadequate access to financing, unreliable electricity supply, tax rates, and political instability.
- Bring productivity growth to the forefront of the policy reform agenda to enhance socio-economic development, generate productive employment and create decent work opportunities for all.
- A coherent and integrated policy framework to enhance productivity growth, including policies to promote access to credit, financial deepening and financial inclusion, is required. Particular emphasis should be placed on smaller enterprises to support them so they can reach a minimum efficient scale and economic viability. Alternative sources of financing should also be supported, such as in the private equity market. Providing easier access to financing is essential to foster private investment, diversification and job creation.
- Upgrading management practices focused on continuous improvement to reduce waste, identify activities that do not add value, simplify processes and eliminate deficiencies that lead to incremental improvement in products, services and processes, aimed at increasing the overall efficiency and performance of enterprises. Raising productivity would also enable wage growth and better working conditions.
- Upskilling workers and managers is key to increase the overall efficiency of enterprises. Enterprises with better-qualified and experienced managers tend to perform better and have a higher probability of getting a loan from commercial banks.
- Streamlining import and export processes while reducing related costs is particularly recommended to upper-middle and lower-middle income Arab economies due to their dependency on imported goods to foster foreign trade, technological transfer and adoption, and the internationalization of SMEs. Import restrictions could lead to higher input costs, which erode gains.
- Investment in research and development to foster innovation should also be embraced as a priority. This would also contribute to increasing productivity.
- Enterprises are encouraged to develop enterprise risk management programmes to strengthen business resilience, that is, their ability to cope with black swan events (such as pandemics or climate change), minimize disruptions to operations, and ensure business continuity. This has also important implications to retain jobs and avoid massive layoffs.
- The COVID-19 pandemic tested the ability of firms to adapt their products and processes to new consumption patterns, digital sales, and new delivery models. Business organizations play a key role in supporting their members to review and adapt business models to the rapidly changing market conditions. Advisory services, trainings and capacity-building materials should be adapted and tailored to the needs of members according to firm size and economic activity. Key areas include productivity, digital economy, adaptation to climate change, and essential management practices such as the development of written business strategies, accounting methods and financial statements.

## ► 2.1 Introduction

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The business environment and management practices are key drivers of enterprise performance, productivity growth, and employment outcomes<sup>36</sup>. These factors have an impact on the ability of enterprises to produce and allocate resources efficiently, and are key determinants of a country's aggregate productivity and economic development<sup>37</sup>. The empirical evidence shows that a faulty business environment and poor management practices<sup>38</sup> may hinder productivity, returns on investment and in doing so the economic viability of enterprises<sup>39</sup>, which may inexorably slow down employment and economic growth.

The enabling environment for sustainable enterprise development, on the one hand, comprises a wide range of factors, including institutions, legal and regulatory frameworks, macroeconomic stability, rule of law and secure property rights, physical and digital infrastructure, as well as the adoption of information and communications technology (ICT), among others<sup>40</sup>. The quality of the environment determines the extent to which it is conducive to sustainable enterprise development. Identifying and tackling structural barriers for establishing a conducive business environment is necessary to promote private investment, enterprise development, economic growth, and decent job creation.

Management practices, on the other hand, are important determinants of enterprises' productive efficiency. Empirical evidence shows that the higher the quality of management, the higher the total factor productivity<sup>41</sup>. Some of the benefits associated with improved management practices include: greater quality of goods and efficiency in the production of goods and services, higher rates of expansion in the long term, better ability to cope with events that affect workers productivity and greater efficiency to allocate human resources, among others<sup>42</sup>.

In this context, this chapter seeks to assess the main barriers to sustainable enterprise development for decent job creation that arise from the business environment, sectoral differentials, and management practices in selected Arab states<sup>43</sup>, which are the macro, meso and micro dimensions

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36 Farole, T., Hallak, I., Harasztosi, P., & Tan, S. W. (2017). Business environment and firm performance in European lagging regions. World Bank Policy Research Working Paper, (8281). Also, see: Dollar, D., Hallward-Driemeier, M., & Mengistae, T. (2005). Investment climate and firm performance in developing economies. *Economic Development and Cultural Change*, 54(1), 1-31.

37 Lopez-Acevedo, G., Medvedev, D., & Palmade, V. (Eds.) (2017). Business Environment Challenges Continue to Weigh on Firm Performance. Business Environment Challenges Continue to Weigh on Firm Performance. Chapter 3 in: Lopez-Acevedo, G., Medvedev, D., & Palmade, V. (2017). *South Asia's Turn: Policies to Boost Competitiveness and Create the Next Export Powerhouse*. World Bank, Washington DC.

38 Bloom, N., Mahajan, A., McKenzie, D., & Roberts, J. (2010). Why do firms in developing countries have low productivity? *American Economic Review*, 100(2), 619-23.

39 Hallward-Driemeier, M. C. (2005). Improving the climate for investment and business in South Asia. *Growth and Regional Integration*, 61. Also, see: Gogokhia, T., & Berulava, G. (2021). Business environment reforms, innovation and firm productivity in transition economies. *Eurasian Business Review*, 11(2), 221-245. Głodowska, A. (2017). Business Environment and Economic Growth in the European Union Countries: What Can Be Explained for the Convergence? *Entrepreneurial Business and Economics Review*, 5(4), 189-204.

40 The ILO has identified 17 basic conditions that are considered essential. See: ILO (2007). *Conclusions concerning the promotion of sustainable enterprises*. International Labour Conference, June 2007.

41 Bloom, N., Sadun, R., & Van Reenen, J. (2016). Management as a Technology? (No. w22327). National Bureau of Economic Research. Also see: Adhvaryu, A. (2018). Managerial quality and worker productivity in developing countries. *IZA World of Labour*.

42 Adhvaryu, A. (2018). Managerial quality and worker productivity in developing countries. *IZA World of Labour*.

43 To conduct the empirical analysis, the following country groups were used: **Arab ES** comprises Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory. **Arab ES 2019** includes Jordan, Lebanon, and the Occupied Palestinian Territory. **Arab ES 2020/1** comprises Jordan and Lebanon. **Fragile states** include Yemen, Lebanon, Jordan, and Occupied Palestinian Territory.

of the ILO approach to promote productivity growth<sup>44</sup>. The main research question is focused on finding the main (structural) constraints preventing enterprises from achieving sustained increases in productivity. Moreover, it aims at devising recommendations for policy makers and business organizations to enhance productivity growth, enterprise development, and decent job creation.

It is organized as follows. Section 1 is focused on the business environment (macro factors) to assess obstacles to sustainable enterprise development. Section 2 examines productivity gaps and constraints to job creation at sectoral level. Section 3 assesses management practices (micro factors). Finally, section 4 provides a summary of main findings and recommendations for policy makers and business organizations.

It is worth mentioning that the analysis of the Arab economies has posed a significant challenge for the development of this chapter, because of lack of updated data for all factors and countries.

Most of the analysis relied on secondary data from the World Bank Enterprise Survey (WBES), which collects firm-level data from a variety of subjects including business environment (finance, corruption, infrastructure, crime, competition, and labour) and business performance measures. Some of the most important limitations are the exclusion of informal firms and the underrepresentation of micro and small enterprises.

The WBES held surveys only for Jordan, Lebanon, and the Occupied Palestinian Territory (PSE) for 2019 and for Jordan and Lebanon after 2019. The chapter also includes historic data of Yemen 2013 and Iraq 2011 to complement the analysis, with the risk of not being relevant for the current economic situation. The WBES has not collected any recent data (after 2006) for any of the GCC economies (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) or fragile states such as the Syrian Arab Republic.

A total of 2,677 firms were surveyed in 2013 and 1,498 in 2019 considering the Arab states sample. For 2020 (October-November), 523 Jordanian enterprises were surveyed and a follow-up was made in 2021 (May and June). In Lebanon, 601 were surveyed in 2020 (July and August) and the same number of observations in the follow-up (December 2020 and January 2021) survey.<sup>45</sup>

Considering these constraints, the results obtained for this report do not provide representative estimates for the Arab region, or allow adequate comparisons across fragile, GCC and upper-middle income economies. Therefore, the conclusions and policy recommendations are mainly country specific and for two groups: Arab ES which comprises Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory; and Arab ES 2019 which comprises Jordan, Lebanon, and the Occupied Palestinian Territory.<sup>46</sup>

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Finally, the GCC (Gulf Cooperation Council) comprises Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. It is worth noting that Northern African Arab states are not included.

44 ILO (2021). Decent work and productivity. Governing Body 341/POL/2, International Labour Organization.

45 See Annex 1 for a detailed explanation of survey availability and sample designs.

46 We included in the firm-level analysis only the Arab states available in the World Bank Enterprise Survey: Jordan, Lebanon, Yemen, Occupied Palestinian Territory, and Iraq. Some surveys are available before 2013 for Syria, Oman, and Saudi Arabia, but they do not include stratification weights, which might compromise the accuracy of the results.

## ► 2.2 Macro level: The business environment

This section seeks to assess barriers to sustainable enterprise development and productivity growth from the business environment in selected Arab states. It focuses on how the business environment<sup>47</sup>, labour regulations and the financial sector are associated with small and medium enterprise (SME) performance and quality job creation. The analysis had data limitations. The available firm-level data did not allow us to analyse all the relevant factors described in the ILO productivity ecosystem.

The analysis considered the economic and political context in 2019 (the last year available in the WBES surveys) which was difficult for several Arab economies. In 2019, the oil-exporting countries were hit by a decline in oil prices. In the same year, regional uncertainty in the Arab economies remained high mainly due to the ongoing conflict in Syria and Yemen; hyperinflation, food, and electricity shortages, and protests in Lebanon; conflict and political uncertainty in PSE, and climate vulnerabilities in Yemen.

The Covid-19 outbreak presented other difficulties that affected businesses performance, unemployment, and productivity. For these challenges, the Arab economies have implemented within their limited fiscal space several measures to help SMEs and employees. Trade policy tools were also implemented to counter depreciation pressure, as trade restrictions in Iraq and Jordan and price controls in Iraq, Jordan and Qatar<sup>48</sup>.

Despite the effects of the Covid-19 outbreak in the Arab economies, the IMF Regional Outlook projects economic growth for 2021, except for Lebanon and Oman. However, according to the same report, the Arab economies might still face high and persistent unemployment, informality, lower productivity. These are coupled with highly indebted governments with little space to support enterprises.

### 2.2.1. General analysis of obstacles to enterprise operations

This section seeks to assess the extent to which the business environment is conducive to sustainable enterprise development and decent job creation<sup>49</sup>. Labour regulations that favour firms' growth and productivity, effective taxation systems that allow entrepreneurs to launch and grow in business, and acquire access to credit, are essential elements to support sustainable quality job creation.

A recent study shows that firms in regions with business-friendly environments display better performance (i.e., profitability, productivity, and sales growth)<sup>50</sup>. A business-friendly environment that supports operations, an effective taxation system and a solid financial sector to foster private investment, along with appropriate physical and digital infrastructure, among other factors, are key

47 A good business environment plays a crucial role to support increasing and sustained productivity along with wage growth. Business regulations that do not represent a major obstacle to operations; an effective taxation system that allow entrepreneurs to launch and make their businesses grow, a strong financial sector fosters private investments. Physical and digital infrastructure to ease access to digital and physical markets at reduced costs that do not hinder competitiveness.

48 (International Monetary Fund, 2020).

49 Research studies have concluded that a conducive business environment along with access to market scale, skills and infrastructure boosts productivity growth and enterprise performance (in terms of profitability, efficiency, and sales growth). In fact, studies have found that better business environments significantly contribute to increasing enterprises' sales growth, total factor productivity and profitability (Farole, Hallak, Harasztosi, & Tan, 2017) and (Young & Loayza, 2019). Moreover, the IMF (2009) paper suggests that macroeconomic factors (e.g., growth and external competitiveness) affect MENA firms' performance.

50 (Farole, Hallak, Harasztosi, & Tan, 2017) Focused the analysis on Italy, Spain, Poland, and Romania.



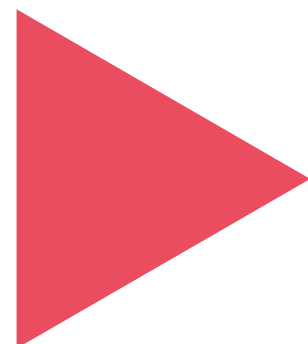
enablers and play an important role for better productivity and wage growth.

The WBES gathered data on 15 macro-factors that may potentially hinder enterprise operations. They interviewed business managers to assess which factors are barriers to business development and identify the most significant ones. The survey included firm-level characteristics and information about when to obtain import/export licenses. It also asked about electrical connections, losses due to robbery, and senior management time spent dealing with government regulations, among others. They used standard methodology, making the data comparable across countries.

The 2019 enterprise surveys indicated **that access to finance, political instability and tax rates were among the most relevant concerns in the Arab ES economies**. The proportion of business owners and managers that identified access to finance, political instability and tax rates as main obstacles were the most cited concerns by business owners. Moreover, the calculations suggest that **informality and access to electricity** were still high priority constraints in the region in 2019 (see Figure 1).

In 2013, the World Bank<sup>51</sup> found that political instability, corruption, unreliable electricity supply and inadequate access to finance were the main areas of concern for businesses, being political instability the most important with a negative impact on sales and productivity growth mainly on smaller firms. The authors also found that corruption and unreliable electricity supply were also associated with lower labour productivity and significant losses in sales.

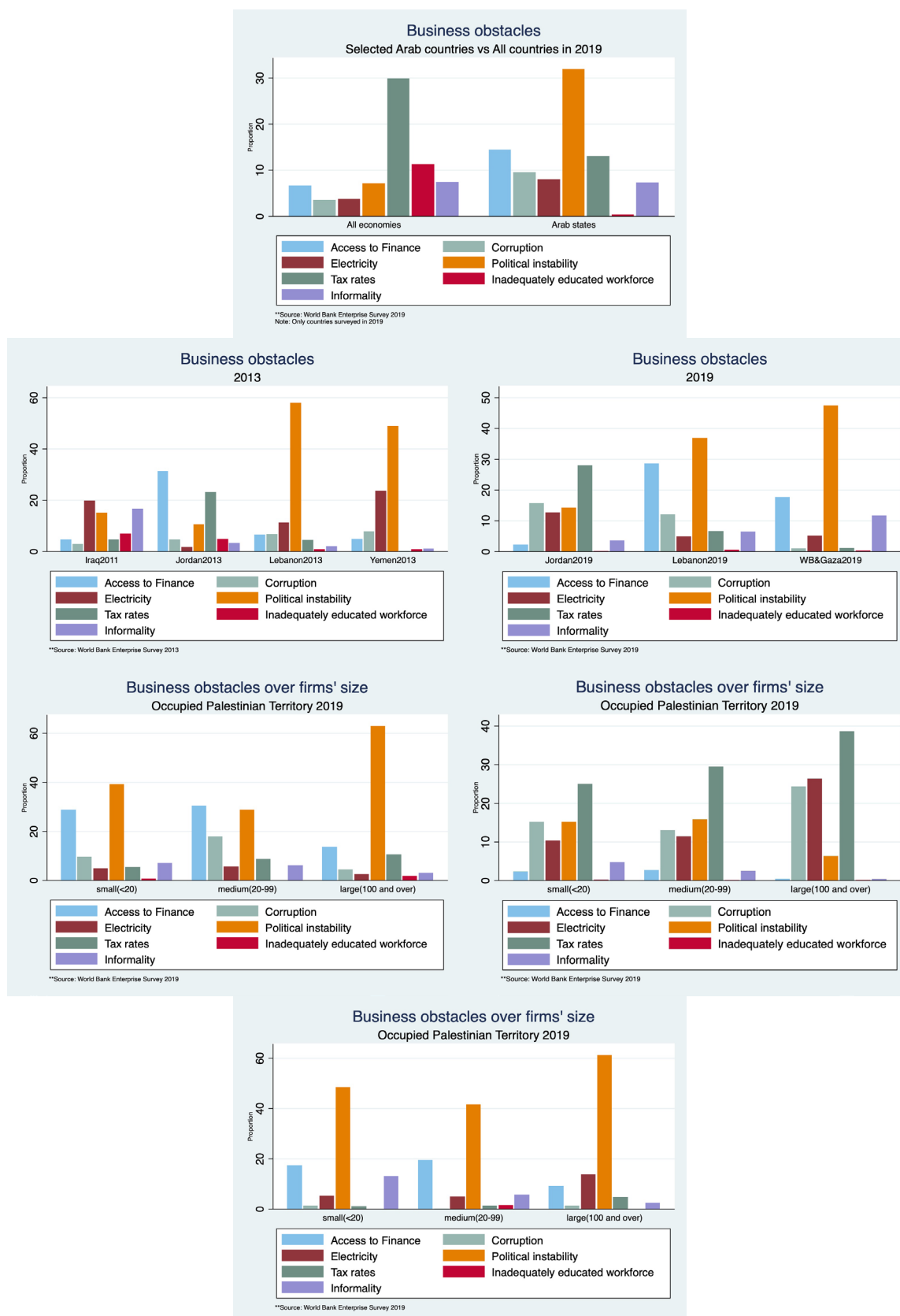
Similarly, the IMF<sup>52</sup> suggests that political instability, corruption, the lack of access to finance and unreliable electricity supply played a significant role in the lack of employment growth between 2009-2012. Moreover, it shows that small firms might be less affected by obstacles to operations possibly because they were able to stay under the radar.



51 (World Bank; European Bank; European Investment Bank, 2016).

52 (IMF, 2019). The study used the World Bank Enterprise Survey (WBES) for Egypt, Jordan, Lebanon, Morocco, and Tunisia.

► Figure 1. Business obstacles 2013 vs 2019



Our calculations for 2019 suggest that some obstacles are more important than others depending on enterprise size, but all firms seem affected by at least one of them. In Lebanon and the Occupied Palestinian Territory, political instability and access to finance are among the most cited obstacles by every firm regardless of its size. However, in the latter, access to electricity seems to be a major obstacle for large enterprises. In Jordan, tax rates are the most important obstacle across enterprises, but corruption and access to electricity seem to affect more the large enterprises while informal competition seems to affect more the small firms.

Around 65-70 per cent of enterprises in Jordan reported at the end of 2020 (during the COVID-19 outbreak) that legislation affecting businesses was unstable and unpredictable, which hindered future planning and business investment.

**Arab ES economies spent more time in getting adequate electricity supply compared to lower-middle and upper-middle-income peers.** Getting electricity is one of the most important concerns in the Arab ES economies compared to upper-middle income Arab economies, mainly in Lebanon and the Occupied Palestinian Territory.

In 2013, enterprises in Lebanon spent double the time to get electricity connections compared to upper-middle and lower-middle-income Arab economies. The situation was not any better in the Occupied Palestinian Territory, where enterprises took on average ten more days than lower-middle-income Arab economies (Table 1). The results gave a slight improvement in the time to get electricity connections in Jordan in 2019. While our estimation was not statistically significant for Lebanon and the Occupied Palestinian Territory, the available evidence does not suggest meaningful changes between 2013 and 2019.

Table 2 indicates broad differences in the number of days to obtain import licenses. It took around 25 days and 10 more days in the Occupied Palestinian Territory and Iraq, respectively, to get import licenses, compared to Jordan in 2019. The situation did not change much for the Occupied Palestinian Territory from 2013-2019. We observe that in Jordan and Lebanon the number of days to get an import license in 2019 was fewer than the average in upper-middle and lower-middle-income Arab economies.

Similar results were found for the time to obtain an operating license and average days to clear direct exports through customs. In Jordan these processes take less time, followed by Lebanon and the Occupied Palestinian Territory, except for the average days to clear exports, which tends to be more efficient than Lebanon. Enterprises in Lebanon take almost triple the time to clear exports through customs compared to Jordan (Table 2).



**Table 1 Business environment areas of concern 2013 (objective questions)**

	Senior management time spent in dealing with gov. regulations	Days to obtain import licenses	Days to obtain operating license	Average days to clear direct exports through customs	Days to obtain an electrical connection	Days to obtain a water connection	Percentage of firms paying for security	Losses due to robbery, vandalism, and arson (% of sales)	Products exported directly lost due to breakage or spoilage (%)
Jordan	5.3 (0.79)	2.1 (0.18)	1.4 (0.10)	4.6 (0.46)	4.6 (0.46)	21.0 (4.18)	12.4 (2.25)	0.25 a (0.23)	0.36 (0.13)
Lebanon	4.1 (0.52)	27.9 <sup>a</sup> (21.1)	50.0 <sup>a</sup> (27.3)	4.9 (0.59)	4.9 (0.59)	40.2 (10.68)	21.8 (3.03)	0.20 (0.08)	0.24 (0.12)
Iraq	6.5 (1.52)	28.1 (6.1)	19.4 (3.50)	11.8 (3.95)	11.8 (3.95)	8.9 (3.05)	17.7 (3.90)	0.8 (0.26)	1.7 (0.24)
Occupied Palestinian Territory	4.9 (0.62)	29.7 (13.39)	12.6 (3.64)	2.3 (0.40)	2.3 (0.40)	16.6 (4.60)	35.4 (3.00)	1.7 (0.47)	4.6 (1.54)
Yemen	1.9 (0.52)	11.6 (2.82)	7.0 (1.47)	11.2 (2.28)	11.2 (2.28)	35.9 (14.32)	27.1 (6.32)	0.6 (0.23)	1.6 <sup>a</sup> (1.10)
Lower-middle income	10.3	17.3	24.3	9.2	9.2	24.2	57.1	1.3	1.3
Upper-middle income	10.6	22.7	35.7	7.3	7.3	29.8	55.5	0.7	0.8

Source: Own calculation based on Enterprise Surveys and (World Bank; European Bank; European Investment Bank, 2016).

Note1: Fragile states group is composed by: Lebanon, Iraq, Occupied Palestinian Territory, and Yemen. The data of Iraq is from 2011.

Note2: All values are significant at 95 percent level of confidence, unless specified otherwise.

<sup>a</sup> Shows values that are not different than zero at 95 percent of confidence.

**Table 2 Business environment areas of concern 2019 (objective questions)**

	Senior management time spent in dealing with gov. regulations	Days to obtain import licenses	Days to obtain operating license	Average days to clear direct exports through customs	Days to obtain an electrical connection	Days to obtain water connection	% Of firms paying for security	Losses due to robbery, vandalism, and arson (% of sales)	Products exported directly lost due to breakage or spoilage (%)
Jordan	0.42 (0.20)	2.6 (0.19)	2.7 (0.26)	4.7 (0.63)	3.8 (1.47)	4.6 (0.53)	50.0 (4.03)	0.00 (0.00)	0.07 (0.06)
Lebanon	2.4 (0.31)	2.2 (0.66)	7.3 (1.16)	12.3 (1.77)	235.9 <sup>a</sup> (127.5)	46.9 <sup>a</sup> (33.8)	21.1 (3.01)	0.19 <sup>a</sup> (0.11)	0.45 <sup>a</sup> (0.32)
Occupied Palestinian Territory	1.0 (0.27)	27.2 (6.27)	16.4 (4.85)	5.3 <sup>a</sup> (3.20)	129.3 <sup>a</sup> (71.81)	11.9 (1.57)	36.4 (3.81)	0.31 <sup>a</sup> (0.19)	3.6 <sup>a</sup> (1.88)
Lower-middle income	10.5 (0.66)	14.0 (1.56)	19.1 (1.64)	4.7 (0.61)	30.2 (5.47)	17.8 (5.15)	54.4 (1.53)	0.48 (0.08)	1.28 (0.27)
Upper-middle income	6.6 (0.32)	10.9 (1.17)	19.7 (2.52)	5.5 (1.50)	24.3 (3.45)	15.3 (2.70)	65.3 (1.62)	0.2 (0.02)	0.37 (0.07)

Source: Own calculation based on Enterprise Surveys.

Note: All values are significant at 95 percent level of confidence, unless specified otherwise.

<sup>a</sup> Values that are not statistically different than zero.

Although there are no detailed questions regarding the mentioned areas of concern in the 2020/21 WBES surveys, we found some evidence that the COVID-19 outbreak might have worsened the service delivery time. For example, at the end of 2020, in the midst of the COVID-19 outbreak, the average time to obtain any kind of permit (utility connection, construction permit, import license, or operating license) from the government in Jordan took around five days, which is slightly higher than in 2019.

**Table 3 SMEs and business environment**

	Electricity				Labour regulation	Inadequately workforce	Corruption		Political instability
	OLS	Probit	OLS	Probit	Probit	Probit	OLS	Probit	Probit
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Avg. power outage (hrs.)	Uses power generator (Y/N)	Percentage of electricity from generator	Major obstacle (Y/N)	Major obstacle (Y/N)	Major obstacle (Y/N)	Percentage of total annual sales paid in informal payments	Major obstacle (Y/N)	Major obstacle
SMEs <100 employees	1.18** (0.41)	-0.58 (14.3)	-1.72 (2.92)	0.42*** (.16)	-0.11 (0.19)	-0.28 (0.213)	0.62 (0.58)	-0.00 (0.17)	0.05 (0.18)
Foreign ownership	-1.64* (0.59)	0.15 (0.18)	-5.91* (3.57)	0.23 (0.19)	-0.07 (0.28)	0.22 (0.24)	0.01 (1.0)	-0.12 (0.19)	0.08 (0.24)
Exports 10% or more of sales	-0.91* (0.51)	0.26** (0.12)	-2.86 (3.07)	-0.18 (0.14)	-0.062 (0.14)	-0.07 (0.19)	-0.84 (0.68)	-0.057 (0.12)	0.23 (0.13)
Firm is part of a larger firm	0.14 (0.45)	0.18* (0.10)	2.63 (2.82)	0.13 (0.11)	0.25* (0.13)	0.02 (0.15)	-0.39 (0.86)	-0.02 (0.10)	0.35* (0.13)
Constant	3.89 (0.54)	1.01*** (0.18)	33.54*** (3.94)	-0.33 (0.20)	-1.1*** (0.26)	-0.28 (0.25)	2.0* (0.73)	-1.2*** (0.10)	1.1*** (0.24)
Number of observations	122,781	132,295	126,955	132,297	132,297	132,297	131,919	132,262	132,288
R-squared	0.08		0.13				0.01		

Source: Own calculation based on Enterprise Surveys.

Note1: Simple OLS using survey-weighted observations (svy command in Stata). Linearized Taylor standard errors. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10 percent levels respectively. Economy and locality size fixed effects not shown. All controls are dummy Y/N variables.

Note2: All values are significant at 95 percent level of confidence, unless specified otherwise.

SMEs experience on average more hours of a power outage and are more likely to cite electricity as a major obstacle. In contrast, exporting enterprises, and enterprises that are part of larger corporations, tend to experience fewer hours of a power outage, probably because they rely more on power generators for energy supply.

Empirical evidence shows the impact of business regulation on enterprise performance in terms of investment and growth, among other economic outcomes<sup>53</sup>. Our analysis suggests that enterprises that are part of larger corporations tend to be more likely to identify labour regulation as major constraint than other type of businesses, regardless of the sector and their size.

Finally, we explored the association between enterprise productivity and the business environment, using the enterprise survey cross-country dataset of 2019 complemented with business environment

53 For more reference see Djankov et al, 2002; Bastos and Nasir, 2004; Klapper et al, 2006; Sharma, 2009; Aterido and Hallward-Driemeier, 2010; Aterido, Hallward-Driemeier, and Pages, 2011; Commander and Svejnar, 2011).

variables from the World Bank and IMF datasets and macroeconomic indicators<sup>54</sup>. The results show that enterprises with over five years exhibit higher productivity than young businesses. Large enterprises exhibit higher productivity than microenterprises. Nevertheless, the results were not statistically significant for all specifications. Enterprises that reported tax rates as major obstacles tend to have lower productivity than those which did not<sup>55</sup>.

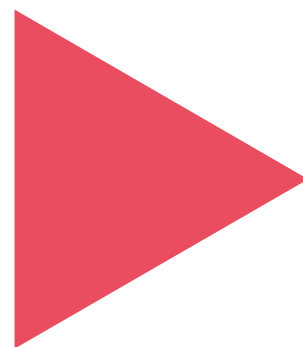
## 2.2.2. Access to finance

A functional financial sector is key to fostering private investment, business resilience and decent job creation. However, adequate access to financing continues to be a persisting obstacle across enterprises in the Region. As a result, enterprises have adjusted their funding strategies to rely more on internal financing. Only a small segment of the private sector is financed by the formal financial sector<sup>56</sup>.

Similar results were found by an IMF study published in 2020. It finds that SMEs in the Middle East and North Africa (MENA) tend to have one of the lowest indicators in terms of access to commercial bank lending (7 per cent). This has important implications for SME development and employment creation since these economic units employ 95 per cent of the workforce<sup>57</sup>.

**The institutional framework in the Arab states does not facilitate access to credit particularly to SMEs, despite improvements in the ease of doing business.**

Table 4 presents the institutional quality for financial infrastructure represented by the “getting credit” dimension of Doing Business. This set of indicators, collected from domestically owned limited liability enterprises of up to 50 employees, have their headquarters in the economy’s most important business city. High-income Arab states exhibit a better quality of financial infrastructure compared to the rest of the Arab economies. Iraq, Syria, and Yemen exhibit the worst performance and are among the 20 worst economies out of 190 in the respective ranking.



<sup>54</sup> The latter was composed by the GDP per capita growth to capture the economic status of the economies; fiscal balance (government revenues – government expenditures) to capture fiscal sustainability and foreign direct investment to assess whether obstacles affect or not net inflows. As part of the control, we included access to finance, corruption, bribery, and the ease of doing business indicator from the World Bank to control for business environment at the country level. As suggested in IMF 2019, the control variables were calculated as the local average response to effectively capture the structural constraints firms face in the localities they operate.

<sup>55</sup> See Annex 2 for detailed results.

<sup>56</sup> World Bank et al. (2016).

<sup>57</sup> (International Monetary Fund, 2020). The data was calculated using the Financial Access Survey; World Bank, World Development Indicators; World Bank Enterprise Surveys; and IMF staff calculations.

**Table 4 Quality of Financial Infrastructure measured by the “getting credit” dimension of the Doing Business**

Group	Economy	Strength of legal rights index (0-12)	Depth of credit information index (0-8)	Credit registry coverage (% of adults)	Credit bureau coverage (% of adults)
High-income	Bahrain	3	8	0.0	40.9
	Oman	1	6	27.1	0.0
	Qatar	1	8	34.7	0.0
	Saudi Arabia	4	8	0.0	56.7
	United Arab Emirates	6	8	12.0	51.3
	Kuwait	1	8	16.8	31.6
Upper-middle income	Iraq	0	0	1.3	0
	Jordan	11	8	5.0	22.9
	Lebanon	2	6	21.3	0.0
Lower-middle income	Occupied Palestinian Territory	8	8	22.9	0.0
Low-income	Syria	1	2	7.8	0.0
	Yemen	0	0	1.3	0.0

Source: Doing Business Report, May 2019.

The **legal right index** measures the legal rights of borrowers and lenders. The selected Arab states exhibit a poor record on legal rights, except Jordan and the Occupied Palestinian Territory, which suggest that financial institutions in the Region have deficiencies that need to be tackled<sup>58</sup>.

The **depth of credit information index** measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders. It also measures rules and practices affecting the coverage, scope, and accessibility of credit information, hence the extent to which information asymmetries could hinder lending to SMEs. The scores show two different groups. The first one composed by Bahrain, Qatar, Saudi Arabia, UAE, Kuwait, Jordan, Occupied Palestinian Territory, Oman, and Lebanon with better credit information systems compared to the second group made up by Iraq, Syria, and Yemen.

The coverage of credit registries and bureaus provide key information for credit lending. Low levels of coverage might hinder the ability of financial institutions to adequately assess risks and thus provide funding. High-income Arab states have a larger coverage than the rest of the Arab economies. Iraq and Syria have the lowest credit registry or private bureaux coverage in the Region.

**The role of internal funds is more important than formal financial mechanisms in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory for both investment and working capital.**

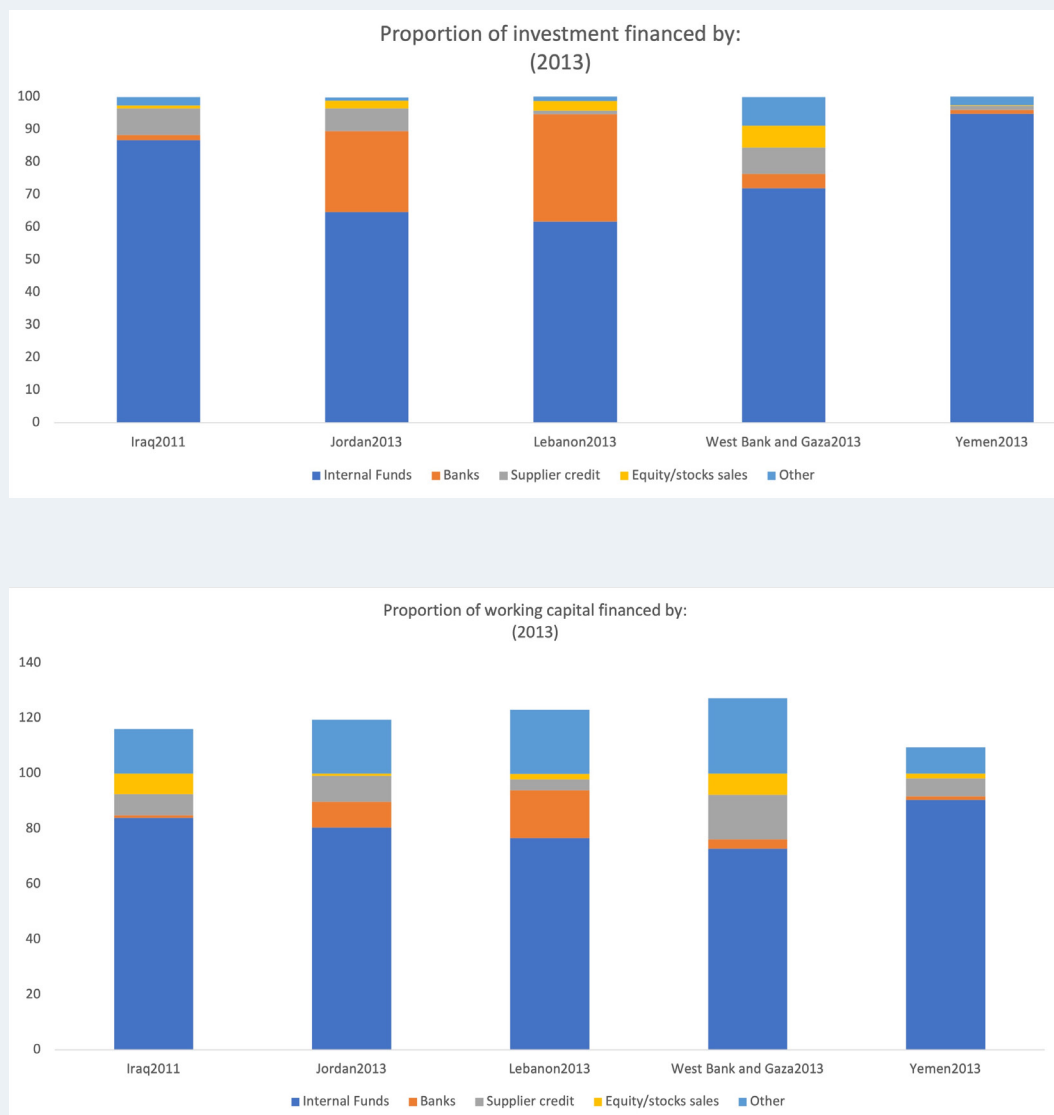
The WBES data provide detailed information on businesses' use of the different financing mechanisms (i.e., internal funds, bank finance, credit from suppliers or customers, equity finance, and others) for both working capital and purchases of fixed assets.

<sup>58</sup> For more references see World Bank. 2011. Financial Access and Stability—A Roadmap for the Middle East and North Africa. MENA Development Report. Washington, DC: World Bank. (World Bank, 2011).



Figure 2 presents the composition of firms' financing in 2013 for investment and working capital. The Arab ES 2013 region relies more on internal funds than the average upper-middle-income Arab economy, except for Lebanon and Jordan (for fixed assets purchases). The share of finance by commercial banks in Lebanon is 32.3 per cent for investment and 17.3 per cent for working capital. The situation deteriorated significantly by 2019/2020 when only 13 per cent of enterprises reported that they relied on financial institutions to fund liquidity problems. In Iraq, Yemen, Occupied Palestinian Territory and Jordan the role of banks is negligible concerning working capital. Supplier credit is the most widely used in the Occupied Palestinian Territory, and in Iraq for fixed capital purchases.

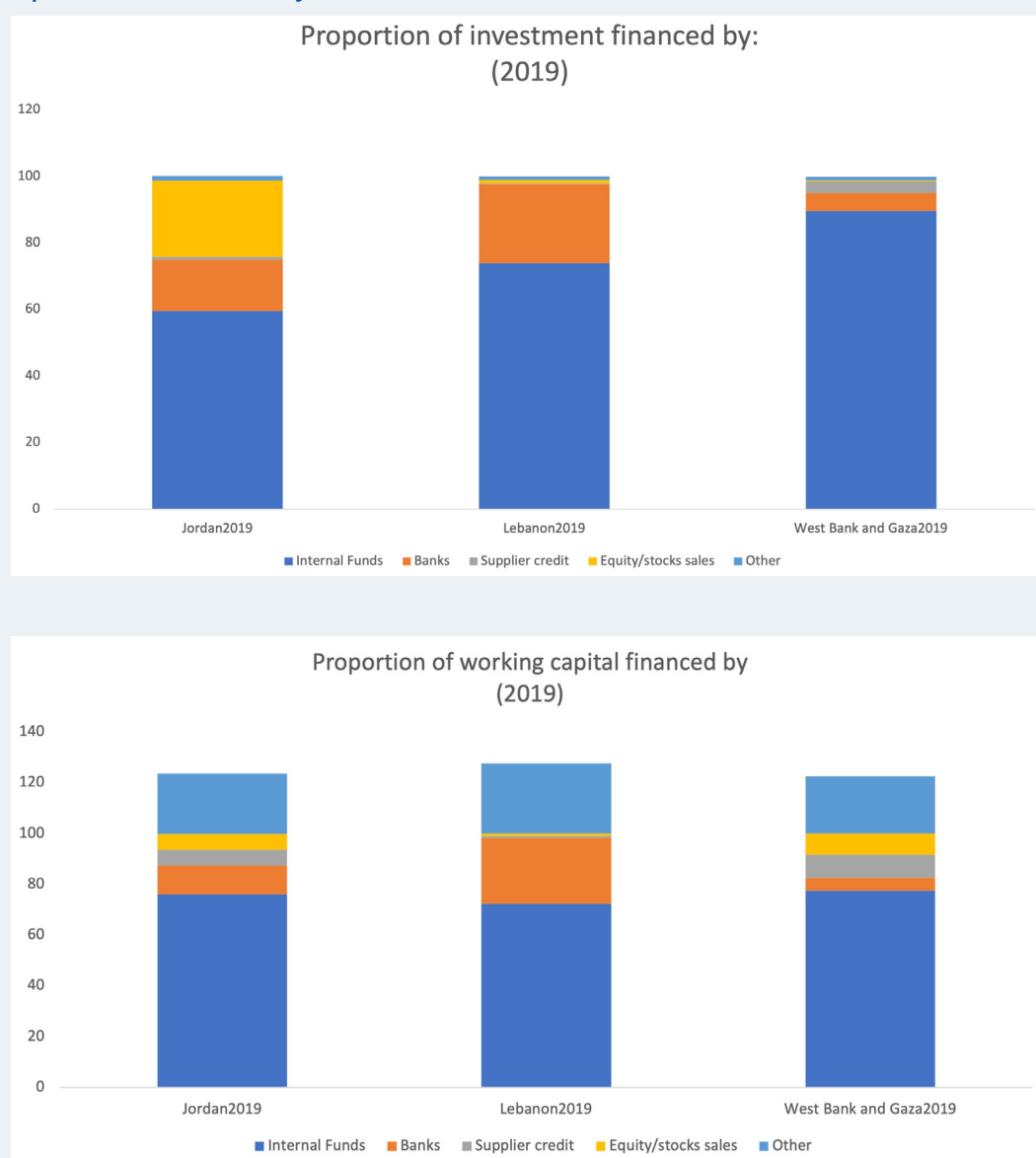
► **Figure 2 Proportion of investment (above) and working capital (below) financed by different sources in 2013**



Source: Own calculation based on World Bank Enterprise Survey.

With respect to the composition of enterprise financing in 2019 for investment and working capital (Figure 3), like in 2013, Iraq, Yemen, Lebanon, Jordan, and the Occupied Palestinian Territory relied on internal funds for both fixed assets purchase and working capital. The data show that in 2019 enterprises in Lebanon tended to rely more on internal funds compared to 2013. Equity/stock financing has become an important source of funding in Jordan for investment in fixed capital, but internal funds and other sources of financing are still the most commonly used mechanisms to obtain working capital<sup>59</sup>.

► **Figure 3 Proportion of investment (above) and working capital (below) financed by different sources in 2019**



Source: Own calculation based on World Bank Enterprise Survey.

<sup>59</sup> See Annex 3 for the calculations of the proportion of fund by source and country.

In 2020, the funding gap of enterprises increased significantly, which led to increases in working capital needs because of liquidity/cash flow constraints that arose from the COVID-19 outbreak. Enterprises decreased the credit to suppliers and their clients, widening the funding gap (Table 5).

**Table 5 Funding gap**

	I wave (2020/2021)			Last wave available (2021)		
Country	Cash flow availability	Sales on credit	Purchases on credit	Cash flow availability	Sales on credit	Purchases on credit
	Percentage of firms that responded "DECREASED"					
Lebanon	55.3 (4.6)	71.2 (4.4)	76.3 (4.2)	68.9 (4.3)		
Jordan	92.4 (2.2)	54.1 (5.8)	58.0 (5.4)	66.4 (5.5)	-	-

Source: Own calculation based on Enterprise Surveys.

Note1: All values are significant at 95 percent level of confidence, unless specified otherwise.

Note2: The data show in the last wave is for previous respondents. The comparison is with the last month of the previous wave. Jordan's last survey was held in June/July 2021 and Lebanon's last survey was held in April/May 2021.

Moreover, liquidity constraints led to overdue obligations. In Lebanon and Jordan, 30 and 70 per cent of establishments respectively exceeded their obligations to financial institutions after 2019. In this respect, our results suggest that enterprises in 2021 are turning to equity financing to solve their liquidity constraints even in a higher proportion than loans from commercial banks (Table 6).

**Table 6 Since the outbreak of COVID-19, what has been the main source this establishment has used to deal with cash flow shortages?**

Main financing sources to deal with cash flow shortages	Jordan		Lebanon	
	I wave 2020/21	II wave 2021	I wave 2020	II wave 2021
Loans from commercial banks	21.0 (3.9)	14.9 (4.7)	11.8 (2.8)	3.3 (1.8)
Loans from non-banking financial institutions (microfinance institutions, credit cooperatives, credit unions, or finance companies)	0.4 (0.4)	0.3 (0.1)	1.1 (1.5)	0.7 (0.5)
Equity finance (increase contributions or capital from existing owners/shareholders or issuing new shares)	3.4 (1.4)	0.3 (0.2)	27.6 (5.7)	51.6 (5.2)
Delaying payments to suppliers or workers	0.2 (0.1)	8.1 (2.3)	7.8 (3.3)	12.2 (4.0)
Government Grants	0.0 (0.0)	33.6 (6.6)	-	
Other	75.0 (3.8)	41.0 (6.3)	51.6 (6.0)	20.3 (4.3)
Government subsidized loan	-	1.7 (1.7)	-	-

Source: Own calculation based on Enterprise Surveys.

Note: All values are significant at 5 percent level unless specified otherwise.

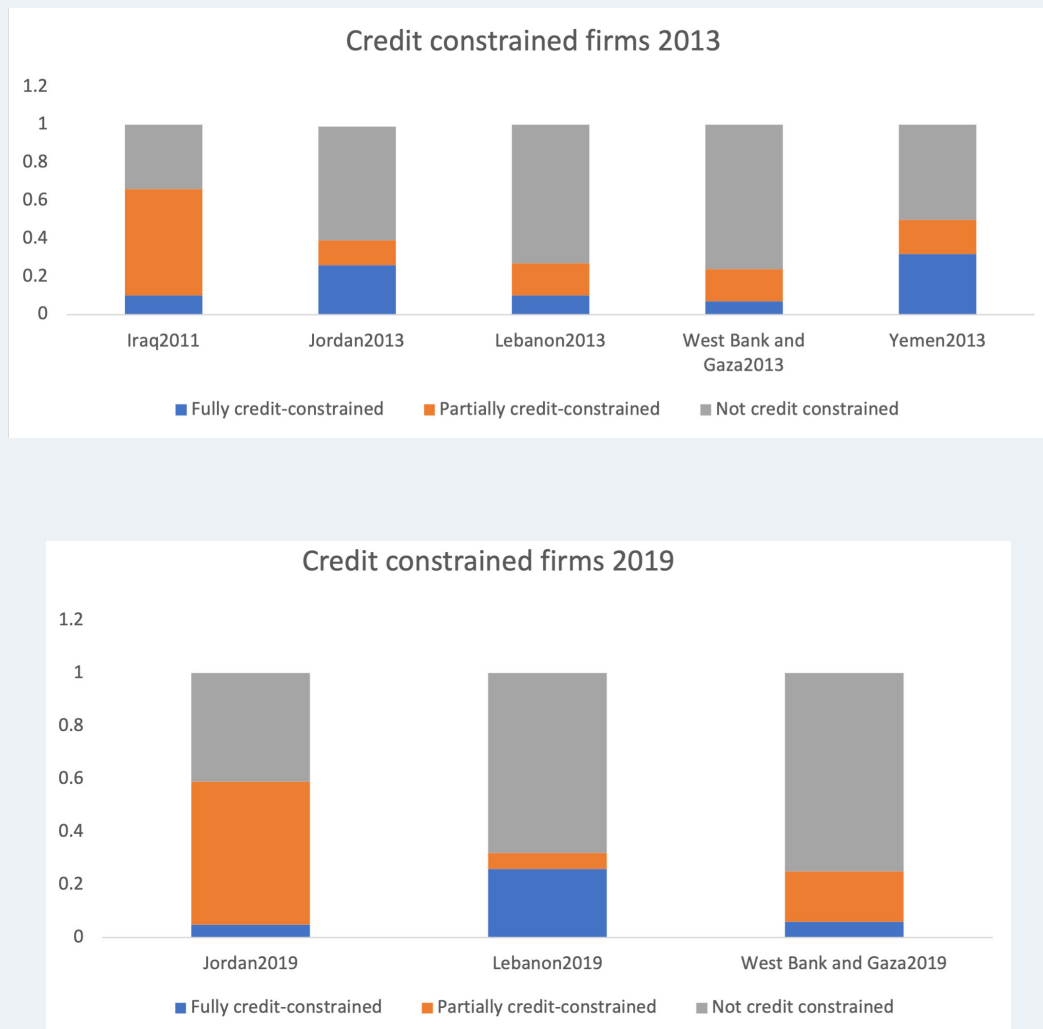
**Overall, enterprises were not credit-constrained in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory, but were mainly disconnected from the financial system before the COVID-19 outbreak. After the outbreak, enterprises became severely credit-constrained and started using other mechanisms such as equity finance as an alternative source of funding. Smaller establishments with slower employment growth and sales per workers are more likely to be credit constrained.**

The low proportion of enterprises that depend on formal financing does not necessarily reflect credit constraints (Figure 4). Enterprises prefer to fund their operations using internal capital and/or are discouraged to apply for loans. To understand credit constraints, we used the methodology developed by Kuntchev et al. 2014<sup>60</sup>, which splits credit-constrained enterprises into three categories: (i) fully credit-constrained, (ii) partially credit-constrained, and (iii) not credit constrained. For this report, fully and partially constrained enterprises are considered credit constrained<sup>61</sup>.

60 (Kuntchev, Ramalho, Rodriguez-Meza, & Yang, 2014).

61 Fully credit constrained firms are those that have no source of external funding and fall into two categories: those that applied for a loan and were rejected; and those that were discouraged from applying either because of unfavorable terms and conditions or because they did not think the application would be approved (complex application procedures, unfavorable interest rates, high collateral requirements, and insufficient size of loan and maturity). Partially credit-constrained firms include those firms that have external financing but were discouraged from applying for a loan from a financial institution; and firms that have an external source of financing and applied for a loan that was partially approved or rejected. Finally, not

► Figure 4 Credit constrained enterprises 2013 and 2019



Source: World Bank Enterprise Surveys.

Our results show that 54 per cent of enterprises in Jordan, Lebanon, and the Occupied Palestinian Territory, were not credit constrained in 2019, before the COVID-19 outbreak. However, great many enterprises that mentioned not being credit constrained were disconnected and/or discouraged from the financial market. These might reflect a lack of confidence in commercial banks or in the possibility of getting credit. It explains why enterprises in the Occupied Palestinian Territory and Lebanon (fragile states) tend to depend more on internal capital to fund their operations<sup>62</sup>.

credit-constrained firms are those that did not apply for a loan as they have sufficient capital, and those that applied for a loan and the application was approved in full.

62 Annex 4 shows the estimations for connected, disconnected, and discourage firms).

**Table 7 Credit constrained firms (fully and partially constrained) association with firms' performance**

	Probit (marginal effects)		
<b>Dependent Variable: Fully and partially constrained – Y/N</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
Annual employment growth (%)	-0.21** (0.07)		
Capacity utilization (%)		-0.0014 (0.0011)	
Log of sales per worker (USD)			-0.0229*** (0.0069)
Log of size	-0.0877 (0.0499)	-0.172* (0.075)	-0.147** (0.054)
Young firms: 0-5 years (Y/N)	0.1501 (0.1167)	-0.086 (0.0988)	-0.0245 (0.0896)
Firm is a part of larger firm (Y/N)	-0.1004** (0.0366)	0.0147 (0.0541)	-0.0728 (0.0375)
Manager experience in sector (years)	-0.0007 (0.0015)	0.0005 (0.0021)	0.0019 (0.0015)
Exports 10% or more of sales (Y/N)	-0.0325 (0.0449)	-0.0004 (0.0571)	-0.0340 (0.0460)
Foreign ownership (Y/N)	0.0085 (0.0842)	-0.1692 (0.1316)	-0.0948 (0.0789)
Number of observations	2501	1087	2308

Source: Own calculation based on Enterprise Surveys.

Note: Marginal effects from Probit regression using survey weights and including sector and economy fixed effects. Standard errors are reported in parenthesis. Capacity utilization is defined only for manufacturing firms. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10 percent levels respectively. The estimations do not include after 2019.

After the COVID-19 outbreak, the situation changed. At the end of 2020, 36 per cent of enterprises reported being not constrained compared to the 54 per cent in 2019. In 2019, less than three per cent of enterprises informed being fully credit-constrained in Jordan, and by the end of 2020, the percentage increased substantially to 50 per cent.

We also looked at the impact of financial constraints on employment, sales and establishment size<sup>63</sup>. We found that enterprises with adequate access to credit were able to create employment and sell more products and services than credit-constrained enterprises (Table 7).

Credit constrained enterprises tend to be smaller. They have more employment reductions and

<sup>63</sup> To this end we ran a Probit model and estimated the marginal effects. The results are significant after accounting for firm size, age, and sector of activity.

lower productivity than non-constrained enterprises in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory. According to the World Bank (2016), credit constraints can be due to multiple factors that mutually reinforce themselves. Enterprises' projects might not be financially viable, or enterprises themselves might not be creditworthy because of poor accounting past history records or weak performance. However, lack of access to credit might also be associated with weak performance. This suggests the presence of a low productivity trap.

Enterprises with an external auditor to review financial statements, and part of a shareholding company, are associated with a higher probability of getting a loan, after controlling for the economy, establishment size, and sector fixed effects. Such a positive effect appears to be even larger for enterprises located in fragile states. Moreover, managers' experience and exporting enterprises also show a positive association with the probability of getting a loan (Table 8).

**Table 8 Loan and credit access association with enterprise performance**

	Probit (marginal effects)		
<b>Dependent Variable: Firm has a loan or line of credit from a bank</b>	<b>(1) All selected Arab states</b>	<b>(2) Fragile states in 2013</b>	<b>(3) Arab ES 2019</b>
Young firms: 0-5 years	0.07 (0.07)	-0.005 (0.05)	0.09 (0.07)
Small and medium firms (less than 100 full time employees)	-0.04 (0.05)	-0.03 (0.06)	-0.08 (0.08)
Female principal owner	0.08 (0.04)	0.08 (0.05)	-0.004 (0.060)
Foreign ownership	0.022 (0.056)	0.07 (0.065)	-0.10 (0.07)
External auditor reviewed financial statements	0.189*** (0.03)	0.25*** (0.04)	0.12* (0.04)
Shareholding company	0.10** (0.04)	0.12* (0.05)	0.11* (0.06)
Manager experience in sector (years)	0.003** (0.001)	0.004** (0.001)	0.003 (0.002)
Exports 10% or more of sales	0.097** (0.04)	0.09* (0.04)	0.08 (0.05)
Firm is a part of larger firm	0.03 (0.03)	-0.014 (0.04)	-0.08 (0.05)
Number of observations	2606	1258	1348

Source: Own calculation based on Enterprise Surveys.

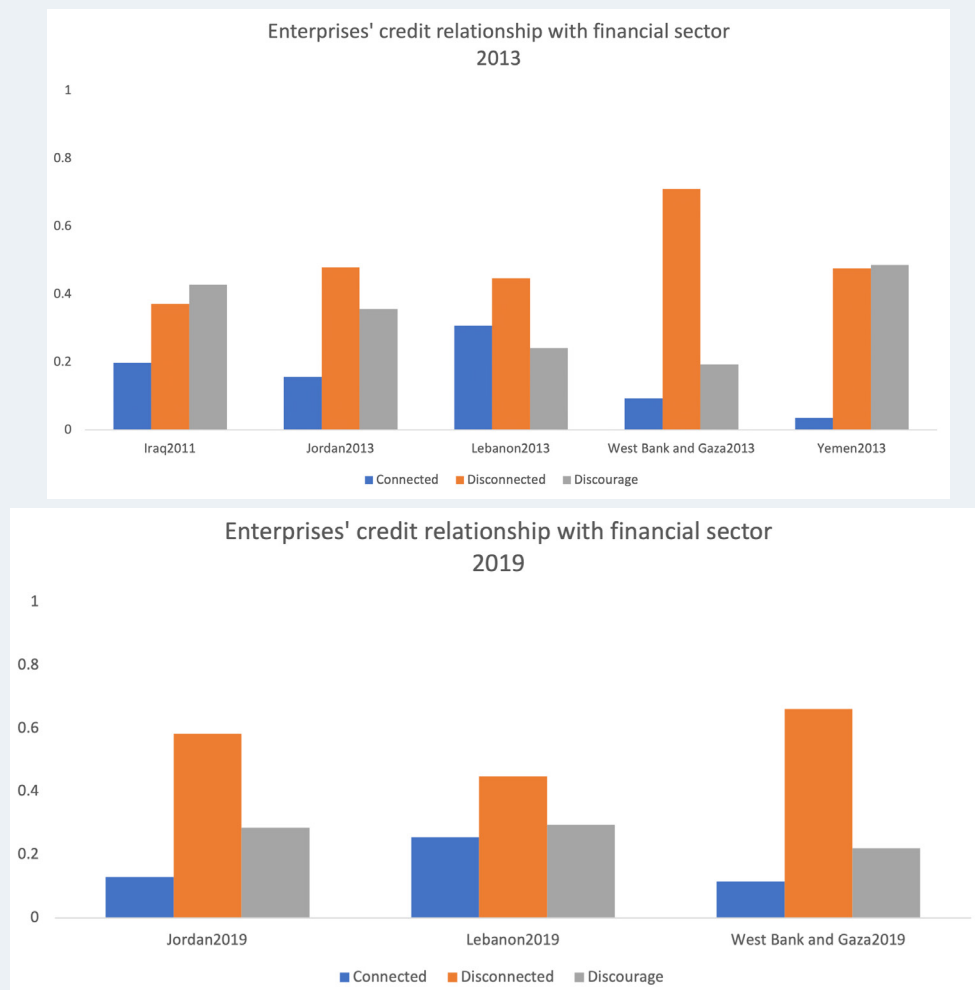
Note: Marginal effects from Probit regression using survey weights and including sector and economy fixed effects. Standard errors are reported in parenthesis. Capacity utilization is defined only for manufacturing firms. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10 percent levels respectively. All controls are (YES/NO) dummy variables.

**A great proportion of enterprises are disconnected from the banking system in Iraq, Yemen, Lebanon, Jordan, and the Occupied Palestinian Territory. The situation worsened after the COVID-19 outbreak.**

A more detailed analysis shows that enterprises are not credit-constrained for one of two reasons: (i) or establishments have their loan application approved; or (ii) they have sufficient capital and do not need to look for financing. The latter was why enterprises were not credit constrained in the selected Arab economies before the COVID-19 outbreak. The data have shown that during 2010/21 enterprises have suffered from severe liquidity constraints and are intensively looking for funding. The reliance on bank loans has decreased, and enterprises obtain credit from non-bank institutions, equity markets and appear to be delaying payments to suppliers.

Figure 5 shows the results by separating enterprises into three categories: connected, disconnected, and discouraged. Connected enterprises are those that applied for loans regardless of the outcome (approved or rejected); hence, they see financial markets as an option for funding. Disconnected enterprises are those that did not apply for any loan, as they had sufficient capital. Discouraged enterprises are those that did not apply because they could not meet the terms and conditions.

► **Figure 5 Enterprises' credit relationship with financial sector, 2013 (above) and 2019 (below)**



Source: Own calculation based on Enterprise Surveys.



In 2013 and 2019, the highest share of enterprises disconnected from the financial system were in the Occupied Palestinian Territory and Jordan, which had sufficient internal funds. At the other end of the spectrum is Lebanon where enterprises used financing from commercial banks. Nonetheless, the situation changed dramatically with the current political and economic crisis coupled with the effects from the COVID-19 pandemic. By mid-2021, approximately 3.3 per cent of enterprises relied on loans from commercial banks.

**Table 9 Characteristics of disconnected firm**

Dependent Variable:	Probit (marginal effects)	
	(1)	(2)
	Investment – purchased fixed assets (Y/N)	Access to finance: major or severe obstacle (Y/N)
Disconnected (no need for a loan due to sufficient funds – (Y/N)	-0.37 (0.14)	-0.19 (0.05)
Credit constrained (FCC, PCC) Y/N)	-0.43 (0.16)	0.12 (0.05)
Wald test disconnected = credit constrained	0.20	47.48***
P-value	0.65	0.00
Number of observations	3.403	3.428

Source: Own calculation based on Enterprise Surveys.

Note: \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10 per cent levels respectively. All controls are (YES/NO) dummy variables.

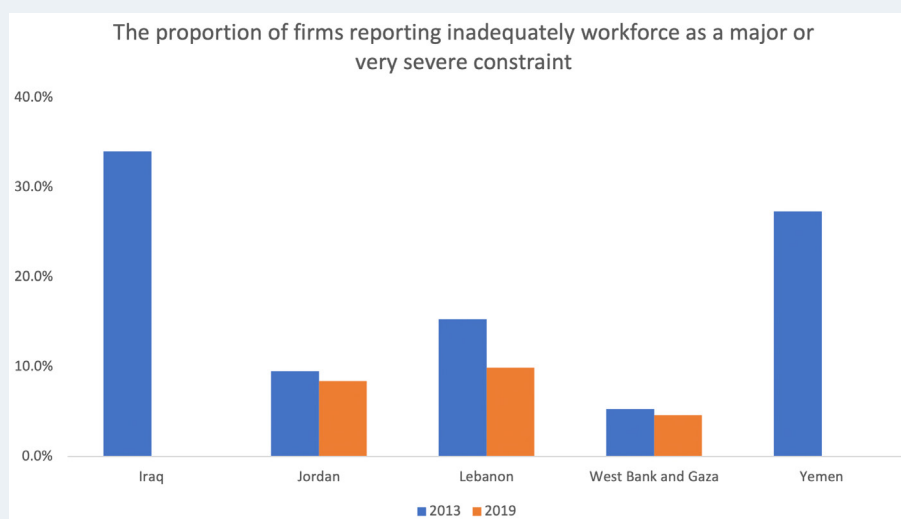
According to the World Bank (2016), bank-disconnected enterprises are the result of several different factors. Enterprises without access to financial services may miss growth opportunities. Establishments in economies with lower credit to the private sector relative to GDP (such as in the Occupied Palestinian Territory) tend to have a higher percentage of enterprises disconnected from the financial system. Both disconnected and credit-constrained enterprises are less likely to invest and less likely to have expansion plans. The difference is that disconnected enterprises are not looking for credit while credit-constrained ones are applying for loans without success. Indeed, credit-constrained establishments see access to finance as the biggest constraint in a higher share than disconnected businesses. It reveals the need to devise policies to promote financial deepening and financial inclusion. Addressing credit rationing to enterprises, particularly to SMEs, should be embraced as a priority.

### 2.2.3. Inadequately educated workforce

#### Mismatch between supply and demand of skills with low-trained workforce

According to the World Bank et al. (2016), the educational system of several countries from the Arab region has failed to provide enterprises with employees with relevant skills<sup>64</sup>. Despite these results, the share of enterprises that consider the inadequately educated workforce as the main or very severe obstacle is among the lowest of all constraints. These are even lower compared to peer economies (Figure 6).

► Figure 6 Inadequately educated workforce as a major constraint



Source: Own calculations based on Enterprise Surveys.

Note: Only Iraq's survey was held in 2011.

According to the same study, the demand for skills is a more pressing concern for periods where economies are growing and demanding workforce, compared to low-growth and negative growth periods<sup>65</sup>. In addition to the skills mismatch, enterprises in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory have not given enough training to their employees. Indeed, on average, the proportion of enterprises providing upskilling tends to be lower than in upper-middle-income counterparts for both years, 2013 and 2019.

#### Reduction of wages, jobs and working hours might affect average productivity.

The skills shortage issue must consider the COVID-19 crisis on expatriate labour, mainly in the GCC economies. The IMF 2019 Economic Outlook highlights the limited social protection, the higher risk of disease exposure of expatriates, and the fact that this group is employed more by sectors that were

<sup>64</sup> The results of this study cannot be generalized for the Arab region because it focused on the MENA region. However, several Arab economies were part of this study.

<sup>65</sup> According to the World Bank et al. (2016) the firms in the MENA region that report inadequately educated workforce as a very severe obstacle tend to grow faster and employ a higher share of university-educated employees than those economies that are not growing.

hit the hardest by the pandemic. The same report suggests that the policy should offer subsidies to promote employment and adopt measures to reduce labour market rigidities. These rigidities deter enterprises from hiring. These policies become more vital for economies such as those of Jordan and Lebanon, which heavily rely on travel and tourism.

To analyse the situation of enterprises during the COVID-19 outbreak, we used the 2020/21 enterprise survey collected only for Jordan and Lebanon. In Jordan, temporary workers seem to be the most affected after the COVID-19 outbreak, but the situation slightly improved in 2021. Around 25 per cent of enterprises reported a reduction of permanent and temporary workers and a reduction of salaries until the mid-2020s due to the outbreak of the pandemic. For temporary workers, the proportion increased to 37 per cent at the end of 2020 and decreased to 19 per cent during the first semester of 2021.

In Lebanon the COVID-19 crisis has come on the heels of grave financial, economic and political crises that have hit Lebanon since the end of 2019. Between October 2019 and November/December of 2020, 58 per cent of enterprises reported a reduction in the total number of workers from which temporary and semi-skilled workers were the most affected.<sup>66</sup> Moreover, a high percentage of enterprises (25 per cent) reported the reduction of high-skilled workers and 45 per cent of firms reported a reduction in working hours because of the compounded crisis. In fact, from October 2019 to April/May 2021, among all laid-off workers, 45 per cent were highly-skilled and 30 per cent semi-skilled worker.

## 2.2.4. Trade openness

**The business environment in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory needs to be more conducive to trade.** Exposure to international trade has been associated with competitiveness. Trade openness helps boost competitive pressure on domestic businesses and gain access to foreign knowledge and technology.

Our results show that in some countries exporting enterprises are more productive than those only serving local markets. The mechanisms that produce such differences are varied. According to Bernard et al. the mechanisms could be summarized in two aspects: (i) self-selection into the export market and (ii) learning by exporting effects<sup>67</sup>.

Lowering barriers to entry in the export market (e.g., streamlining the regulatory procedures) may ensure that this selection process works more efficiently. Under the right conditions, trade can represent an opportunity for enterprises to gain productivity and competitiveness. In the face of distorted markets, productive enterprises may not access foreign markets and reap the benefits from trade. Behar and Feud (2011) suggest that enterprises in the region engage in low-level trade, with a few large enterprises at the top. **The region's exports are estimated to be around only a third of their potential.**

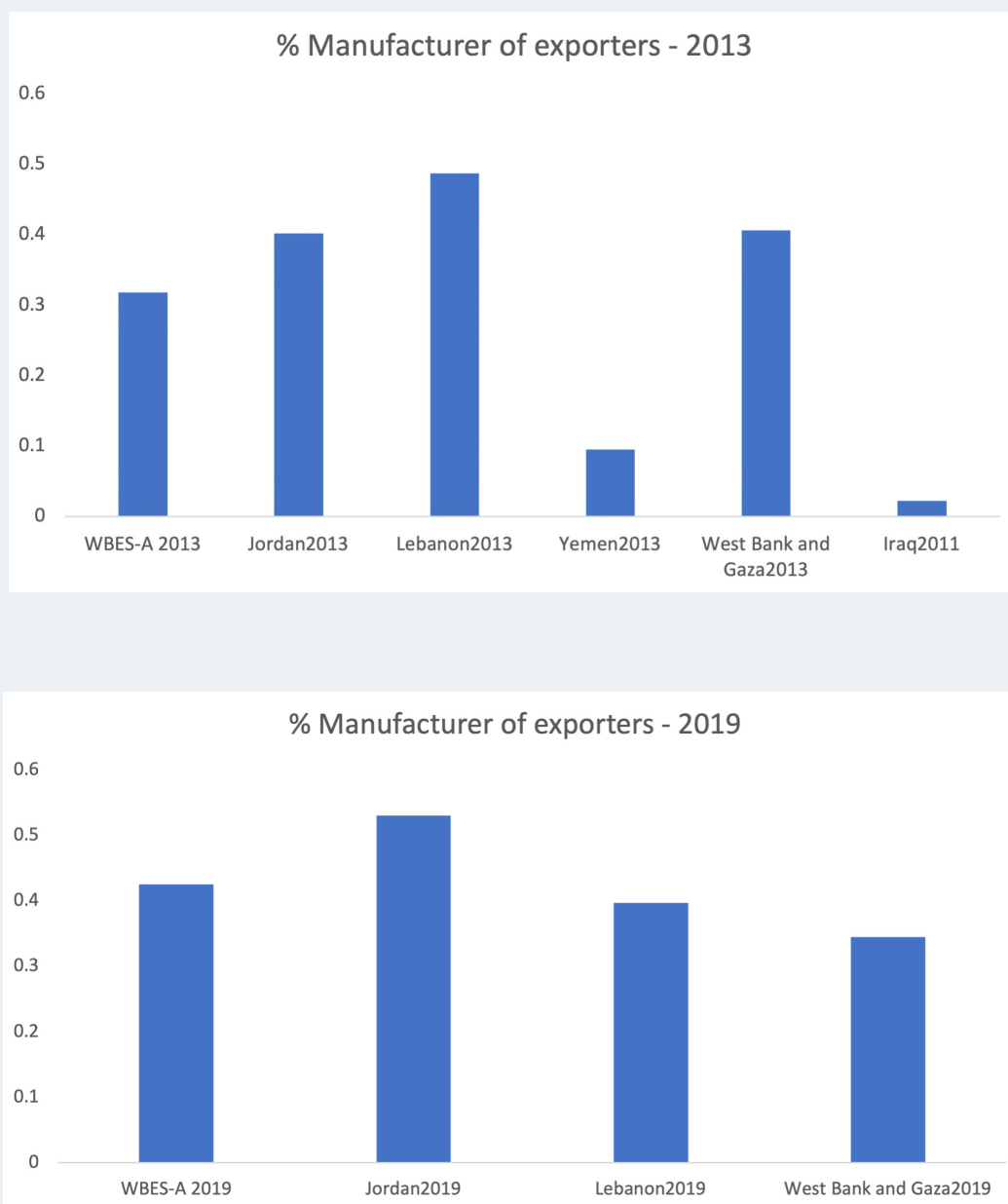
The Enterprise Survey data shows that one in three manufacturers in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory, exported goods directly or indirectly by more than lower-middle-income economies in 2013. In 2019, the percentage of manufacturing exporters was higher than upper-middle and lower-middle-income economies<sup>68</sup> (Figure 7).

<sup>66</sup> Around 26 percent of firms reported temporary workers reduction while only 1.6 percent reported permanent workers reductions. The proportion of firms reporting reduction of temporary workers did not report during the first four months of 2021.

<sup>67</sup> Learning by exporting argues that exporters gain knowledge and efficiency from exposure to foreign markets. For a more detailed explanation read (Bernard, Eaton, Jenses, & Kotum, 2006).

<sup>68</sup> Readers must be careful comparing both years. The 2013 subsample includes Lebanon, Jordan, the Occupied Palestinian Territory, Yemen, and Iraq in 2011. The 2019 subsample only includes Lebanon, Jordan, and the Occupied Palestinian Territory.

► Figure 7 Share of manufacturer exporters 2013 and 2019



Source: Own calculation based on Enterprise Surveys.

The share of exporters varies considerably across the region. In Lebanon, Jordan, and Occupied Palestinian Territory, exporters accounted for approximately 40 percent of total manufacturers, while in Yemen and Iraq the proportion did not exceed ten per cent in 2019. Almost two-thirds of exporters were large enterprises, while approximately one-third of manufacturing SMEs were exporters.

Table 10 shows the time and cost to export grouped by income. High-income Arab economies exhibit less time and fewer costs to export compared to poorer economies. One exception is Kuwait, which shows values like lower-middle- and low-income economies. Iraq, Syria, and Lebanon are the states with the highest costs to export, which can even be more than ten times the costs in Bahrain, the country with the lowest export costs.

**Table 10 Time and costs to export**

Group	Economy	Time to export: Border compliance (hours)	Cost to export: border compliance (USD)	Time to export: Doc. compliance (hours)	Cost to export: Doc. compliance (USD)
High-income	Bahrain	59	47	24	100
	Oman	28	279	7	107
	Qatar	25	382	10	150
	Saudi Arabia	37	319	11	73
	United Arab Emirates	27	462	5	140
	Kuwait	84	665	72	227
Upper-middle income	Iraq	85	1118	504	1800
	Jordan	53	131	6	100
	Lebanon	96	480	48	100
Lower-middle income	Occupied Palestinian Territory	6	51	72	80
Low-income	Syria	84	1113	48	725
	Yemen	-	-	-	-

Source: Doing Business Report, 2020.

The business environment should be more conducive to importing as well<sup>69</sup>. High-income Arab economies' tariffs are higher than those of high-income counterparts. In contrast, Lebanon and Jordan exhibit lower average tariffs compared to peer upper-middle-income economies. However, both countries have shown an increase in average tariffs since 2017 (Figure 8).

<sup>69</sup> The MENA – ES region relies heavily on imports, and at the same time, it maintains substantial restrictions on trade. World Bank, 2016.

► Figure 8 Simple mean applied tariff, all products (%)



Source: World Bank – Data Catalog.

The economies with the highest time and costs to import are Iraq, Lebanon, and Syria (Table 11). High-income Arab economies exhibit the shortest time and lower costs. Upper-middle-income and lower-income-economies need to work on reducing time and costs to import especially due to enterprises' high reliance on foreign inputs. Import restrictions could lead to higher input costs, which erodes gains, labour productivity, and ultimately may hinder the growth of efficient enterprises.

**Table 11 Time and costs to import**

Group	Economy	Time to export: Border compliance (hours)	Cost to import: Border compliance (USD)	Time to import: Doc. compliance (hours)	Cost to import: Doc. compliance (USD)
High-income	Bahrain	42	397	60	130
	Oman	39	244	7	124
	Qatar	48	558	72	290
	Saudi Arabia	72	464	32	267
	United Arab Emirates	54	553	12	283
	Kuwait	72	634	96	332
Upper-middle income	Iraq	131	644	176	500
	Jordan	79	206	55	190
	Lebanon	180	790	72	135
Lower-middle income	Occupied Palestinian Territory	6	50	45	85
Low-income	Syria	141	828	149	742
	Yemen	-	-	-	-

Source: Enterprise Surveys, and UNCTAD Trade Analysis Information System (TRAINS), and Doing Business 2020.

Note: Jordan, Lebanon and Saudi Arabia and Yemen data are from 2017. The rest of surveys were held in 2019.

## 2.2.5. Recent developments on the business environment

During the last years, some of the Arab economies have improved across different business environment dimensions. Most of the improvement has been in high-income Arab states, which exhibit the best performance in the Global Competitiveness Index (GCI) (Table 12). The GCI measures 12 pillars: institutions, infrastructure, ICT adoption, macroeconomic stability, health, skills, product market, labour market, financial system, business dynamism, market size, and innovation capability (Table 12).

According to the Global Competitiveness Index, United Arab Emirates, Qatar, and Saudi Arabia, are the countries with the best performance among the Arab economies. Kuwait (+8 in the ranking) and Bahrain (+5) are the economies that have improved the most between 2018-2019, followed by Saudi Arabia (+3) and Jordan (+3). Similar results were found in the Doing Business scores between 2019/2020.

Bahrain has improved in the institution pillar on security, property rights and corporate governance. In the infrastructure pillar, it has improved on transportation and utility infrastructure, mainly giving access to electricity and reliable water supply. Moreover, the GCI shows improvements in financial deepening and financial stability, business dynamisms, and innovation capability. The worst performing dimension is the macroeconomic stability, in which it ranks 117 out of 141 economies.

Kuwait has improved in institutions, infrastructure, ICT, product market, financial system, and business dynamism. However, it has exhibited a decline in the innovation capability dimension, which is crucial in the new digital economy and in trade openness (trade tariffs, complexity of tariffs and border clearance efficiency). Specifically, the improvements were observed in government regulations; efficiency of legal framework to settle disputes; quality of electricity supply (the access coverage is already 100 percent); internet access; financial depth and stability and business dynamism.

Saudi Arabia has improved in the institutions, infrastructure, ICT adoption, labour market, financial system, and business dynamisms pillars. Specifically, the improvement took place on security and public sector performance, property rights and corporate governance; transport and utility infrastructure; ICT adoption (internet access); product market (mainly on trade openness); labour market, financial system (depth and stability); and innovation.

Finally, Jordan has mixed results. It shows an improvement on property rights, corporate governance, and public-sector performance, but a decline in security. On the infrastructure pillar, the GCI shows an improvement in the overall transportation infrastructure but a decline in the utility infrastructure mainly due to unreliable water supply. On the other pillars, Jordan has shown a slight improvement in domestic competition and trade openness; labour market; financial system (depth and stability); business dynamism, but a reduction in ICT adoption and innovation capability.

According to the Doing Business 2020 Report, Saudi Arabia (7.7), Jordan (7.6), and Bahrain (5.9 change in DB score) are the Arab states that have improved the most across three or more areas between 2019/2020. Saudi Arabia is the economy that improved the most in the ranking with a total of eight reforms promoting policies to attract investment (Kingdom's vision 2030).

**Table 12 Business environment indicator for selected Arab economies – Global Competitiveness Index**

Group	Economy	Global Competitiveness rank, 2020
High-income	Bahrain	45
	Oman	53
	Qatar	29
	Saudi Arabia	36
	United Arab Emirates	25
	Kuwait	46
Upper-middle income	Iraq	-
	Jordan	70
	Lebanon	88
Lower-middle income	Occupied Palestinian Territory	-
Low-income	Syria	-
	Yemen	140

Source: World Bank Group, Doing Business Index; Transparency International (<https://www.transparency.org/en/cpi/2020/index/nzl#>), Corruption Perception Index; World Economic Forum; Global Competitiveness Index <http://reports.weforum.org/global-competitiveness-report-2019/competitiveness-rankings/>

Note: Large numbers represent worse performance.



According to the World Bank, these economies implemented regulatory reforms focused primarily on improvements in getting credit and resolving insolvency, dealing with construction permits, getting electricity, enforcing contracts, trading across borders, among others. Bahrain implemented the highest number of regulatory reforms improving in almost every area measured by the index. Moreover, the World Bank claims that high-income Arab economies are taking advantage of digital technologies to improve process efficiency, for example, with adequate access to electricity<sup>70</sup>.

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates improved processes for accessing electricity and access to credit during 2018/19<sup>71</sup>. Jordan implemented law amendments and improved access to credit information to banks and financial institutions to ease the access to credit while Lebanon adopted mediation as an alternative dispute resolution mechanism to enforce contracts<sup>72</sup>.

## ► 2.3 Meso level: Sectoral assessment of productivity gaps and constraints to job creation

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This section seeks to analyse productivity gaps and constraints to job creation by the economic sectors, which might affect enterprise performance. For example, a sector with a larger average proportion of microenterprises or high levels of self-employed persons might exhibit lower levels of productivity. Other sectors might be more prone to taking advantage of new opportunities brought about by digital technologies and might depend less on labour.

The enterprise survey shows that services are the most important economic sector in Iraq, Yemen, Lebanon, Jordan, and The Occupied Palestinian Territory. The results indicate that small and large enterprises are concentrated in services sectors while medium enterprises are focused on manufacturing. On the other hand, more disaggregated analyses show that small enterprises are working in retail while large ones focus on other services such as financial and insurance.

### 2.3.1. Employment dynamics

Several studies show that most of the employed personnel is distributed between a vast number of small establishments and a few large enterprises<sup>73</sup>. In Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory, formal jobs are mainly concentrated in large firms despite the large number of small enterprises. However, there are differences across countries.

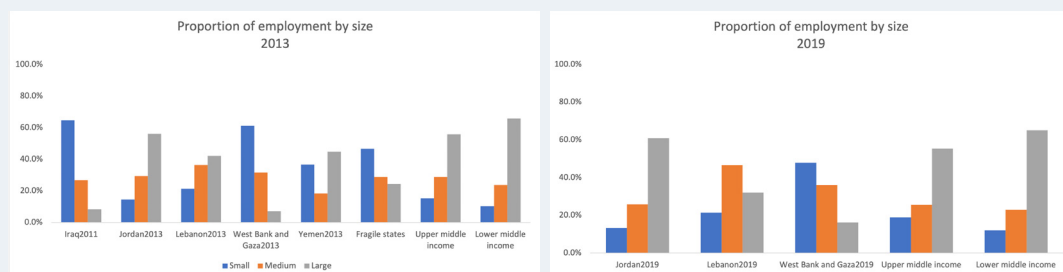
<sup>70</sup> For more information see the Doing Business Report 2020.

<sup>71</sup> Other measures to enforce contracts, faster trading across border processes and obtaining construction permits also explains the Doing Business ranking improvement.

<sup>72</sup> See Annex 5 for a detailed description of the policy changes.

<sup>73</sup> (Gemechu, Francis, & Meza, 2015) and (Meghana, Demirguc-Kunt, & Maksimovic, 2014).

► Figure 10 Proportion of employment by enterprises' size and sector



Source: World Bank Enterprise Survey.

Moreover, we find that most jobs in 2019 were in the services sector considering Jordan, Lebanon, and the Occupied Palestinian Territory. Medium-sized enterprises are operating in a larger proportion in manufacturing compared to large and small enterprises (Table 13).

**Table 13 Distribution of sales by firms' size**

	Distribution of sales					
	Small (5-19)		Medium (20-99)		Large (100+)	
	2013	2019	2013	2019	2013	2019
Jordan	11.2	22.7	23.5	47.2	65.3	30.2
Lebanon	27.3	18.6	40.7	41.3	32.0	40.2
PSE	49.1	56.5	40.6	29.3	10.3	14.1
Yemen	2.2	-	42.9 a	-	54.8 a	-
Arab ES	30.0	18.6	37.6	41.1	32.3	40.0

Sources: Enterprises Surveys.

Note: The distribution of firm sizes was calculated using the following Stata command `svyset id [pweight=wmedian], strata(strata) single unit (scaled)`.

a Values statistically not different than zero at 95% of confidence.

Iraq survey was held in 2011.

Source: Own calculation based on Enterprise Surveys.

Note: All values are significant at 95 percent level of confidence, unless specified otherwise.

a: Value statistically no different than zero.

The largest concentration of employment in large enterprises goes in tandem with a higher concentration of total sales, except in Jordan where medium-sized manufacturing and service enterprises comprise around 65 percent of total sales.

**Employment growth is weak in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory. SMEs struggle to grow and expand their operations. The COVID-19 outbreak increased the proportion of smaller establishments.**

In the 2009-2012 period, Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory exhibited employment growth in the manufacturing sector, regardless of enterprise size (Table 14). Occupied Palestinian Territory is the only country that showed employment growth in the service sector. The situation changed significantly from 2015 to 2018, when countries experienced negative or no increase in either sector. Lebanon's small enterprises have been affected the most, possibly due to the macroeconomic and political crisis that led to hyperinflation and the contraction of GDP, basically since 2019.

**Table 14 Employment growth by size and sector for Arab ES economies (Jordan, Lebanon, and PSE)**

	Manufacturing		Services	
	2009-2012	2015-2018	2009-2012	2015-2018
Jordan	5.2** (1.6)	-1.9 (2.4)	2.7 (1.8)	-1.1 (1.2)
Lebanon	4.6** (1.6)	-2.6 (2.1)	0.5 (1.3)	-4.1** (1.8)
PSE	6.2** (1.9)	-4.4 (2.4)	8.2** (1.3)	-1.3 (1.6)
Small (<20)	4.6** (1.2)	-6.2** (1.82)	2.8 (1.9)	-2.4** (1.0)
Medium (20-99)	7.0** (1.9)	2.3 (1.5)	3.8 (2.6)	-0.1 (1.4)
Large (100 and over)	6.3** (1.7)	0.4 (1.7)	1.8 (1.6)	-4.8 (2.3)

Source: Own calculation based on Enterprise Survey.

Note: \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10 percent levels respectively. All controls are (YES/NO) dummy variables.

Labour economics theory suggests that enterprises' growth results as a process of learning and selection, which improves aggregate firm productivity. Business dynamics is low in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory (Table 15). Enterprises tend to remain the same sized categories; phenomena observed in 2009-2012 and 2015-2018. In fact, for both periods, a negligible number of small enterprises became medium and/or large-sized. Worryingly, the data shows that 18 and nine per cent of medium-sized became small-sized enterprises in 2013 and 2019 respectively<sup>74</sup>. Such a situation that became more salient during the COVID-19 outbreak.

**Table 15 Enterprise transitions across size categories, 2012 and 2018, selected Arab states**

Average of the full sample (Jordan, Lebanon, PSE, Iraq, and Yemen)			
Enterprise size	Status in 2012		
	Small (5-19)	Medium (20-99)	Large (100+)
Small (5-19 employees)	94	6	0
Medium (20-99) employees	18	80	3
Large (100+) employees	0	0	100

Source: WB Enterprise Surveys.

Note: The transition matrix for Iraq is between 2007 and 2010.

Average of the full sample (Jordan, Lebanon, and Occupied Palestinian Territory)			
Enterprise size	Status in 2018		
	Small (5-19)	Medium (20-99)	Large (100+)
Small (5-19 employees)	94	4	2
Medium (20-99) employees	9	90	1
Large (100+) employees	0	7	93

Source: WB Enterprise Surveys.

<sup>74</sup> The World Bank Enterprise Survey provides data only on growth rates for surviving firms (not for firms that exited the market) and exclude recent entrants (between the last fiscal year and three fiscal years ago) and micro firms. Nonetheless, these data provide a practical starting point to analyze employment dynamics.

**After 2019, medium-sized firms had to lay off permanent and temporary workers.** In Lebanon, around 30 percent of medium-sized enterprises became small, and a similar percentage of large-size enterprises became medium-sized by the end of 2020<sup>75</sup>. This might be the result of the Lebanon current crisis coupled with the effects of the COVID-19 pandemic<sup>76</sup>.

In 2018, annual employment growth was slower for credit-constrained and large enterprises in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory. Between 2009 and 2012 we also observe this persisting pattern (Table 16). Furthermore, the OLS regression results do not show any statistically significant association between employment growth and labour productivity, or between employment growth and the perception of corruption as a priority for business operations during the 2015-2018 period.

**Table 16 Annual employment growth vs. productivity and credit constraint firms**

	Annual employment growth (%)	
	2009-2013	2015-2018
Credit-constrained (partially and fully) (Y/N)	-0.06* (0.032)	0.01 (0.018)
Log of labour productivity	-0.007 (0.012)	-0.00 (0.010)
Corruption: major constraint (Y/N)	-0.08* (0.043)	-0.03 (0.019)
Small firms (3 FY ago) (Y/N)	0.19 (0.035)	0.06*** (0.022)
Large firms (3 FY ago) (Y/N)	0.09** (0.040)	0.00 (0.020)
Young firms (0-10 years)	0.13 (0.084)	0.09 (0.108)
Constant	-0.11 (0.081)	-0.02 (0.029)
Sample size	1.340	1.046
R-squared	0.13	0.12

Source: WB Enterprise Surveys.

Note: Regression coefficients are reports. Values are in PPP- purchasing power parity. The regression includes controls for economy, sector, and locality fixed effects. Standard errors in parenthesis. \*\*\*, \*\*, and \* denote statistical significance at the 1,5,10 percent levels respectively.

<sup>75</sup> The ES survey shows that the proportion for small firms in Lebanon, October 2019 was 58 percent. By October/November 2020 the proportion of firms increased to 71 percent. The difference is statistically significant at 85 percent of confidence.

<sup>76</sup> See Annex 7 for a complete view of the Employment Transition Matrix.

## 2.3.2. Wages

**More productive enterprises have higher wage bills per worker.** The total wage bill per worker, which includes wages, taxes and social security payments, adjusted for purchasing power parity in US dollars, are used to evaluate wage gaps. More productive enterprises (measured by sales per worker) exhibit significantly larger wage bills per worker in Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory, which is in line with previous research<sup>77</sup> (Table 17). The size of enterprises and managers' experience is also positively correlated with wages.

**Table 17 Wage across sectors and size (in thousands deflated 2009 USD)**

	Manufacturing		Services	
	2013	2019	2013	2019
Jordan	405.1 (96.2)	293.6 (54.8)	184.4 (61.4)	236.9 (42.9)
Lebanon	375.5 (63.8)	197.9 (17.3)	215.9 (23.5)	208.0 (18.2)
PSE	77.8 (10.2)	84.6 (12.4)	50.7 (4.7)	87.3 (9.7)
<b>All Arab states</b>	284.9 (44.2)	176.6 (17.5)	158.7 (25.3)	178.1 (17.5)

Source: World Bank Enterprise Survey.

Note: All values are significant at 95 percent of confidence.

Overall, manufacturing enterprises paid higher wages than service sector establishments in 2013. This difference was practically zero in 2019. We also find that an important proportion of large enterprises were working in high-productivity service sectors between 2013 and 2019. In addition, we observe that average wages in the manufacturing sector declined between 2013 and 2019 in Jordan and Lebanon while wages remained stable in the service sector.

77 (Haltiwanger, Lane, & Spletzer, 2007) and (Tiothy, Foster, Haltiwanger, & Troske, 2004).

**Table 18 The wage-size effect**

	Log average wage bill PPP-adjusted to 2009 USD		
	All	Sample of 2013 countries	Sample of 2019 countries
Log size	0.95*** (0.04)	1.01*** (0.06)	0.95*** (0.036)
Log firms' age	0.009 (0.04)	0.15** (0.07)	-0.09 (0.060)
Labour productivity in 2009 USD	0.21*** (0.04)	0.39*** (0.07)	0.12 (0.050)
Managers' experience	0.01** (0.003)	0.003 (0.006)	0.01* (0.003)
% Of workers with university degree (2013 sample) or skilled workforce (2019 sample)	-	-(0.005) (0.016)	-
Formal training (Y/N)	0.11 (0.134)	0.36 (0.25)	0.104 (0.081)
Constant	7.5*** (0.31)	7.3*** (0.54)	9.18*** (0.240)
Observations	2,521	557	1,089
R-squared	0.68	0.72	0.75

Source: Enterprise Surveys.

Note: OLS regressions coefficients are reported. Standard errors in parenthesis. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 1 percent levels respectively. Economy and sector fixed effects are not shown. For the whole sample, time dummies were included.

Moreover, our results do not show an association between the percentage of workers with a university degree and higher wages. Labour economics theory suggests that higher wages are positively associated with the level of education. However, in distorted markets, or in economies with low-quality tertiary education or skills mismatch, this association might not hold. The regression results show that large enterprises tend to pay employees more than SMEs, known as the wage-size effect (Table 18). The differences in wages can be associated with productivity differentials, management quality, the ability of large enterprises to attract better talent, among other factors. Finally, the garments sector shows a negative association with average wages. This result might explain in part the reduction of the average wages in the manufacturing sector from 2013 to 2019.

**There is no difference in wages paid by exporting and non-exporting enterprises** (Figure 11). Exporting enterprises are exposed to more competition and are supposed to be more productive, exhibit larger sizes and pay higher wages than non-exporting ones. Nonetheless, our results suggest that differences between exporting and non-exporting enterprises is not statistically significant in Iraq, Yemen, Jordan, and Occupied Palestinian Territory. In Lebanon, exporting enterprises do pay higher wages than non-exporting ones.

► Figure 11 Wage bill per worker, 2013 and 2019



Source: Enterprise Surveys.



### 2.3.3. Productivity

This section conducts both a descriptive analysis of labour productivity (output per worker and output per labour costs), revenue-based total factor productivity, and a correlation analysis using OLS and Probit models to define enterprise-level determinants of labour productivity.<sup>78</sup>

#### Descriptive analysis<sup>79</sup>

Business productivity measures the efficiency of enterprises to turn inputs into output. Robert Solow's (1957)<sup>80</sup> in his seminal work concluded that income inequality would be largely explained by underlying differences in productivity. Further work performed by Acemoglu and Dell (2010) and Syverson (2011)<sup>81</sup> analysed productivity differentials between economies and across enterprises. Acemoglu and Dell concluded that half of the between-country and between-municipality differences of countries in the Americas could be accounted for differences in human capital while Syverson found that business productivity differentials would be explained by several factors, including production/management practices and some external elements relating to the business environment.

The World Bank enterprise survey can be used to estimate productivity at the firm level and assess the effect of the business environment on enterprise performance. It includes labour and total factor productivity (TFP) estimations for manufacturing enterprises, as well as factor ratios or share costs of capital, labour, and intermediate materials over the output for manufacturing and non-manufacturing enterprises<sup>82</sup>. TFP estimates are based on a Cobb-Douglas production function using monetary prices for inputs and outputs. The output was estimated using revenues (sales as a proxy). The enterprise-level TFP is the sum of the economy-industry-level effect and enterprise-specific productivity<sup>83</sup>.

We find that the average revenue (sales as proxy) as a share of total labour costs is higher in manufacturing enterprises compared to services in Jordan, Lebanon, and the Occupied Palestinian Territory<sup>84</sup> (Table 19).

78 Gaddis, et al (2018) conducted firm-level regressions controlled by within-country fixed effects and used the following controls using a pooled sample: age and firm size, a proxy for physical capital (whether the enterprise purchased fixed assets in the last fiscal year); for human capital, the years of experience on the top manager and whether the firm offers formal training; exporter status; foreign ownership; a dummy variable for access to finance (1 if firms have a loan or line of credit and zero otherwise); whether a firm has its own website or not and included several business environment variables: total duration of power outages, whether a firm owned a generator, faced crime, paid for security, expected a request for a bribe, and time spent by management in dealing with regulations. (Islam, Gaddis, Palacios Lopez, & Amin, 2018).

79 Due to data limitations, it was not possible to analyse informal companies, which are the ones that commonly exhibit the lowest-productivity, lower-wages and lower-skilled personnel compared to formal businesses. Moreover, all estimations were conducted using the sample design provided in each of the surveys. For the sampling weight variable, we used a probabilistic weight design with the medium weights variable wmean as suggested in the implementation reports, and the variable strata for the stratum identifiers.

80 (Solow, 1957).

81 (Acemoglu & Dell, 2010) And (Syverson, 2011).

82 TFP estimates can be subject to several biases which are difficult to address: (i) selection, (ii) simultaneity, (iii) issues with using monetary as opposed to physical quantities measures or inputs and output. (World Bank; European Bank; European Investment Bank, 2016).

83 TFP was estimated by the World Bank using the following regression model:  $y_i = \beta_k K_i + \beta_l L_i + \beta_m M_i + \epsilon_i$  where  $y_i$  is proxied by the "replacement value of machinery and equipment";  $K_i$  is proxied by "total wage bill"; and  $M_i$  by the "cost of raw materials and intermediate goods used in production". To make data comparable, the variables were transformed to a common currency year. TFP was estimated separately for each industry (grouped by two-digit ISIC codes) and pooling economies by income level (based on the World Bank classification). The final estimation is then  $y_{isw} = \beta_{ksw} K_{isw} + \beta_{lsw} L_{isw} + \beta_{msw} M_{isw} + \sum \beta_c c + \epsilon_{isw}$  where  $i$  refers to the firm,  $s$ , the sector and  $w$  the economy. To allow for an average economy-level effect, a dummy variable for each economy  $c$  is included. The regressions were controlled by income level, economy, and year fixed effects. For a detailed explanation see (Francis, Karalashvili, Maemir, & Meza Rodriguez, 2020) one important caveat to consider is that the regression specification assumes common production technology which might be different across industries and economic level.

84 The results are valid for low levels (70) of statistical confidence.

**Table 19 Revenue as a share of total labour costs by country, sector and size, selected Arab states, 2019**

	Revenue as a share of total labour costs deflated 2019 USD		
By country	Manufacturing	Services	Total
Jordan	27.7 a (19.2)	8.9 (1.2)	15.6 (7.5)
Lebanon	10.5 (10.5)	10.5 (1.7)	10.5 (1.2)
PSE	10.9 (8.7)	8.7 (1.1)	9.6 (1.1)
Yemen 2013	20.4 (5.0)	43.4 (18.5)	33.9 (11.0)
Arab ES economies 2019	15.1 (5.1)	9.3 (0.8)	11.5 (2.1)
By enterprise size	Manufacturing	Services	Total
Small (<20)	17.1 (7.7)	9.0 (0.9)	11.9 (2.8)
Medium (20-99)	11.5 (1.9)	10.7 (2.0)	11.1 (1.4)
Large (100 and over)	7.9 (1.6)	7.1 (0.9)	7.5 (0.9)

a Significant at 80 percent of statistical confidence.

Note: all values are significant at 95 percent of confidence unless indicated otherwise.

When labour productivity was calculated as sales per worker, the estimations showed that larger enterprises are more productive than smaller ones. From Jordan, the Occupied Palestinian Territory, and Yemen the IMF (2019) found similar results. Although not entirely comparable, the World Bank (2013) suggests that larger enterprises in the Middle East and North Africa are more productive than SMEs. Moreover, our calculations indicate that bigger localities exhibit higher average productivity in the Occupied Palestinian Territory and Jordan. In Lebanon and Yemen, the charts showed no differences across localities by size. In Jordan, the North and Central regions exhibit the highest productivity rates and Irbid and Zarqa present the lowest rates<sup>85</sup>.

Furthermore, large enterprises seem to exhibit higher total factor productivity compared to SMEs (Table 20). To assess differences more precisely, we ran a regression model using TFP as dependent variables, being controlled by several business characteristics. Our results suggest that foreign-owned, exporting enterprises and those forming part of large corporations exhibit higher production rates than other enterprises.

<sup>85</sup> See Annex 8 for a detailed calculation of productivity by locality size.

**Table 20 Total Factor Productivity by size for Arab ES 2019 economies (Jordan, Lebanon, and PSE)**

Total Factor Productivity based on YKLM model	
Small (<20)	2.9 (0.5)
Medium (20-99)	2.8 (0.6)
Large (100 and over)	3.9 (0.2)

Note: all values are significant at 95 percent of confidence unless indicated otherwise.

Source: WBES surveys, 2019.

Large manufacturing enterprises, which use proportionally more capital and intermediate goods, are more productive than those which do not use those factors intensively. Large enterprises seem to be skewed toward capital use with associated lower remuneration of labour (Table 21).

**Table 21 Labour productivity model**

	Services	Manufacturing		
	Logarithm of labour productivity	Logarithm of labour productivity		TFP (YKML)
	(1)	(2)	(3)	(4)
Log of size	-0.07 (0.194)	0.25 (0.18)	-1.2*** (0.168)	-0.11 (0.63)
Log of cost of capital			0.07** 0.033	0.089 (0.107)
Log of cost of intermediate goods			0.51*** 0.045	-0.088 (0.157)
Foreign ownership	1.0*** (0.384)	-0.03 (0.278)	-0.34** (0.138)	0.95 (0.68)
Exports 10% or more sales (Y/N)	0.35** (0.159)	0.13 (0.143)	-0.001 (0.109)	0.74* (0.427)
Firm is part of a larger firm (Y/N)	-0.1 (0.170)	-0.23 (0.180)	0.13 (0.140)	-0.09 (0.57)
Constant	10.8*** (0.24)	10.5 (0.27)	3.9*** (0.491)	1.90 (1.58)
Number of observations	1.196	981	734	737
R-squared	0.14	0.05	0.35	0.03

Note: Simple OLS using survey-weighted observations (svy command in Stata). Linearized Taylor standard errors. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10 percent levels respectively. Year, economy, and locality size fixed effects not shown.

Source: Own elaboration with data from the WB Enterprise Survey.

We also assessed median factor ratios by enterprise size and economic activity for Jordan, Lebanon, and the Occupied Palestinian Territory (Table 22). The results suggest that enterprises have become either more capital-intensive or they are rewarding capital more than in 2013. The most salient example is Jordan, which exhibits a much higher reliance on capital in 2019 compared to 2013<sup>86</sup>.

**Table 22 Factor ratios per firms by country and size 2019**

Factor ratios for Jordan, Lebanon, and the Occupied Palestinian Territory					
	Cost of labour per unit of sales		Cost of inputs per unit of sales	Cost of capital per unit of sales	Cost of finished goods per unit of sales
	Manufacturing	Services	Manufacturing	Manufacturing	Services
Small (<20)	0.24 (0.01)	0.26 (0.02)	0.37 (0.03)	0.92 (0.20)	0.51 (0.07)
Medium (20-99)	0.18 (0.02)	0.24 (0.04)	0.41 (0.04)	2.0 (0.32)	0.56 (0.12)
Large (100 and over)	0.19 (0.04)	0.23 (0.03)	0.42 (0.04)	2.3 (0.18)	0.30 (0.10)

Source: ES surveys, 2019.

Note: all values are significant at 95 percent of confidence unless indicated otherwise.

Moreover, the factor ratios also suggest that medium-sized manufacturing enterprises might be using labour more efficiently by comparison to other manufacturing and service enterprises. Nonetheless, small enterprises working in services are using labour less efficiently by comparison to medium and large manufacturing enterprises<sup>87</sup>. The cost of inputs per unit of sales does not show differences across enterprises.

The cost of capital over total annual sales is much higher in medium and large enterprises than in small establishments. This last result suggests that small economic units exhibit higher productivity in the use of capital. However, this result ought to be analysed carefully. Capital is calculated as the total cost for the establishment to re-purchase all its machinery. Small enterprises might not need a bigger budget for their operations, whereas medium and large ones, especially those operating in the manufacturing sector, might have heavily invested in machinery for production.

<sup>86</sup> In 2013, Lebanon and Occupied Palestinian Territory intermediate costs share is higher than labour share and in the latter intermediate costs share is also higher than the labour one. In Jordan, Yemen, and Iraq the differences in costs per unit of sales are not statistically different. In 2019, intermediate costs per unit in Lebanon, Jordan and Occupied Palestinian Territory are higher than labour costs per unit of sales. In Jordan, intermediate costs are also higher than capital costs per unit of sales.

<sup>87</sup> The comparison was performed using 70 per cent confidence intervals.

## Labour productivity and size of enterprises

This section seeks to analyse the association of several business characteristics with labour productivity (sales per worker as a proxy). After considering several characteristics and running multiple analyses, we found two key results. The first is that labour productivity is correlated with a higher probability of becoming a larger enterprise. The second is low-tech enterprises focused on innovation show higher productivity than low-tech companies that did not innovate.

Moreover, we found that during the 2015-2018 period, there was a positive outcome between labour productivity in 2015, and the probability of having become a larger enterprise by 2018<sup>88</sup>. Enterprises that showed higher labour productivity were able to become larger -in terms of the number of workers- between 2015 and 2018. However, the results also show that the probability for increasing is low and small enterprises are more likely to remain small (Table 23).

**Table 23 Probit model. Enterprise size and labour productivity, 2015-2018 period**

Average for the full sample 2019 (Jordan, Lebanon, and Occupied Palestinian Territory)			
	Status in 2018		
Status in 2015	Small firm in 2018 (Y/N)	Medium firm in 2018 (Y/N)	Large firm in 2018 (Y/N)
Log of labour productivity (PPP)	-0.006 (0.015)	0.000 (0.015)	0.005* (0.004)
Small (5-19 employees) in 2015 (Y/N)	0.78*** (0.045)	-0.77*** (0.045)	-.010 (0.007)
Large (100+ employees) in 2015 (Y/N)	-0.14*** (0.04)	-0.73*** (0.09)	0.87 (0.08)
Young firms (0-10 years)	0.063 (0.042)	-0.07 (0.04)	0.004 (0.005)

Source: WB Enterprise Surveys.

Note: Probit regression coefficients are reports. Values are in PPP- purchasing power parity. The regression includes controls for economy, sector, and locality fixed effects. Standard errors in parenthesis. \*\*\*, \*\*, and \* denote statistical significance at the 1,5,10 percent levels respectively.

<sup>88</sup> A Probit model was estimated to assess the correlation between labour productivity and the probability of becoming a larger firm.

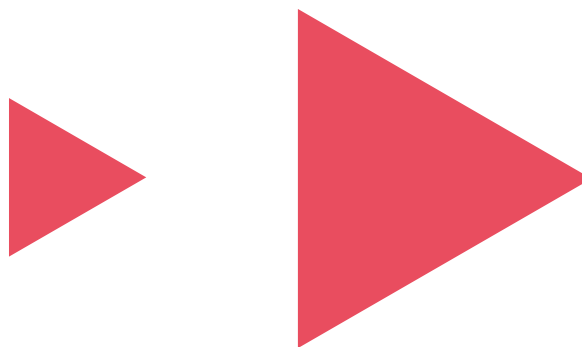
## Productivity and innovation

### **Low-tech enterprises that introduced a new product and/or significantly improved processes show higher productivity than low-tech firms that did not.**

Efficient management and business practices are associated with innovation, better worker skills and ultimately higher productivity. Mohnen and Hall (2013) found a positive correlation between introducing a new or significantly improved product and business performance for European economies. However, the evidence for developing economies is mixed<sup>89</sup>. The World Bank (2016) suggests that innovation in the Middle East and North Africa is positively associated with higher labour productivity, particularly in medium and large manufacturing enterprises.

Previous studies show that knowledge acquisition is dominated by high-tech sectors correlated to managers and workers' skills and formal training. The level of education does not seem to be related to knowledge acquisition, possibly due to supply-demand mismatches and low quality of tertiary education. Moreover, enterprises are more likely to introduce new products and/or processes if they have access to finance. Medium- and low-tech sectors have considerable room for improvement toward the technological frontier<sup>90</sup>.

In contrast to previous studies, we did not find any difference in investment in research and development between high- and low-tech enterprises (Table 24), but we did find evidence that suggests differences in enterprises that introduced a new/improved process and/or product (Table 25). Low-tech enterprises in Jordan and Lebanon, and high-tech enterprises in the Occupied Palestinian Territory that introduced new/improved products and processes exhibit higher productivity<sup>91</sup>.



<sup>89</sup> (Mojnen & Hall, 2013).

<sup>90</sup> As discussed in the World Bank 2016 study, innovation also considers improvements in technical specifications, components and materials, improvement in functional characteristics and on production or delivery methods, organizational improvements, and processes.

<sup>91</sup> Estimations were significant at 80 percent of confidence.

**Table 24 Proportion of enterprises investing in R&D and foreign technology in 2019**

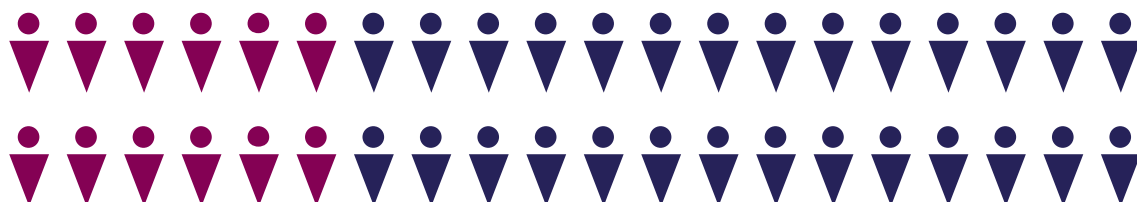
	High-tech		Low-tech	
Arab States	Invest in R&D	Buy foreign tech	Invest in R&D	Buy foreign tech
Jordan	0.39 (0.09)	0.02 <sup>a</sup> (0.017)	0.57 (0.07)	0.00 <sup>a</sup> (0.00)
Lebanon	0.06 <sup>a</sup> (0.032)	0.031 <sup>a</sup> (0.019)	0.064 (0.02)	0.04 (0.015)
Occupied Palestinian Territory	0.00 <sup>a</sup> (0.000)	0.00 <sup>a</sup> (0.000)	0.00 (0.001)	0.05 <sup>a</sup> (0.029)
Upper middle income	0.03 0.006	0.04 (0.008)	0.08 (0.016)	0.06 (0.017)
Lower middle income	0.05 (0.013)	0.04 (0.00)	0.07 (0.00)	0.04 (0.006)

Source: Enterprise Surveys.

Note1: High tech manufacturing sectors include aircraft and spacecraft; pharmaceuticals; office, accounting, and computing machinery; radio, TV, and communications equipment; and medical, precision, and optical instruments. Medium-low-technology industries include electrical machinery and apparatus, motor vehicles, trailers and semi-trailers, chemicals excluding pharmaceuticals, railroad equipment and transport equipment and machinery and equipment. Low-tech industries include manufacturing; recycling; wood, pulp, paper, paper products, printing, and publishing; food products, beverages, and tobacco; textiles, textile products, leather, and footwear.

Note2: All values are significant at 95 per cent of confidence unless indicated otherwise.

<sup>a</sup> Values statistically no different than zero.



**Table 25 Productivity gap vs innovation**

Labour cost over revenue between high-tech and low-tech firms						
Arab state	New product introduced during last 3 years? (Y/N) (Difference N-Y)		Main significant improved process?		Invest in R&D	
	High-tech	Low-Tech	High-tech	Low-Tech	High-tech	Low-Tech
Jordan	0.05	0.19	-0.05	0.17 <sup>a</sup>	0.04	0.18
Lebanon	-0.04	0.12**	- 0.08 <sup>a</sup>	0.09 <sup>a</sup>	0.02	0.06 <sup>a</sup>
Occupied Palestinian Territory	0.08	0.05		0.02	-0.02	-0.05
ARABES	0.026	0.074	0.03	0.05	0.05	0.01

Source: WB Enterprise Surveys.

Note1: Larger values indicate less productivity.

Note2: All values are significant at 95 percent of confidence unless indicated otherwise.

<sup>a</sup> Values significant at 80 percent of confidence.



## ► 2.4 Micro level: Management practices

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Due to data limitations, this section seeks to assess the relationship between management practices and enterprise performance in terms of labour and total factor productivity in Jordan, Lebanon, and the Occupied Palestinian Territory.

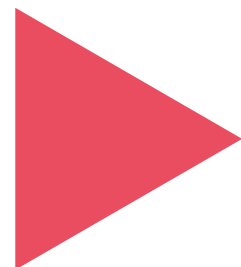
### ►► 2.4.1. Quality of management

Brunh et al. suggest that better management practices are positively associated with enterprises' productivity and growth<sup>92</sup>. Bloom et al. (2013)<sup>93</sup> found that improved management practices resulted in a 17-per cent increase in productivity due to improvements in the quality of products, efficiency, and better management of inventories. McKenzie and Woodruff (2015)<sup>94</sup> found that small enterprises with better business practices in marketing, stock- and record-keeping, and financial planning have higher labour productivity, survival rates and faster sales growth. Bloom and Van Reenen (2006)<sup>95</sup> showed that family-run businesses are poorly managed compared to professionally run enterprises; also, that both strong competition and open labour markets are associated with improved management performance. Better-managed enterprises need a highly-skilled workforce, and they make better use of it.

The World Bank (2016) found that large enterprises tend to be better managed than small ones. The report found that enterprises in the Occupied Palestinian Territory and Lebanon exhibited on average better management practices compared to those in Middle East and North Africa and Eastern Europe and Central Asia. Enterprises in Jordan and Yemen exhibited poor management practices compared to the rest of the Arab countries.

We assessed management practices using the methodology proposed by Bloom and Van Reenen (2010), which explores four areas: operations, monitoring, targets, and incentives across enterprises, industries, and countries.

Tables 28-30 show the proportion of enterprises that responded to each category of questions related to management practices to have a sense of how enterprises are run. In the operations dimension, we find a high proportion of enterprises that do not take any action or fix problems with no further action to solve them. In the monitoring dimension, most enterprises use one or two indicators to monitor production performance, which might be a sign of not having strong monitoring systems.




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<sup>92</sup> More references can be found in (Brunh, Karlan, & Schoar, 2010).

<sup>93</sup> For more references see Bloom and Van Reenen (2010)(Bloom, Eifert, Mahajan, Mackenzie, & Roberts, 2013).

<sup>94</sup> (McKenzie & Woodruff, 2015).

<sup>95</sup>(Bloom & Van Reenen, Measuring and Explaining Management Practices Across Firms and Nations, 2006).

**Table 28 Management practices – operations and monitoring, 2019**

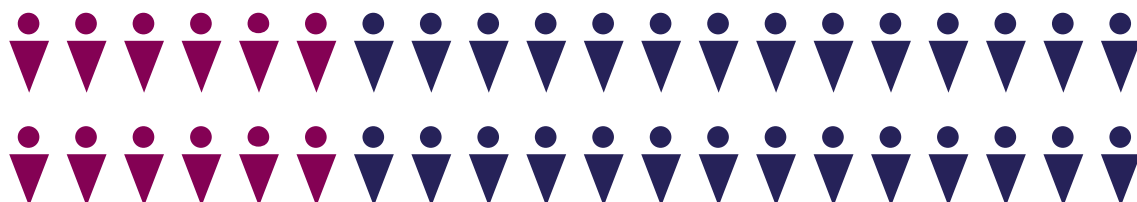
Country	Operations			Monitoring		
	New product introduced during last 3 years? (Y/N) (Difference N-Y)			Main significant improved process? Invest in R&D		
	No action taken	Fixed it and no further action	Fixed it with further action	1-2 indicators	3-9 indicators	10 or more indicators
Lebanon	0.027 (0.001)	0.57 (0.057)	0.39 (0.057)	0.46 (0.119)	0.28 (0.109)	0.26 (0.085)
Jordan	0.10 (0.074)	0.75 (0.079)	0.15 (0.048)	0.28 (0.083)	0.44 (0.088)	0.28 (0.083)
Occupied Palestinian Territory	0.08 (.066)	0.79 (0.076)	0.13 (0.066)	0.60 (0.119)	0.34 (0.120)	0.05 (0.022)

Source: Own calculations based on the World Bank Enterprise Surveys.

Note: All values are significant at 95 percent of confidence unless indicated otherwise.

In the target dimension, enterprises either focus on short- or long-term targets and a small proportion of companies highlighted both. Many enterprises report that these production/service targets are made known to most managers and production workers. The survey does not collect information about periodic target assessment because targets change over time.

Depending on the country, enterprises have different amounts of difficulties to achieve these targets. In Jordan, quite a few enterprises make an extraordinary effort to achieve their targets, much more than in Lebanon and the Occupied Palestinian Territory. Indeed, 82 per cent of the surveyed enterprises in Lebanon report that they met their targets without much effort. We should look into these results carefully. Any variation could be related to differences in the quality of management practices, goal-setting variations, or other factors that would explain difficulty variations. For example, targets set by enterprises in Jordan might be more challenging than in Lebanon, which would explain the variation in trying to achieve them.



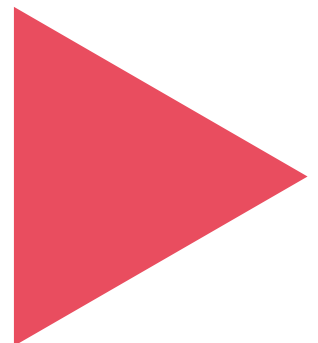
**Table 29 Management practices – production targets, 2019**

	Production targets								
Country	What best describes the timeframe of production/ service provision targets?			How easy to achieve its production targets?			Who was aware of the production Targets this Establishment?		
	Short-term focus	Long-term focus	Short- and long-term focus	Targets not achieved	Achieved with more than normal or extraordinary effort	Achieved with not much and some effort	Only senior managers	Most managers and some/ most production workers	All managers and production workers
Lebanon	0.48 0.113	0.23 0.078	0.29 0.091	0.04 0.018	0.14 0.013	0.82 0.021	0.70 0.082	0.24 0.082	0.06 0.039
Jordan	0.24 (0.06)	0.49 (0.08)	0.27 (0.08) 0.25 (0.079)	0.00 (0.00)	0.94 (0.04)	0.06 (0.04)	0.19 (0.050)	0.73 (0.059)	0.08 (0.038)
Occupied Palestinian Territory	0.44 (0.111)	0.31 (0.115)		0.00 (0.00)	0.48 (0.103)	0.51 (0.103)	0.42 (0.106)	0.52 (0.103)	0.05 (0.015)

Source: Own calculations based on the World Bank Enterprise Surveys.

Note: All values are significant at 95 percent of confidence unless indicated otherwise.

About incentives, we found that enterprises prefer to base their bonuses on managers' performance or team activity rather than on establishment performance. Most enterprises promote managers based on performance, but some do not promote managers at all. The latter could be related to poor management practices or the size of the company, in which no upper positions are available. Enterprises tend to retain managers despite underperformance.



**Table 30 Management practices – incentives, 2019**

	Incentive						
Country	What Were Managers' Performance Bonuses usually based on?				What was the primary way non-managers were promoted?		
	Own	Team	Establishment	Firm	Not promoted	Bases on factors other than performance	Bases partially or solely on performance
Lebanon	0.71 (0.10)	0.18 (0.09)	0.09 (0.077)	0.00 (0.00)	0.32 (0.067)	0.02 (0.004)	0.66 (0.067)
Jordan	0.55 (0.10)	0.39 (0.09)	0.05 (0.043)	0.00 (0.01)	0.25 (0.089)	0.00 (0.000)	0.75 (0.089)
Occupied Palestinian Territory	0.67 (0.12)	0.29 (0.12)	0.03 (0.016)	0.01 (0.00)	0.46 (0.117)	0.00 (0.001)	0.54 (0.117)

	Incentive		
Country	What Were Managers' Performance Bonuses usually based on?		
	Rarely or never	Within 6 months	After 6 months
Lebanon	0.59 (0.073)	0.22 (0.067)	0.18 (0.048)
Jordan	0.72 (0.058)	0.19 (0.049)	0.09 (0.031)
Occupied Palestinian Territory	0.53 (0.102)	0.23 (0.075)	0.24 (0.082)

Source: Own calculations based on the World Bank Enterprise Surveys.

Note: All values are significant at 95 percent of confidence unless indicated otherwise.

To have an aggregate quality measure, an un-weighted index was constructed using data on operations, monitoring, production targets, and incentives (Table 31). Each category has an equal weight in the index score. Both the production targets and incentives have three indicators, which were aggregated using an unweighted arithmetic average. All the values were normalized using z-scores<sup>96</sup>.

96 Bandiera et al. (2007 and 2009) suggest that pay-for-performance compensations are associated with productivity growth. Managers who are paid fixed wages favour workers to whom they are socially bonded. However, when they are subject to paid performance compensations, they favour high ability workers irrespective of whether they are socially connected or not.

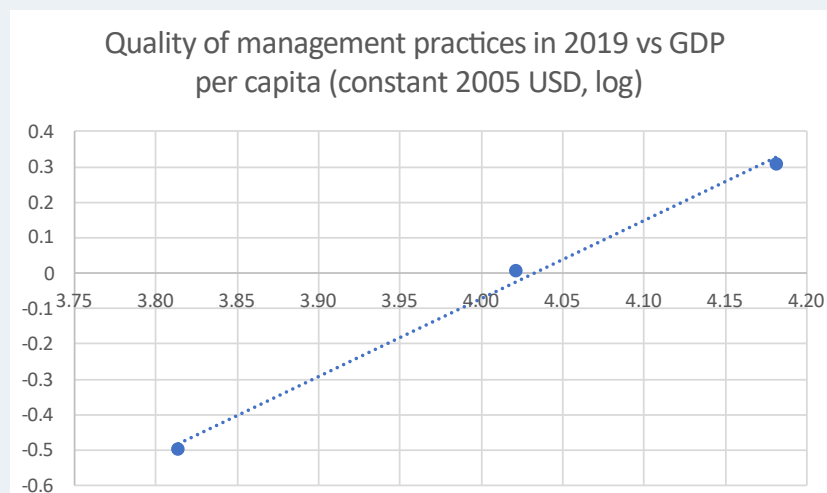
**Table 31 Quality of management practices ranking - 2019**

Country	Quality of management practices ranking	
	Score	Ranking
Lebanon	0.309	1
Jordan	0.006	2
PSE	-0.496	3

Source: Own calculations based on the World Bank Enterprise Surveys.

The z-score standardization imposes a mean of zero for all countries. For analytical purposes, we considered poor management enterprises those that exhibit scores below zero, and good management practices those that exhibit scores above zero.

Lebanon exhibits better management practices compared to Jordan and the Occupied Palestinian Territory, similar to findings from other studies<sup>97</sup>. Moreover, we find that the Occupied Palestinian Territory has poor management practices. Finally, the results show that quality management is positively correlated with economic development (measured by GDP per capita) (Figure 12).

**► Figure 12 Quality of management practices vs GDP per capita (constant 2005 USD, log)**

Source: Own calculations based on the World Bank Enterprise Surveys.

## 2.4.2. Adaptation of management practices for the COVID-19 outbreak

### **Enterprises are slowly adopting strategies and new business models to face COVID-19 challenges.**

Lockdown measures adopted during the COVID-19 crisis forced enterprises to adopt remote work. Not all the economies in the Region are equally equipped to shift to remote work and digital technologies. Disparities in access to the internet, informality and other factors affect the ability of low-income economies to work from home<sup>98</sup>. In Jordan, for instance, workers in the informal sector are more likely to be in jobs that cannot be performed from home. In the GCC countries, the ability to perform remote work is higher for national workers than for expatriates because the formers work in positions that are easier to be performed remotely (i.e., managerial positions)<sup>99</sup>.

The World Bank conducted surveys to provide information on the impact of the COVID-19 outbreak on enterprise performance. At the moment of writing this Chapter, the World Bank had conducted two follow-up surveys in Lebanon and three in Jordan. The total sample target in Lebanon and Jordan is 532 (response rate of 83 per cent) and 601 enterprises (response rate of 95.9 per cent), respectively.

In Lebanon the surveys were carried out in the following two periods: November 11 – December 2020 and May19 – June 18, 2021. In Jordan, the surveys were conducted in the following three periods: July 6- August 5, 2020; November 30, 2020- January 20, 2021; and June 10 – July 1, 2021.

We find that between 93 and 97 per cent of establishments reported to be open in Lebanon and Jordan, and 3 to 7 per cent temporarily closed by mid-2021. Establishments were hit the hardest during 2020 with lockdowns that forced 72 and 93 per cent of establishments to close temporarily due to COVID-19 outbreaks in Jordan and Lebanon respectively.

In 2021, lockdowns were less widespread, affecting a lower proportion of establishments both in Lebanon (32 per cent) and Jordan (20 per cent). In both periods, establishments were closed around 10-12 weeks in Lebanon and around 8 weeks in Jordan<sup>100</sup>.

Enterprises faced several constraints for remote work adoption. Businesses in Jordan adopted remote work in a higher proportion than those in Lebanon. In fact, only 18 per cent of establishments in Lebanon were able to start or increase remote work during 2020 and only about 6 per cent of the workforce was able to work remotely<sup>101</sup>.

98 Gottlieb et al. (2000) shows that the ability of developing economies to adopt remote work is limited to 10-23 percent of all jobs (Gottlieb, Grobovšek, Poschke, & Saltiel).

99 Jonathan I. Dingel & Brent Neiman, 2020. "How many jobs can be done at home?" *Journal of Public Economics*, vol. 189.

100 In the case of Lebanon, we considered the range of values. For Jordan, we considered only data from the first wave because the other two do not have enough data to make inferences.

101 The average percentage of the workforce working remotely is not different than zero for manufacturing and retail while other services exhibit a value of 8.4 percent significant at 95 percent.

**Table 32 How significant for the business was the following crisis? – Lebanon 2020**

	How significant for your business was the below crises' effects? <b>NOT SIGNIFICANT = 1; MODERATELY SIGNIFICANT = 2; VERY SIGNIFICANT = 3</b>				
Country	Mandatory lockdowns	Lack of demand/ sales	Disruption of inputs acquired in Lebanon	Disruption of inputs acquired outside Lebanon	Lack of financial means
	Percentage of business owners that responded "Very significant" to the questions				
Lebanon	92.6 (2.48)	88.4 (3.26)	82.4 (4.45)	78.1 (3.97)	93.4 (2.21)

Source: Own calculations based on the World Bank Enterprise Surveys.

Note: All values are significant at 95 percent of confidence unless indicated otherwise.

**Table 33 Responses to COVID-19 outbreak**

	I wave			II wave		III wave	
Country	Started / increased a business activity online?	Started or increased delivery or carry-out of goods or services?	Started or increased remote work arrangement for its workforce?	Started or increased business activity online?	Started or increased delivery or carry-out of goods or services?	Started or increased business activity online?	Started or increased delivery or carry-out of goods or services?
	Percentage of business owners that responded "YES" to the questions						
Lebanon	1.9 (0.8)	8.0 (2.78)	17.7 (3.42)	21.0 (4.29)	40.0 (6.17)	-	-
Jordan	58.8 (4.32)	14.7 (3.33)	33.1 (4.27)	12.8 (3.14)	3.1 (1.6)	17.9 (4.09)	16.1 (3.92)

Source: Own calculations based on the World Bank Enterprise Surveys.

Note: All values are significant at 95 percent of confidence unless indicated otherwise.

**Table 33 Responses to COVID-19 outbreak**

Country	Introduced new or improved products or services?			Discontinued the production of some goods or the offering of any services?		
	I wave	II wave	III wave	I wave	II wave	III wave
	Percentage of business owns that responded "YES" to the questions					
Lebanon	-	28.0** (3.67)		-	36.4** (4.40)	
Jordan	-	1.8** (1.1)	10.5** (3.4)	-	1.3** (1.1)	6.1** (2.26)

Source: Own calculations based on the World Bank Enterprise Surveys.

Note1: The second wave in Lebanon was held between May-June 2021. The second wave in Jordan was held between November 2020- January 2021 and the third wave between June-July 2021.

Note2: All values are significant at 95 percent of confidence unless indicated otherwise.

Lockdowns have had significant consequences on enterprise performance and employment between October 2019 and mid-2021. A worrying 74 per cent of businesses reported a sharp decrease in sales in Lebanon and Jordan, which translates into lay-offs of permanent and temporary workers<sup>102</sup>.

To address the COVID-19 negative effects, an increasing proportion of enterprises have implemented adjustments/improvements to their products/services and processes (Table 33). During 2020, a small proportion of enterprises in Lebanon was able to adjust business models and management practices. However, subsequent survey rounds show that more and more enterprises used online business activity and/or delivery services. In fact, by mid-2021, online sales increased eight times compared to October 2019<sup>103</sup>.

In contrast, enterprises in Jordan rapidly seemed to have adjusted their products/services and processes towards online activities and adopted delivery services during the first semester of 2020, at least compared to Lebanon. By mid-2020, almost 40 per cent of companies in Jordan reported the use of digital technology in response to the COVID-19 pandemic, focused mainly on improving management practices and marketing, rather than adopting online sales. That is 62 per cent reported a decline in the use of digital platforms for selling.

Between 28 and 36 per cent of enterprises in Lebanon introduced new, improved or discontinued products or services. The proportion was much lower in Jordan. Price adjustments were also very different across countries. In Lebanon, around 82 per cent of enterprises reported a remarkable price increase of 264 per cent compared to 2.8 per cent in Jordan by mid-2021. Nonetheless, the excessive increase in prices in Lebanon was mainly a consequence of the generalized hyperinflation, food and electricity shortages, and depreciation of the exchange rate.

<sup>102</sup> Around 58 per cent of firms reported reduction of personnel during 2020 in Lebanon. In Jordan, 22 per cent of firms report reduction of personnel.

<sup>103</sup> Approximately 6.5 percent of businesses started or increased online activity and 8 per cent used delivery services. By April/May 2021, the proportion of firms using online technologies and/or delivery services increased to 21 percent and 40 per cent respectively. In the October/November 2020, the percentage of online sales in Lebanon were 1.8 per cent and by April/May 2021 they increased to 8.8 per cent.



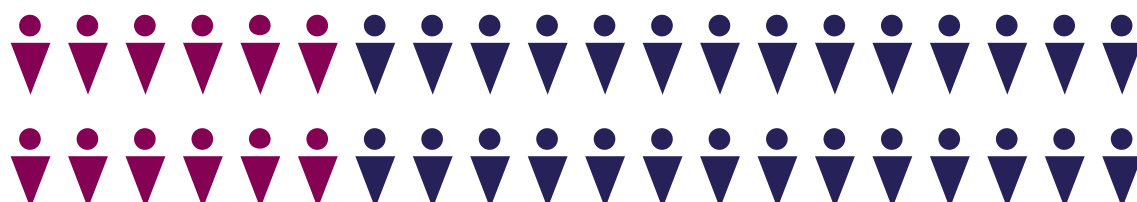
**Table 34 Responses to COVID-19 outbreak – Jordan (percentage)**

Country	Jordan					
	Used technology in response to COVID-19 outbreak (Yes)	Functions the establishment used Technology in response to COVID-19 outbreak? Note: Only for those that responded YES in use of technology			Share of sales using digital platform (increased)	Invest in new equipment, software, or digital solution in response to COVID (Decreased)
		Management	Marketing	Payments		
I wave	37.2 (4.43)	87.9 (5.24)	41.4 (9.33)	11.5 (5.13)	0.9 (0.57)	62.6 (27.7)

Source: Own calculations based on the World Bank Enterprise Surveys.

Note1: The second and third wave did not include these questions.

Note2: All values are significant at 95 per cent of confidence unless indicated otherwise.



## ► 2.5 Policy implications

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Some of the most relevant trade indicators are the time and costs to export and import. High-income Arab economies exhibit less time and lower costs to import and export. By contrast, Iraq, Syria, and Lebanon have the highest costs to import and export, even more than ten times the costs in Bahrain. Therefore, the business environment should be more conducive to foreign trade. Importing and exporting processes can be improved in upper-middle and lower-middle-income Arab economies. These would also help promote technological transfers and adoption (which are essential to boost productivity) and the internationalization of SMEs.

To enhance innovation, investment in research and development should be considered a priority. Enterprises that innovate and exhibit good management practices are the best equipped to deal with obstacles that may arise from a faulty business environment. Moreover, innovation is instrumental for productivity growth and may encourage diversification.

Employers and business membership organizations (EBMOs) play a key role in supporting their members to adapt business models to the rapidly changing market conditions, improve management practices, and devise a productivity-oriented policy reform agenda to discuss with policymakers. Advisory services, training and capacity-building materials should be adapted and tailored to the needs of members according to enterprise size and economic activity. Key areas include **continuous improvement processes**; professional business strategies, particularly for the digital economy; adaptation to climate change; accounting methods and development of financial statements; enterprise risk management strategies; development and use of performance indicators, and key themes for foreign trade such as rules of origin and sanitary and phyto-sanitary measures.

19 has changed the work landscape everywhere. However, some Arab economies have struggled more to adapt their business models and work processes to deal with this new reality. Lockdown measures adopted during the COVID-19 crisis forced enterprises to adopt remote work. Not all countries were equally equipped to introduce virtual work and digital technologies. Disparities in access to the internet, access to electricity, ICTs, informality, among other factors, have affected the ability of low-income economies to work from home. Public policies should be devised to address structural problems. Otherwise, business organizations could support enterprises in developing strategies for telework or hybrid formats according to the most convenient practices. Advising and supporting SMEs to join the digital economy is also essential.

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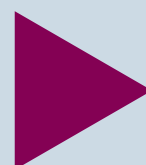
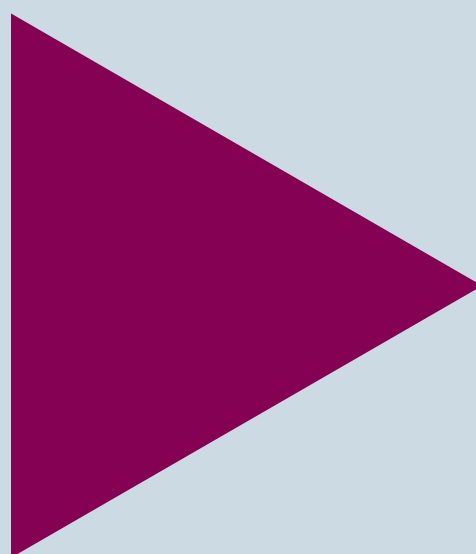


# Chapter 3

## Enterprise survey on challenges and opportunities for sustainable enterprise development in selected Arab States

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Jordan, Lebanon, Oman, Yemen, and Occupied Palestinian Territory



### ► Key survey findings<sup>104</sup>:

#### Impact of COVID-19 on enterprises

- Most enterprises reported decreases in revenue and employment due to the COVID-19 pandemic.
- Across all countries, the main challenge resulting from the COVID-19 pandemic was inadequate cash flow to maintain business operations. Other challenges included increases in prices of input materials and reduction in demand due to cancellation of orders.
- Operational challenges during COVID-19 varied depending on the sector. Retail enterprises were particularly affected by inadequate cash flow to operate. Manufacturing enterprises reported high prices of input materials. Service enterprises were affected by reduction in demand due to order cancellations. Construction enterprises struggled with worker absenteeism. Information and communications enterprises reported data or information technology (IT) challenges.

#### Business environment and obstacles to operate

- Most enterprises, across all countries, sizes, and sectors, did not think that governments had adequate policies to promote innovation and technology adoption.
- Key obstacles to operate were limited access to finance, economic uncertainty, and political instability.
- In Jordan, high tax rates and getting required licenses and permits were the most reported challenges. In Lebanon, an overwhelming majority of enterprises reported political instability, economic uncertainty, and unreliable access to electricity. In the Occupied Palestinian Territory, political instability was the most important challenge. In Oman, limited access to finance was the most common obstacle. In Yemen, a high share of enterprises reported political instability, limited access to finance, and economic uncertainty.
- Limited access to finance was a key obstacle for micro, small and medium enterprises, as well as for enterprises in the service and construction, sectors. High tax rates were a common obstacle among enterprises in retail, and information and communications. Economic uncertainty was common among manufacturing enterprises.
- Over half of enterprises in the sample countries reported relying on their own resources to operate. Micro and small enterprises were more likely to use their own resources to finance their operations compared to medium and large enterprises.

#### Factors that foster productivity growth

- In terms of education, high shares of enterprises reported that top and senior managers finished bachelor's, master's, or doctoral degrees. This trend was observed across all countries and sectors.
- The top skills for enterprises in the sample countries were technical knowledge, teamwork and collaborative skills, and organization skills and attention to detail. Relatively high shares of micro enterprises reported that communication skills and digital skills were important.
- Most enterprises across all countries, including large enterprises, did not find it easy to hire workers with the required skills.
- Overall, enterprises in the sample countries did not have a separate budget for training or development or dedicated less than 5 per cent of the total salary cost for this purpose.

<sup>104</sup> The survey was conducted online between August and November 2021 with 586 enterprises in Jordan, Lebanon, Occupied Palestinian Territory, Oman, and Yemen.



- Over 60 per cent of enterprises in the sample countries reported having incentive compensation programs for workers to reward good performance. These programs were most common among large enterprises and enterprises in the information and communications, construction, and retail sectors.
- Most enterprises in the sample countries reported that compensation programs were useful to boost productivity.
- Regarding performance targets, most enterprises reported monitoring customer satisfaction, as well as profit growth and productivity. Large enterprises were more likely to monitor productivity and profit growth, compared to micro, small and medium enterprises.
- Over 80 per cent of enterprises in the sample countries said that performance targets were known to all (or most) managers and staff.

#### Looking ahead: Future business growth

- The top three strategies to increase revenue during and following COVID-19 were offering new products or services, ensuring business continuity planning, and investing in new technologies. Ensuring business continuity planning was most common among large enterprises, and offering new products or services was most reported among micro, small, and medium enterprises.
- Computers or laptops, mobile phones or email and internet browsing were the most common technologies that businesses used to operate.
- Large enterprises were more likely to use some essential technologies, including automated production processes, data protection software and cloud solutions, online transactions and e-commerce, and online supply chain management systems, among others.
- High fixed capital costs, high risk and lack of relevant government incentives were the main barriers that enterprises in the sample countries faced to upgrade technology. High capital costs and high risk particularly affected micro and small enterprises.
- Most enterprises in the sample countries, agreed that they implemented frequent process improvements. A higher share of large enterprises reported conducting these process improvements compared to micro, small and medium enterprises.
- Investment priorities for the next 5 years include launching new products or services, adopting new technologies, and buying new machinery and equipment or tools. Large businesses accounted for the highest share of enterprises planning to adopt technology.
- Despite challenges experienced during the COVID-19 pandemic, most enterprises were hopeful that revenue and employment would increase in the next 5 years. Higher shares of large and medium enterprises expected employment increases, compared to micro and small enterprises.

#### ► Key recommendations to governments and EBMOs:

##### To Governments:

- Provide temporary conditional subsidies to micro, small and medium enterprises, to help alleviate cash flow shortages. Such subsidies could, for instance, provide enterprises with the necessary financial resources to cover all (or most) wages and basic operational costs (e.g., rent of premises and bills) on the condition that enterprises continue employing workers. Additionally, governments could help large enterprises cover a proportion of their costs if they do not dismiss any workers.
- Give short-term tax holidays (i.e., reduction or exemptions) and grants to micro, small and medium enterprises to support business continuity considering cash constraints amid the

COVID-19 pandemic.

- Establish initiatives to refinance loans of micro, small and medium enterprises in cooperation with Central banks and commercial financial institutions. Such measures would promote economic recovery, help prevent permanent business closures, and encourage innovation and technology adoption, which would ultimately increase enterprises' growth and productivity.<sup>105</sup>
- Provide temporary subsidies to respond to sudden increases in prices of inputs that are strategic or essential in key economic sectors.
- Increase government spending and reduce taxes to stimulate economic growth to improve enterprises' financial stability. This could be done when enterprises experience sudden order cancellations which lead to decreases in demand for products and/or services.
- Encourage alternative sources of financing for small enterprises, including corporate bonds, debt securitization, and non-public offerings, among others.
- Implement policies that promote the development of the financial system and increase competition in the commercial banking sector. Likewise, the Central Bank could provide commercial banks with incentives to lend to micro and small businesses to improve access to financial services.

#### **To Employers and Business membership Organizations (EBMOs):**

- Design or review training courses and guidance to help micro, small, and medium enterprises better manage short-term and long-term revenues and expenses. Potential benefits over the short- and long-term include:
- Over the short-term, such guidance can help improve accounting practices, customer acquisition and retention, and the implementation of new pricing models, among others.<sup>106</sup>
- Over the long-term, such guidance can continually improve processes, products, or services in light of their efficiency and effectiveness. This would contribute to reducing costs, and increasing productivity and saving rates, which would also improve cash flow to strengthen the ability of enterprises to cope with unexpected events and ensure business continuity.
- Continue assessing the needs and challenges of enterprises in the COVID-19 context to formulate policy solutions that can help enterprises.
- Continue engaging in social dialogue to come up with innovative solutions to promote economic recovery.
- Develop or update existing training material to support the improvement of key skills including technical knowledge, teamwork and collaborative skills, and organization skills and attention to detail. Technical knowledge is particularly important to ensure that workers have the necessary skills to operate new technologies and harness the full potential of technological change.
- Encourage the allocation of budget for skills development and training among enterprises to improve workforce quality and labour productivity.
- Assess enterprises' capability building needs to offer members, particularly micro and small enterprises, training opportunities and practical services to improve productivity on a regular basis.
- Assist micro, small, and medium enterprises in the development of key performance indicators to measure productivity and profit growth over time. This could contribute to improving enterprise performance.

<sup>105</sup> ILO, 2020.

<sup>106</sup> Yoon and Lochhead, 2020.

## ► 3.1 Introduction

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The ILO conducted an enterprise survey in selected countries in the Arab States to assess challenges and opportunities for sustainable enterprise development and economic growth amid the COVID-19 pandemic. Surveyed enterprises were asked about factors for an enabling business environment, obstacles to operate and upgrade technology, and factors that impacted productivity growth and future business growth, among others.

The survey was conducted online between August and November 2021 with 586 enterprises in five countries, namely, Jordan, Lebanon, Occupied Palestinian Territory, Oman, and Yemen. Five employers and business membership organizations (EBMOs) disseminated the survey to their members.<sup>107</sup> These EBMOs are the Jordan Chamber of Industry, Association of Lebanese Industrialists, Federation of Palestinian Chambers of Commerce, Oman Chamber of Commerce and Industry, and Federation of Yemen Chambers of Commerce and Industry.

This chapter presents key findings from the survey, arranged by country, enterprise size and sector.<sup>108</sup> Main findings are presented by country, rather than other groupings (e.g., income group, Gulf Cooperation Council (GCC) and non GCC, fragile and non-fragile) considering that enterprises in five countries completed the survey. These countries belonged to different income groups and only Oman was part of the GCC. Therefore, grouping them for analysis would have resulted in samples that would not have been comparable. This chapter is divided into the following five sections:

1. Key findings and recommendations
2. Impact of COVID-19 on enterprises
3. Business environment and obstacles to operate
4. Factors that foster productivity growth
5. Looking ahead: Future business growth

Findings are presented by question asked in the survey. Survey demographics are available in Annex A and the survey questionnaire is available in Annex B.

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<sup>107</sup> Results are not representative of the population of enterprises because random sampling was not used to choose the survey sample. Survey findings for Oman should be interpreted with caution considering that 41 enterprises in Oman participated in the survey, representing the lowest response rate.

<sup>108</sup> Surveyed enterprises were classified into four types according to the number of workers they employed, namely micro (employing less than 5 workers), small (employing between 5 and 19 workers), medium (employing between 20 and 99 workers) and large (employing over 100 workers). Key findings include insights from sectors with the highest representation in the survey, namely manufacturing, other service activities, retail, construction, and information and communications.

## ► 3.2 Impact of COVID-19 on enterprises

The COVID-19 pandemic has exacerbated existing fragilities in the Arab region including weak public institutions, economic and political instability, undiversified economies, and high unemployment.<sup>109</sup> Given this context, enterprises have had limited cash flow to operate, which has led to temporary or permanent business closures, revenue, and employment losses. They have also faced a myriad of challenges such as sudden price surges in input materials, order cancellations, and difficulties accessing customers, among others.

The first cases of the COVID-19 virus in Jordan, Lebanon, the Occupied Palestinian Territory, Oman, and Yemen were recorded between February and April 2020. Governments reacted quickly to rising infections with restrictions of movement including lockdowns, curfews, border closures, and mandatory business and school shutdowns, among others. These five countries have experienced two or more waves of infections, which, in hand with government restrictions, have determined the extent to which businesses can run and recover.

As of November 2021, COVID-19 had infected 2.3 million people and killed over 30,000 people in these five countries. Lebanon has been the most affected country by the pandemic, as it officially registered over 96,000 cases and over 1,200 deaths per 1 million people. Such impact was further aggravated by a devastating explosion in Beirut in August 2020 which increased political instability and intensified the perception of corruption.

► **Table 1 Overview of COVID-19 cases, deaths, and vaccination rates (As of November 2021)**

Country	Cases	Deaths	Cases / 1 million	Deaths / 1 million	% of population fully vaccinated (%)
Jordan	919,173	11,377	90,089	1,115	36
Lebanon	659,404	8,645	96,610	1,267	24
Occupied Palestinian Territory	458,448	4,779	95,445	995	28
Oman	304,499	4,113	59,628	805	55
Yemen	9,961	1,939	334	65	1

Source: Own calculations based on John Hopkins University & Medicine (2021) and World Bank (2021).

The Occupied Palestinian Territory and Jordan have registered the second and third highest number of infections and deaths, respectively. The pandemic in the Occupied Palestinian Territory has weakened the economy and increased financial constraints that predominantly have affected micro, small and medium enterprises.<sup>110</sup> Similarly, the pandemic highlighted macroeconomic issues and unresolved social challenges in Jordan. Most enterprises in Jordan have been impacted by revenue declines and rising energy costs since early 2020.

Oman has had the fourth highest number of infections and deaths. Amid the outbreak and the global shutdown, there was a vast reduction in demand for Oman's products particularly oil, which was

<sup>109</sup> Reliefweb, 2020. In 2020, unemployment rates in the five countries that were considered in the survey were: Jordan (18.5 per cent) Lebanon (6.6 per cent), Occupied Palestinian Territory (27.4 per cent), Oman (5.0 per cent) and Yemen (13.4 per cent) (World Bank, 2021).

<sup>110</sup> The conflict between Israeli forces and Hamas broke out in May 2021 further led to political instability and economic damages to the private sector.

coupled with a sharp drop in oil prices in April 2020.<sup>111</sup> These events have had a direct negative impact on enterprises' cash flow.

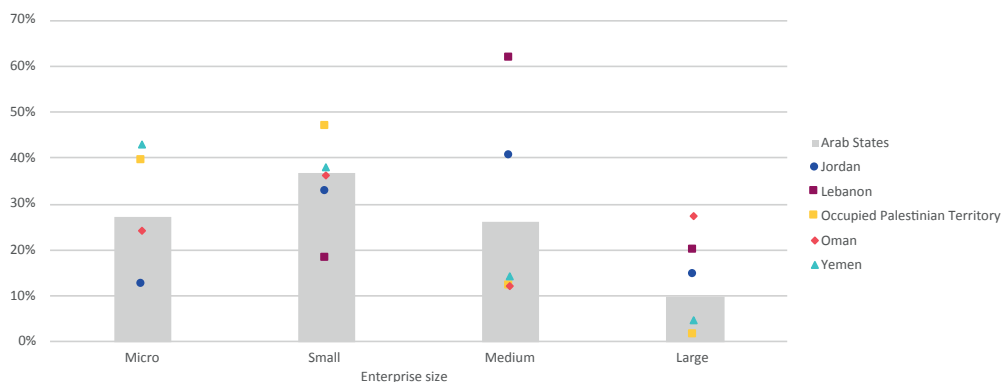
Yemen has officially registered the lowest number of COVID-19 infections and deaths. However, as a fragile state, the virus has amplified existing issues including economic uncertainty, poverty, and conflict. The reduction in remittances and financial aid going into Yemen has made it more challenging for enterprises to operate and led to business closures, particularly of small and medium enterprises.

### 3.2.1. Impact on workforce

**About two thirds of surveyed enterprises reported employment decreases between January 2020 and July 2021.** Most enterprises in the Occupied Palestinian Territory (89 per cent), Oman (80 per cent) and Lebanon (75 per cent) reported decreases in employment due to the COVID-19 pandemic. By contrast, lower shares of enterprises in Yemen (61 per cent) and Jordan (49 per cent) reported employment decreases. These decreases in employment have resulted in challenges that affect enterprises' ability to sustain and expand their operations, which has negatively impacted productivity growth.

**The COVID-19 pandemic primarily impacted micro, small, and medium enterprises (MSMEs) in terms of employment losses.**

► **Figure 1 Enterprises that reported decreases in employment during the COVID-19 pandemic, results by size and country (percentage of surveyed enterprises)**



**Manufacturing, retail, and service activities were the three sectors most impacted by the pandemic in terms of employment losses.** More than half of enterprises that reported decreases in employment across the Arab States came from one of these three sectors. The most hit sectors by country in terms of employment losses are below:

- **Jordan:** manufacturing (31 per cent), service (11 per cent) and retail (11 per cent).
- **Lebanon:** manufacturing (69 per cent) and service (13 per cent).
- **Occupied Palestinian Territory:** retail (18 per cent), service (15 per cent), construction (11 per cent) and manufacturing (11 per cent).
- **Oman:** service (15 per cent) and retail (15 per cent).
- **Yemen:** service (24 per cent), retail (17 per cent) and education (14 per cent).

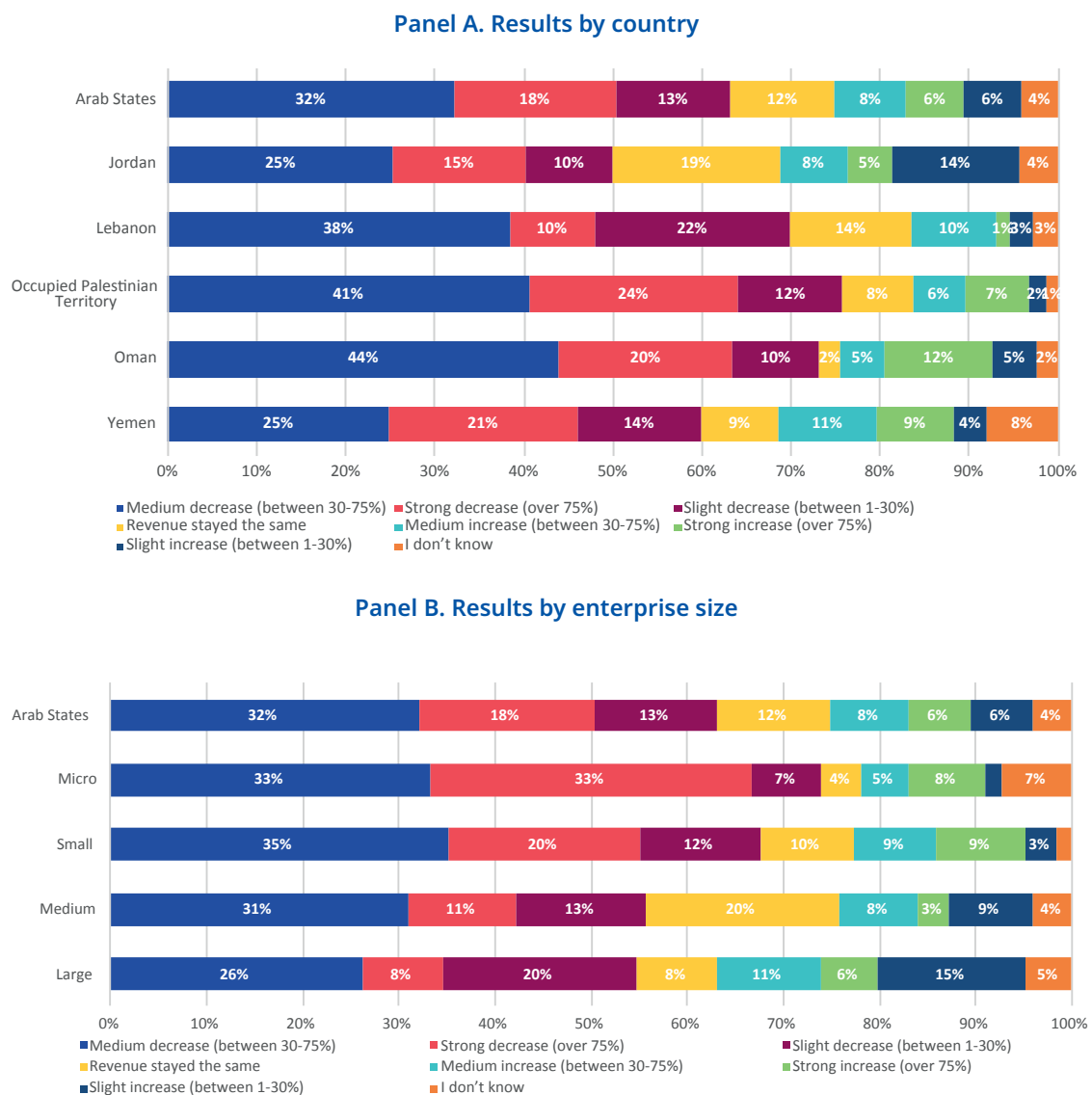
<sup>111</sup> Forty-five per cent of Omani exports (or almost 22 per cent of GDP) go to China. The oil price per barrel fell from \$63.91 on January 1, 2020, to \$16.66 on April 30, 2020 (Trading economics, 2021).

## 3.2.2. Impact on revenue

**Most surveyed enterprises (63 per cent) reported decreases in revenue between January and June 2021.** About 65 per cent of enterprises in the Occupied Palestinian Territory and Oman, 48 per cent of enterprises in Lebanon and Yemen and 40 per cent of enterprises in Jordan reported strong or medium revenue decreases (over 30 per cent).

**The COVID-19 pandemic hit revenues of micro and small enterprises the hardest.** In fact, the shares of enterprises reporting strong or medium revenue losses decreased as the enterprise became larger. In all countries, except Yemen, micro and small enterprises represented the highest shares of enterprises reporting strong or medium revenue decreases. By contrast, Yemen had the highest share of large enterprises reporting strong or medium revenue losses (6 out of 10 enterprises).

► Figure 2 Impact of COVID-19 on revenue (percentage of surveyed enterprises)



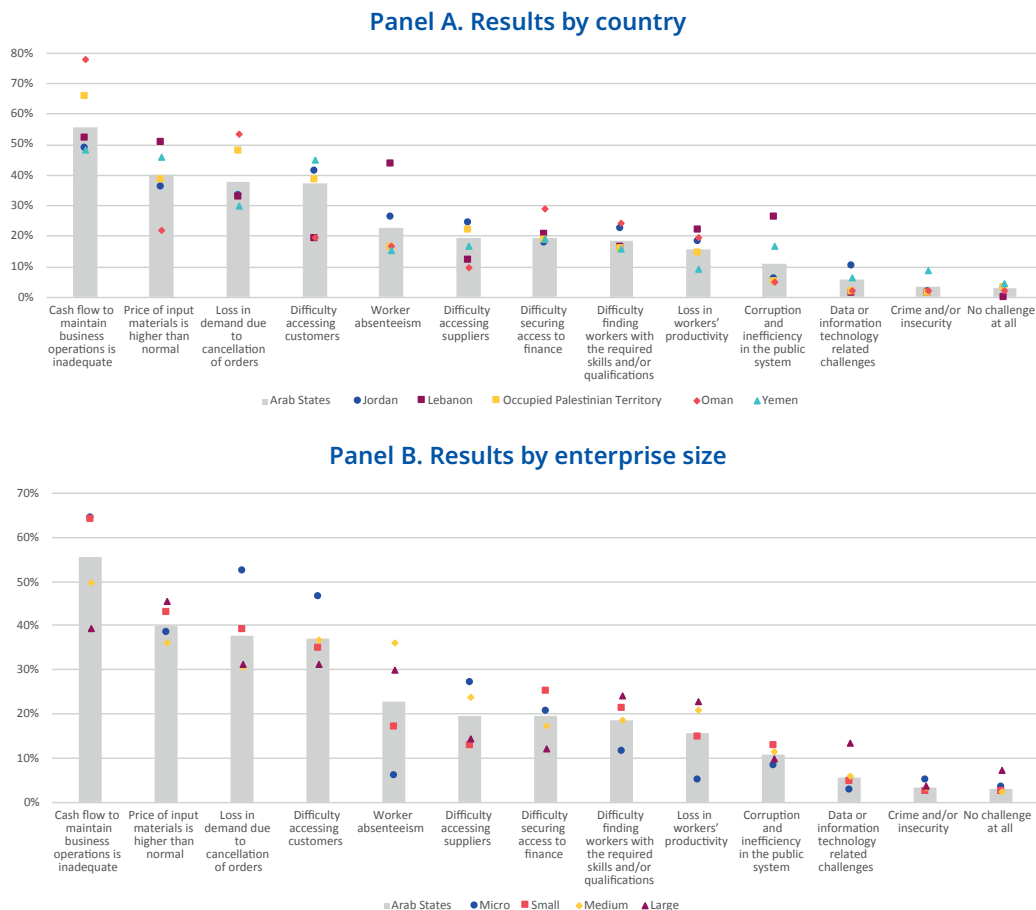
The service sector accounted for the highest share of enterprises reporting strong or medium revenue decreases (63 per cent). Similarly, over half of enterprises in the manufacturing (54 per cent) and construction (52 per cent) sectors reported strong or medium revenue losses. This compares to lower shares of enterprises in the retail (39 per cent) and information and communication (23 per cent) sectors that reported strong or medium revenue decreases.

### 3.2.3. Operational challenges since the COVID-19 outbreak

The most significant operational challenge was having sufficient cash flow to maintain business operations. Cash flow was reported as inadequate by 56 per cent of surveyed enterprises in the Arab States. Other commonly faced challenges included increases in prices of input materials (40 per cent) and reduction in demand due to cancellation of orders (38 per cent).

Across all countries, inadequate cash flow to operate was the most reported challenge. Additionally, 4 out of 10 enterprises in Jordan, Lebanon and Yemen reported difficulty accessing customers, and approximately half of enterprises in the Occupied Palestinian Territory and Oman experienced reduction in demand due to order cancellations. A relatively high share of enterprises in Lebanon reported that worker absenteeism (44 per cent) and corruption and inefficiency in the public system (26 per cent) were operational challenges.

►Figure 3 Main operational challenges resulting from COVID-19 (percentage of surveyed enterprises)



**Micro, small, and medium enterprises mostly reported that inadequate cash flow to maintain business operations was challenging.** By contrast, almost half of large enterprises reported that increases in prices of input materials was a key operational challenge. A relatively high share of micro enterprises was affected by reduction in demand due to order cancellations (52 per cent) and difficulty accessing customers (46 per cent). Additionally, almost 4 out of 10 medium and large enterprises struggled with worker absenteeism.

**Key survey highlights at the country level are as follows:**

- **Jordan:** Most micro (82 per cent) and small (66 per cent) enterprises reported inadequate cash flow to operate. Almost 40 per cent of small enterprises said that securing access to finance was difficult, and 33 per cent of large enterprises reported difficulties finding workers with the right skills.
- **Lebanon:** Almost 60 per cent of small enterprises reported difficulty accessing finance, and 42 per cent small enterprises experienced difficulties with corruption and inefficiency in the public system.<sup>112</sup> Half of medium enterprises had problems with worker absenteeism; and 71 per cent of large enterprises said that prices of input materials were higher than normal.
- **Occupied Palestinian Territory:** Almost 70 per cent of micro and small enterprises, and half of medium enterprises reported inadequate cash flow to operate. Over half of micro enterprises (57 per cent) experienced reduction in demand due to order cancellations.<sup>113</sup>
- **Oman:** The vast majority of micro (88 per cent) and small (93 per cent) enterprises said that their cash flow was inadequate to operate. Four out 10 small enterprises had problems securing access to finance. Additionally, half of large enterprises reported losses in workers' productivity.
- **Yemen:** Most large enterprises (82 per cent) reported difficulties accessing customers. Half of micro and small enterprises struggled with inadequate cash flow to operate. Almost half of medium enterprises said that prices of inputs were higher than normal.

**The retail sector represented the highest share of enterprises (66 per cent) that faced inadequate cash flow to operate because of the COVID-19 pandemic.** Over half of enterprises in the manufacturing, services, and construction sectors, as well as almost half of enterprises in the information and communications sector also reported the same challenge. We find the following key challenges by sector:

- Six out of 10 enterprises in the manufacturing sector said that prices of input materials were higher than normal.
- Half of service enterprises were affected by reduction in demand due to order cancellations.
- Half of retail enterprises had problems accessing customers.
- Half of construction enterprises struggled with worker absenteeism.
- Half of information and communications enterprises reported data or IT challenges.

<sup>112</sup> No micro enterprises participated in the survey in Lebanon.

<sup>113</sup> Only 2 large enterprises were surveyed in the Occupied Palestinian Territory.



## ► 3.3 Business environment and obstacles to operate

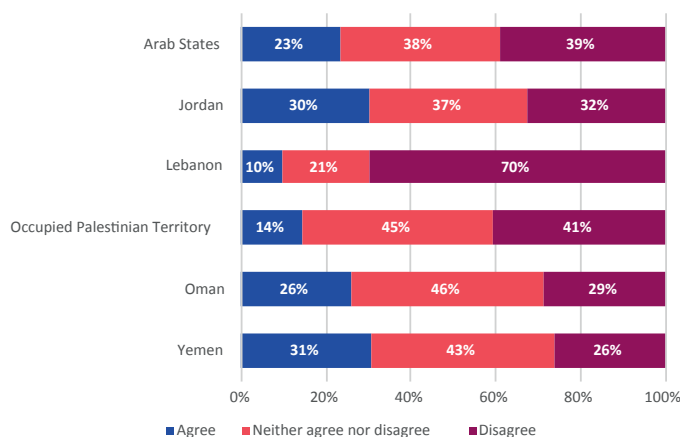
An enabling business environment is the combination of conditions that can improve enterprises' capacity to start up, grow and develop, and create decent jobs. A range of political, economic, social, and environmental factors can influence the extent to which the business environment is conducive to enterprise growth and productivity or creates obstacles that make it challenging for enterprises to survive, operate and thrive.

### ▀▀ 3.3.1. National policies to promote enterprise innovation and technology adoption

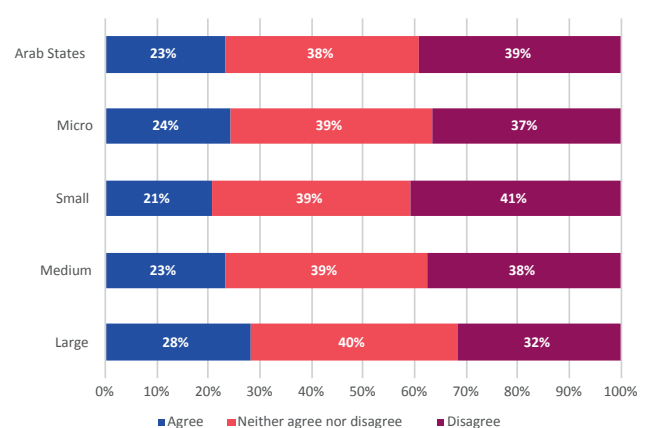
Governments can encourage the adoption and development of new technologies with financial incentives (e.g., tax reductions, grants) by collaborating on such innovations, buying them and/or reducing related risk. The extent to which governments influence and encourage innovation can have major implications on enterprises' growth and productivity. **In sample countries, only 2 out of 10 enterprises agreed that governments in their respective countries had adequate policies to promote innovation and technology adoption.**

► **Figure 4 Enterprises that agreed or disagreed that the national government had adequate policies to promote innovation and technology adoption (percentage of surveyed enterprises)**

**Panel A. Results by country**



**Panel B. Results by enterprise size**



**Relatively low shares of enterprises across all countries agreed that the government appropriately supported innovation and technology adoption.** About 3 out of 10 enterprises in Jordan, Oman and Yemen agreed that the government had in place adequate policies for innovation and technology adoption. This compares to about 1 out of 10 enterprises in the Occupied Palestinian Territory and Lebanon.

**Less than 30 per cent of enterprises of all sizes agreed that government policies adequately supported innovation and technology adoption.** A slightly higher share of large enterprises (28 per cent) reported that government policies to support innovation and technology adoption were adequate, compared to micro (24 per cent), small (21 per cent) and medium (23 per cent) enterprises.

**A higher share of enterprises in the information and communications sector (42 per cent) agreed that government policies for innovation and technology adoption were adequate, compared to enterprises in other sectors.** Manufacturing enterprises (16 per cent) were the least likely to agree that such policies were adequate, followed by enterprises in retail (19 per cent), construction (24 per cent) and services (29 per cent).

### 3.3.2. Main obstacles to operate

**Half of surveyed enterprises reported that limited access to finance was a key challenge to operate.** Other important challenges in the sample countries included economic uncertainty (41 per cent), high tax rates (38 per cent), political instability (37 per cent) and getting required business licenses and permits (31 per cent). The aforementioned obstacles were also highlighted in chapter 2. Survey findings reiterate that limited access to finance can negatively impact investment and business expansion plans, which may result in enterprises missing growth opportunities. Political instability, in particular, can have a negative impact on revenue and productivity growth.

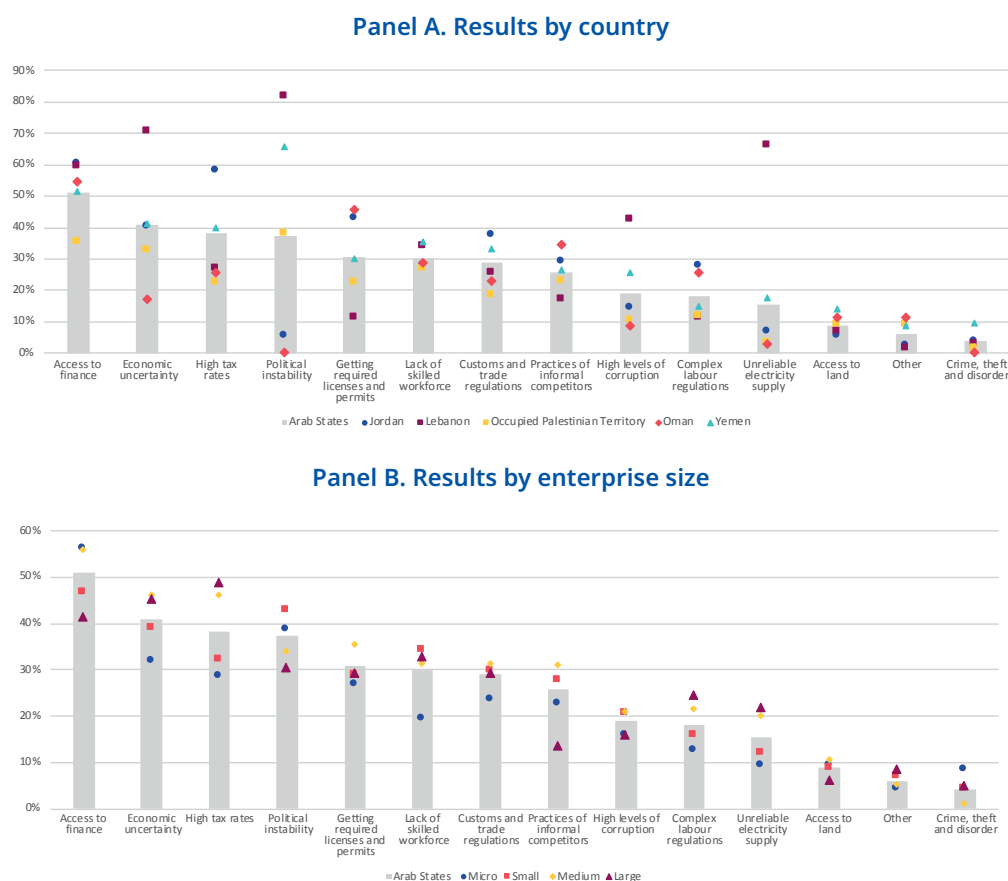
**More than half of enterprises across all countries, except the Occupied Palestinian Territory, experienced problems accessing finance.<sup>114</sup>** It is interesting to note that key challenges to operate varied significantly across countries, due to specific socio-economic conditions and diverse impact of the COVID-19 pandemic on enterprises in these countries. The following obstacles were also found in calculations conducted with WBES surveys in chapter 2.

In Jordan, almost 60 per cent of enterprises reported high tax rates and 43 per cent of enterprises reported issues getting required licenses and permits. In Lebanon, an overwhelming majority of enterprises reported political instability (82 per cent), economic uncertainty (70 per cent) and unreliable access to electricity (66 per cent). In the Occupied Palestinian Territory, political instability was the most important challenge, as reported by almost 40 per cent of enterprises. In Oman, limited access to finance was the most common obstacle (54 per cent) - no enterprises reported having problems with political instability and only 3 per cent said that unreliable access to electricity was a key obstacle. In Yemen, 65 per cent of enterprises experienced political instability, 51 per cent of enterprises had problems accessing finance and 41 per cent of enterprises said that economic uncertainty was challenging.

**Limited access to finance was the most common obstacle to operate for enterprises in services, construction, and information communications.** Economic uncertainty was the most common challenge to operate (53 per cent) among enterprises in manufacturing, followed by limited access to finance (29 per cent). High tax rates were also a commonly reported obstacle among retail (57 per cent), information and communications (55 per cent), and construction (52 per cent) enterprises. Additionally, lack of adequately skilled workforce was highlighted by half of information and communications enterprises and 4 out of 10 construction enterprises.

<sup>114</sup> Thirty-five per cent of enterprises in the Occupied Palestinian Territory reported that accessing finance was a key obstacle to operate.

►Figure 5 Main obstacles that enterprises face to operate (percentage of surveyed enterprises)



The survey also asked enterprises about the single biggest obstacle to operate. **Across the sample countries, the top obstacles to operate were limited access to finance (33 per cent), economic uncertainty (22 per cent), political instability (20 per cent).** The top three obstacles by country, enterprise size and sector are in the tables below.

►Table 2 Top three obstacles to operate, results by country (percentage of surveyed enterprises)

Country	1st	2nd	3rd
Jordan	Access to finance (35%)	High tax rates (31%)	Economic uncertainty (18%)
Lebanon	Economic uncertainty (45%)	Political instability (44%)	Unreliable electricity supply (31%)
Occupied Palestinian Territory	Access to finance (28%)	Political instability (21%)	Economic uncertainty (19%)
Oman	Access to finance (46%)	High tax rates (20%)	Practices of competitors in the informal sector (20%)
Yemen	Political instability (40%)	Access to finance (36%)	High tax rates (19%) Lack of adequately skilled workforce (19%)

► **Table 3 Top three obstacles to operate, results by enterprise size (percentage of surveyed enterprises)**

Country	1st	2nd	3rd
Micro	Access to finance (43%)	Political instability (20%)	Economic uncertainty (19%)
Small	Access to finance (37%)	Political instability (23%)	Economic uncertainty (22%)
Medium	Access to finance (31%)	Economic uncertainty (23%)	High tax rates (22%)
Large	High tax rates (28%)	Economic uncertainty (27%)	Political instability (19%)

► **Table 4 Top three obstacles to operate, results by sector (percentage of surveyed enterprises)**

Sector	1st	2nd	3rd
Manufacturing	Economic uncertainty (33%)	Access to finance (29%)	Political instability (23%)
Other service activities	Access to finance (37%)	Political instability (26%)	Economic uncertainty (22%)
Retail	High tax rates (25%)	Access to finance (24%)	Economic uncertainty (22%)
Construction	Access to finance (43%)	Political instability (24%)	High tax rates (24%)
Information and communications	High tax rates (32%)	Access to finance (29%)	Lack of adequately skilled workforce (16%)

**Limited access to finance was the most common obstacle to operate for enterprises in all countries, except Lebanon and Yemen.** The prevalence of this obstacle may be a by-product of small and medium enterprises' low productivity, lack of new technology adoption and skills development according to market needs. It might also be linked to the institutional framework in the sample countries which does not facilitate access to finance or credit. Economic uncertainty and political instability were the top obstacles to operate in Lebanon (45 per cent) and Yemen (40 per cent), respectively. Country highlights by enterprise size are below:

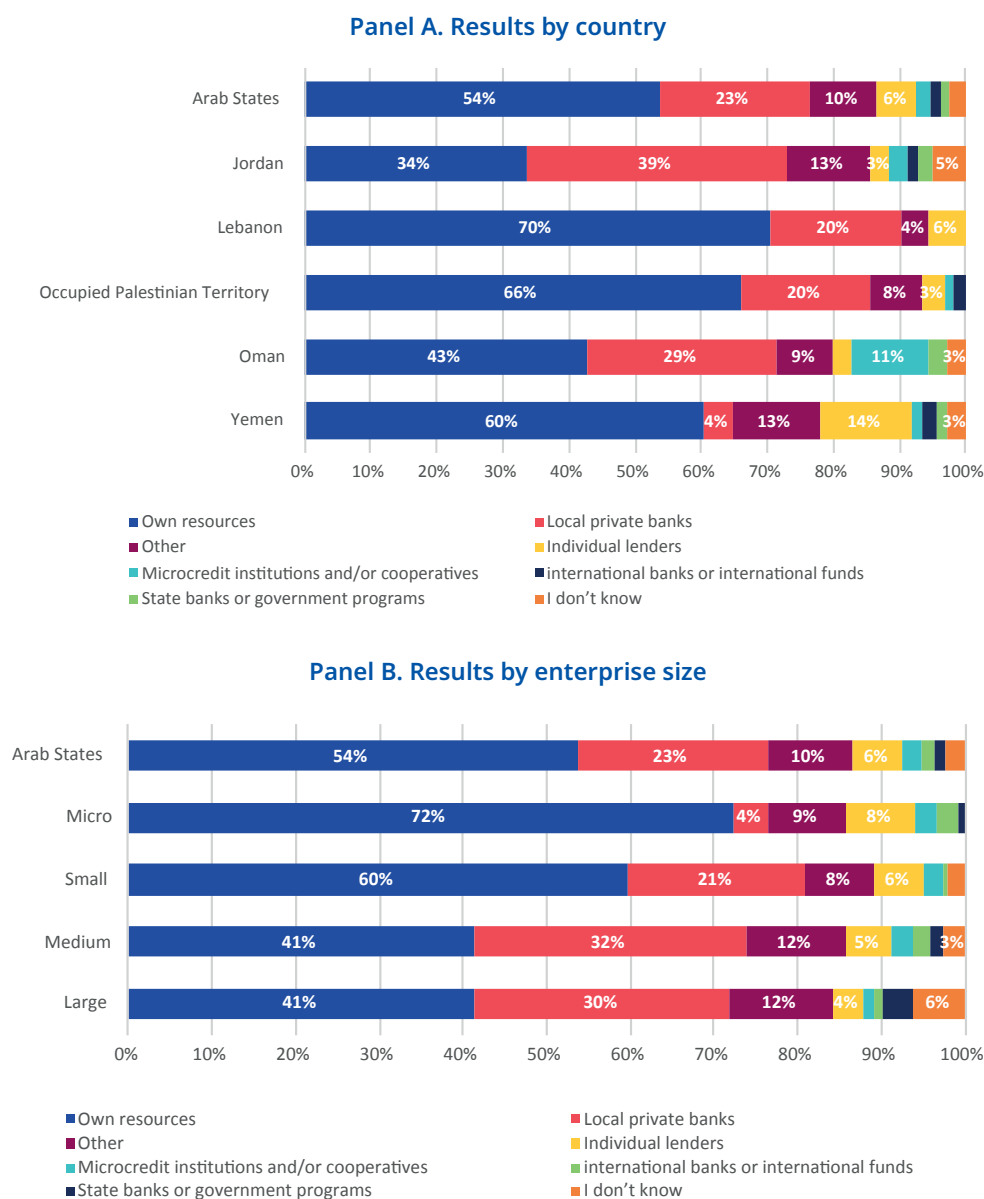
- In Jordan, micro and small enterprises reported that access to finance was the top challenge to operate. High tax rates were most commonly reported among medium and large enterprises, followed by limited access to finance.
- In Lebanon, limited access to finance was the most reported obstacle among small enterprises, political instability was the top obstacle among medium enterprises, and economic uncertainty was the biggest obstacle among large enterprises.
- In the Occupied Palestinian Territory, limited access to finance was the top obstacle among micro and medium enterprises. Small enterprises most reported lack of skilled workforce followed by limited access to finance.
- In Oman, limited access to finance was the top obstacle among micro, small, and large enterprises.
- In Yemen, access to finance was the top obstacle among micro enterprises, and political instability was the top obstacle among small, medium, and large enterprises.

**Access to finance was also a key obstacle for enterprises in service and construction sectors.** High tax rates were a common obstacle for enterprises in retail and information and communications. Economic uncertainty was common among manufacturing enterprises.

### 3.3.3. Main source of enterprise financing

Over half of surveyed enterprises (54 per cent) reported relying on their own resources to operate. Survey findings confirm findings from chapter 2 which highlight the widespread use of internal funds rather than those of formal lenders due to credit constraints and lack of cash flow in the sample countries. Reliance on enterprises' own resources can have negative effects on overall performance because business projects or initiatives might not be taken forward due to lack of funds. This can be detrimental to productivity growth.

►Figure 6 Main source of financing (percentage of surveyed enterprises)



Most enterprises in Lebanon (70 per cent), the Occupied Palestinian Territory (66 per cent) and Yemen (60 per cent) used their own resources to operate. This compares to lower shares of enterprises in Jordan (34 per cent) and Oman (43 per cent) which used their own resources.

**Micro and small enterprises were more likely to rely on their own resources, compared to medium and large enterprises.** Relatively high shares of micro and small enterprises in Jordan, the Occupied Palestinian Territory, Oman, and Yemen used their own resources. In Lebanon, 74 per cent of medium enterprises reported using their own resources. In Jordan, almost half of medium (46 per cent) and large (40 per cent) enterprises reported getting loans from local private banks.

**Six out of 10 enterprises in the manufacturing, service and retail sectors reported using their own resources to operate.** By comparison, 4 out of 10 enterprises in the construction and information and communications sectors reported getting loans from local private banks, and about 3 out of 10 enterprises from these aforementioned sectors reported using their own resources.

## ► 3.4 Factors that foster productivity growth

An adequately skilled and well-educated workforce is conducive of better productivity. However, good management practices are also important to ensure that talented workers are not only recruited but also retained over the long term. Training opportunities are essential to help workers hone skills at work, while importantly improving enterprises' productivity growth.

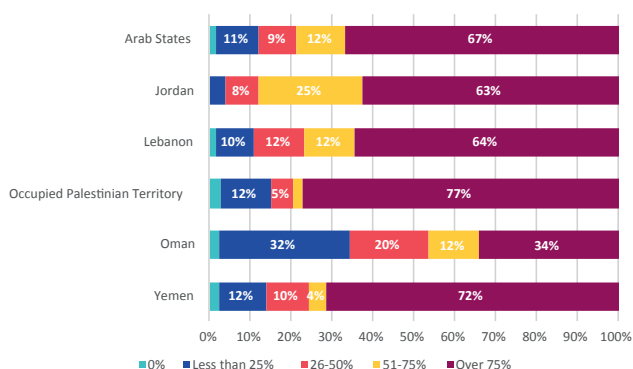
### 3.4.1. Workforce

The Arab States is one of the main migrant-receiving destinations globally. Many migrant workers are low-skilled workers with relatively low educational attainment who tend to work in construction and service sectors. GCC countries, including Saudi Arabia or United Arab States, account for the largest share of migrant workers in the Arab region. Oman was the only GCC country in our survey sample. **Therefore, it is no surprise that most enterprises (67 per cent) reported employing over 75 per cent of national staff.**

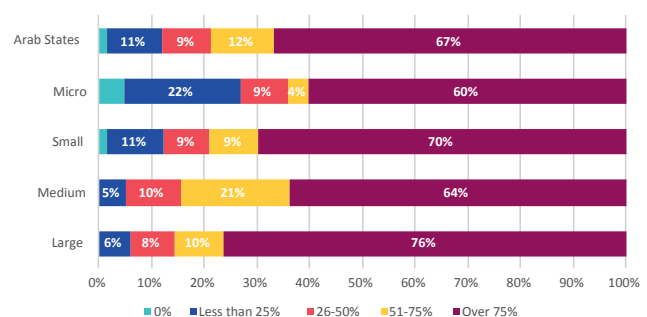
**The highest shares of enterprises that reported employing over 75 per cent national workers came from the Occupied Palestinian Territory (77 per cent) and Yemen (72 per cent).** By contrast, of enterprises in Oman, only 34 per cent reported employing over 75 per cent of national staff, and 32 per cent reported employing less than 25 per cent of national workers.

► Figure 7 Share of national workers employed (percentage of surveyed enterprises)

Panel A. Results by country



Panel B. Results by enterprise size



**Large enterprises employed more national staff, compared to micro, small and medium enterprises.** Large enterprises accounted for the highest share of enterprises that reported employing over 75 per cent of national staff (76 per cent), followed by small enterprises (70 per cent), medium enterprises (64 per cent) and micro enterprises (60 per cent). Key survey findings by country and enterprise size are as follows:

- In Jordan, 8 out of 10 large enterprises reported employing over 75 per cent of national staff. This compares to more than half of micro (55 per cent), small (55 per cent) and medium (58 per cent) enterprises reported employing over 75 per cent of national staff.
- In Lebanon, large enterprises represented the highest share of enterprises that employed over 75 per cent of national staff (82 per cent), followed by small enterprises (75 per cent) and medium enterprises (55 per cent).
- In the Occupied Palestinian Territory, 6 out of 10 micro enterprises reported employing over 75 per cent of national staff, compared to 8 out of 10 small and medium enterprises that reported doing so.
- In Oman, half of micro enterprises reported employing over 75 per cent of national staff, compared to 42 per cent of large enterprises and 33 per cent of small enterprises that reported doing so.
- In Yemen, the majority of medium (96 per cent) and large (82 per cent) enterprises reported employing over 75 per cent of national staff. By contrast, almost 70 per cent of small enterprises and 60 per cent of micro enterprises employed over 75 per cent of national workers.

**About 8 out of 10 information and communications and retail enterprises reported employing over 75 per cent of national staff.** This compares to 6 out of 10 manufacturing and service enterprises, and 4 out of 10 construction enterprises that employed over 75 per cent of national workers.

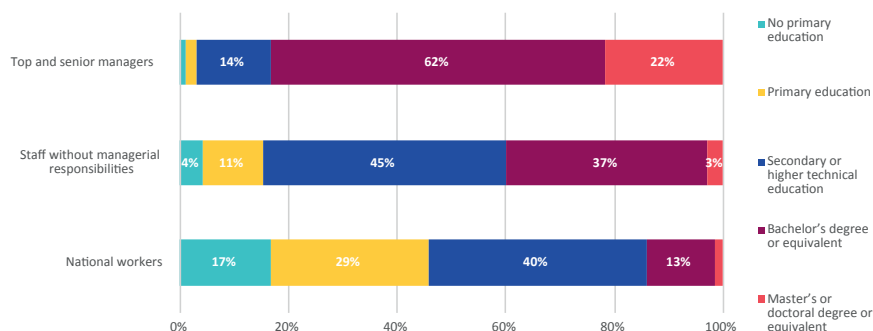
**Only 2 per cent of enterprises in the sample countries did not employ any national staff.** About a third of these enterprises reported not employing national workers due to financial constraints resulting from the COVID-19 crisis.

### 3.4.2. Education and skills

#### Education level

Surveyed enterprises were also asked about the main level of education of all or most top and senior managers, staff without managerial responsibilities and national workers. **Top and senior managers accounted for the highest share of workers (84 per cent) with tertiary education including bachelor's, master's, or doctoral degrees.** By comparison, only 40 per cent of staff without managerial responsibilities and 14 per cent of national workers attained such education level.

► **Figure 8 Main level of education of employed workers, results in the Arab States (percentage of surveyed enterprises)**





Across all countries, **higher shares of enterprises reported that top and senior managers finished bachelor's, master's, or doctoral degrees, compared to staff without managerial responsibilities or national workers.** Key survey findings by worker employed are below:

- Lebanon accounted for the highest share of enterprises that reported that top and senior managers had attained bachelor's or master's degrees (95 per cent), followed by Oman (91 per cent), Jordan (85 per cent), Yemen (81 per cent) and the Occupied Palestinian Territory (75 per cent).
- Yemen accounted for the highest share of enterprises (56 per cent) that reported that staff without managerial responsibilities had finished bachelor's or master's degrees, followed by the Occupied Palestine Territory (47 per cent), Oman (42 per cent) and Jordan (33 per cent).
- About a quarter of enterprises in Oman and Yemen, and 20 per cent of enterprises in the Occupied Palestinian Territory said that national workers had finished bachelor's, master's, or doctoral degrees. Only 4 per cent of enterprises in Jordan and Lebanon said that national workers had attained such tertiary education degrees. Additionally, 8 out of 10 enterprises in Jordan and Lebanon, 7 out of 10 enterprises in the Occupied Palestinian Territory, and 6 out of 10 enterprises in Oman and Yemen reported that national workers had finished primary or secondary education.

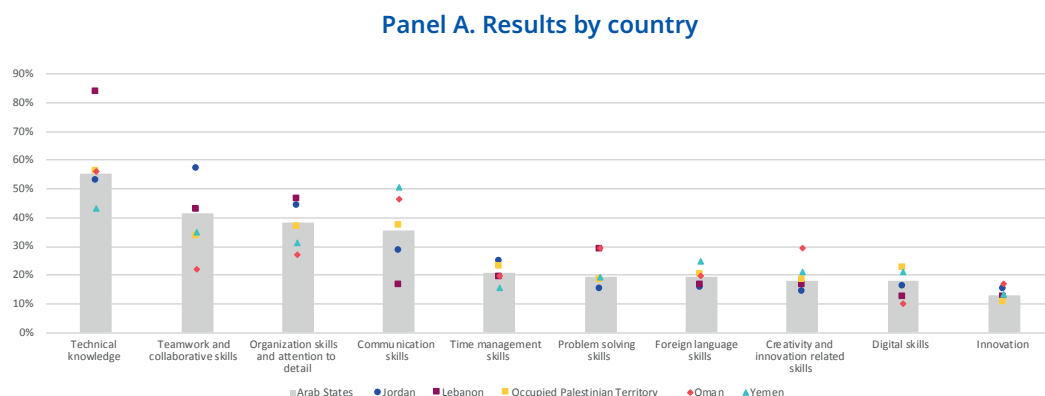
**There is a stark difference in educational levels of top and senior managers, staff, and national workers across all sectors.** Overall, higher shares of enterprises reported that top managers had finished bachelor's or master's degrees, compared to all staff or national staff. This trend was observed regardless of the sector.

However, about two thirds of enterprises in the information and communications sector reported that staff without senior responsibilities had completed bachelor's or master's degrees. This share is significantly higher than shares of enterprises in the construction (13 per cent), manufacturing (27 per cent), service (34 per cent) and retail (38 per cent) sectors that reported that staff had finished tertiary degrees.

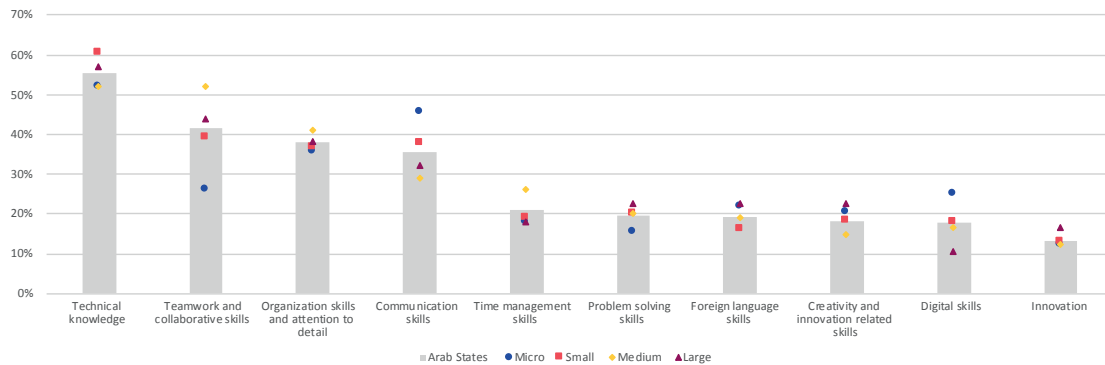
### Most important skills

**The top three skills for enterprises in the sample countries were technical knowledge (55 per cent), teamwork and collaborative skills (41 per cent) and organization skills and attention to detail (38 per cent).** Technical knowledge was the most important skill across all countries, except in Yemen and Jordan. In Yemen communication skills were mostly sought, and in Jordan teamwork and collaborative skills were the top skills among surveyed enterprises. A relatively high share of enterprises in all countries reported that teamwork and collaborative skills and organization skills and attention to detail were important skills for their businesses.

► **Figure 9 Most important skills for enterprises (percentage of surveyed enterprises)**



Panel B. Results by enterprise size



Note: Skills accounting for less than 13 per cent of the regional sample are not displayed in this figure. These skills include networking, cultural sensitivity, and other skills.

Main findings by enterprise size and sector are below:

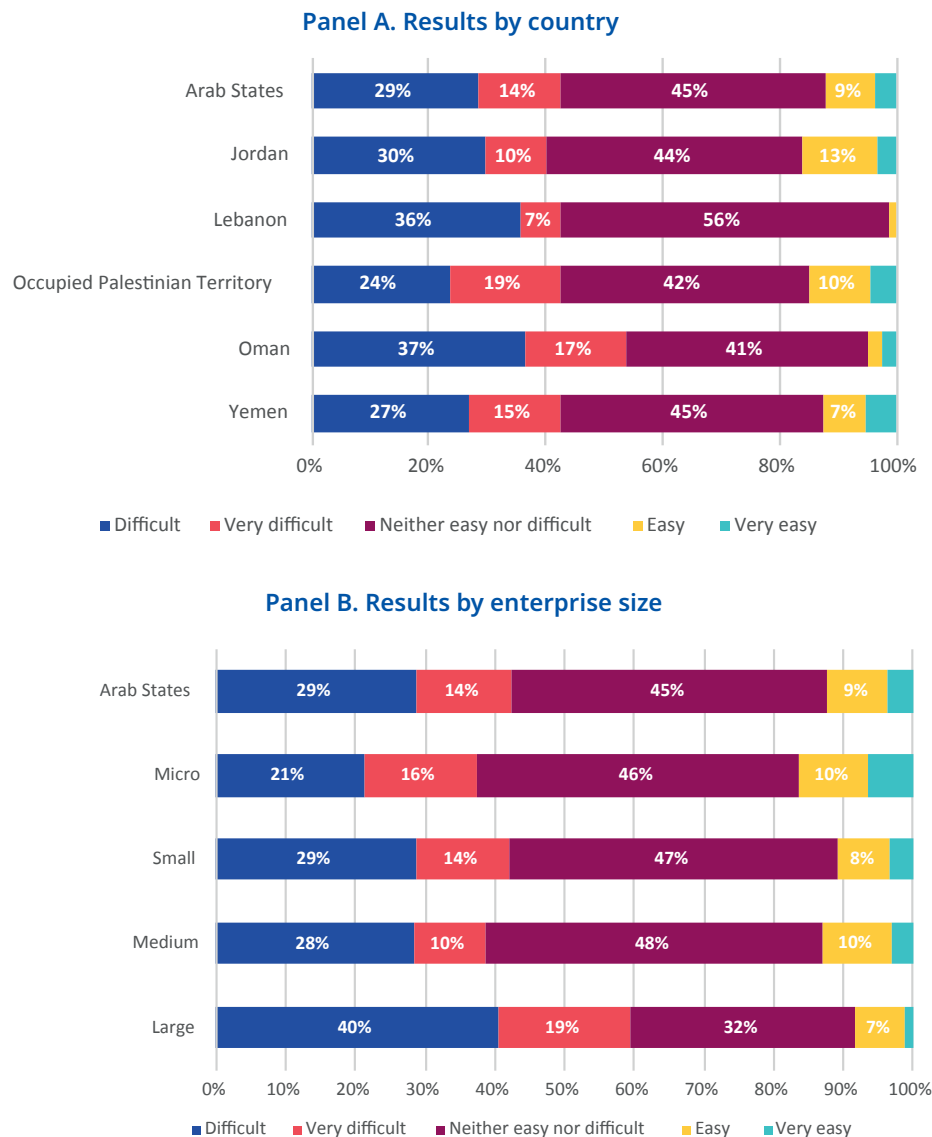
- Over half of micro, medium and large enterprises, and 6 out of 10 small enterprises reported that technical knowledge was a key skill for their businesses. Above average shares of micro enterprises reported that communication skills (46 per cent) and digital skills (25 per cent) were important for their businesses.
- Technical knowledge was most reported among manufacturing (83 per cent) and service (60 per cent) enterprises.
- Seven out of 10 enterprises in construction reported that teamwork and collaborative skills were important, compared to 2 out of 10 enterprises in information and communications.
- Digital skills were particularly important in the information and communications sector, as reported by 77 per cent of enterprises. This compares to less than 10 per cent of retail and construction enterprises, and less than 20 per cent of manufacturing and service enterprises that stressed the importance of these skills.
- Over half of retail enterprises (56 per cent) said that communication skills were important. By comparison, about 2 out of 10 enterprises in the manufacturing and information and communications sectors said that such skills were important.

### Ease or difficulty to hire workers with the required skills

**Over 40 per cent of enterprises in the region reported that finding workers with the required skills was difficult or very difficult.** Of surveyed enterprises, 45 per cent of enterprises said that it was neither easy nor difficult, and only 12 per cent said that it was easy or very easy.

**Most enterprises across all countries did not find it easy to hire workers with the required skills.** About 1 out of 10 enterprises in Jordan, the Occupied Palestinian Territory and Yemen reported that finding workers with the required skills was easy or very easy. Only 1 per cent of enterprises in Lebanon and 5 per cent of enterprises in Oman said that finding workers with the necessary skills was easy or very easy.

► **Figure 10 Enterprises facing difficulties hiring workers with the right skills (percentage of surveyed enterprises)**



**Large enterprises found it harder to recruit workers with the required skills, compared to medium, small, and micro enterprises.** Large enterprises reported the most difficulty recruiting workers with the required skills (60 per cent), followed by small (42 per cent), medium (39 per cent) and micro (37 per cent) enterprises. The share of enterprises that reported finding difficult or very difficult to recruit workers with the necessary skills increased as enterprises became larger in Jordan, Oman, and Yemen. By comparison, small enterprises in Lebanon and the Occupied Palestinian Territory found it most difficult to hire workers with the desired skills.

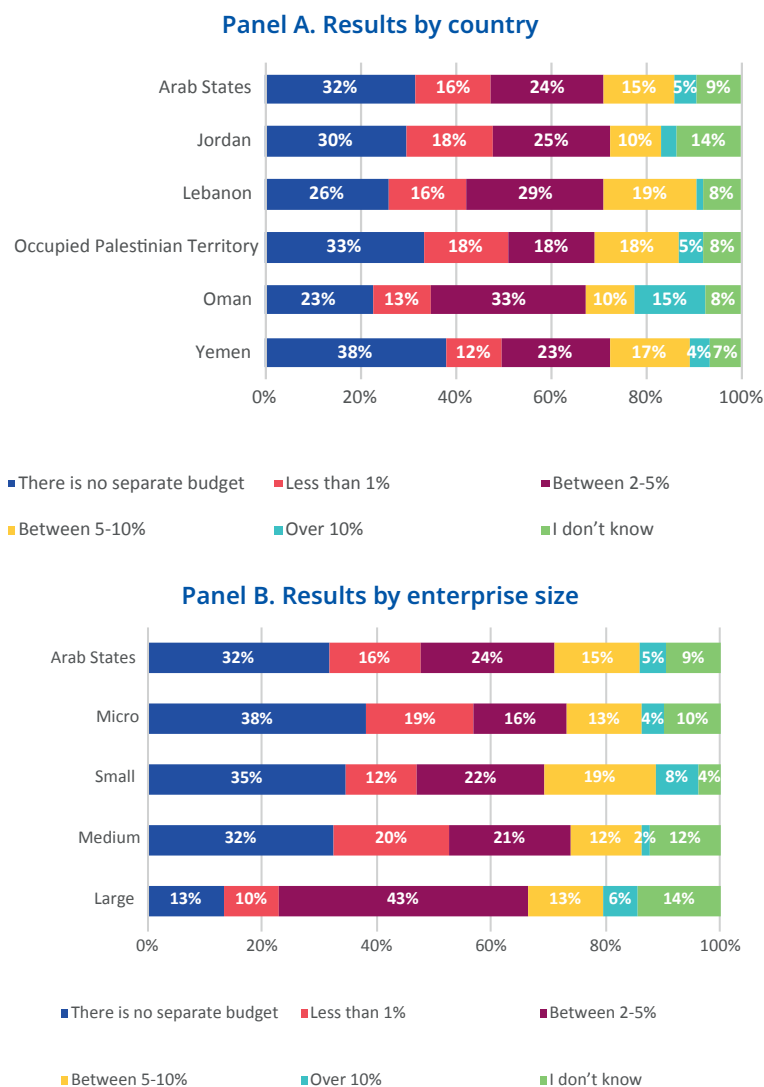
**Most enterprises in the information and communications sector (81 per cent) reported difficulties finding workers with the required skills.** This compares to 3 out of 10 retail enterprises, 4 out of 10 manufacturing and service enterprises, and 5 out of 10 construction enterprises that found it hard to recruit workers with the required skills.

### 3.4.3. Training and incentives

#### Budget for staff training and development

Most enterprises in the sample countries reported not having a separate budget for training and development (32 per cent) or allocating less than 5 per cent of the total salary cost for this purpose (39 per cent). Almost 20 per cent of enterprises reported assigning over 5 per cent of budget to staff training and development. However, having an allocated budget for skills development is necessary to improve workforce quality and in doing so increase labour productivity.

► Figure 11 Enterprises that reported having separate budget for staff training and development (percentage of surveyed enterprises)



A quarter of enterprises in Lebanon and Oman, and about a third of enterprises in Jordan, the Occupied Palestinian Territory and Yemen reported not having a budget for training and

**development.** Oman accounted for the highest share of enterprises (25 per cent) reporting budget for staff and training over 5 per cent of salary cost, followed by the Occupied Palestinian Territory (23 per cent), Yemen and Lebanon (21 per cent), and Jordan (14 per cent).

**Large and medium enterprises were more likely to allocate a budget for training and development, compared to micro and small enterprises.** Above average shares of large (53 per cent) and medium (41 per cent) enterprises reported allocating less than 5 per cent of budget to training and development. This compares to 35 per cent of micro and small enterprises that reported allocating the same budget.

**Almost half of enterprises in the construction sector did not have a separate budget for training and development of staff.** Likewise, 4 out of 10 service and retail enterprises, 3 out of 10 manufacturing enterprises and 2 out of 10 information and communication enterprises did not have such a budget. Almost half of enterprises in the information and communications and manufacturing sectors reported allocating less than 5 per cent of budget for training and development.

### Incentive compensation programs

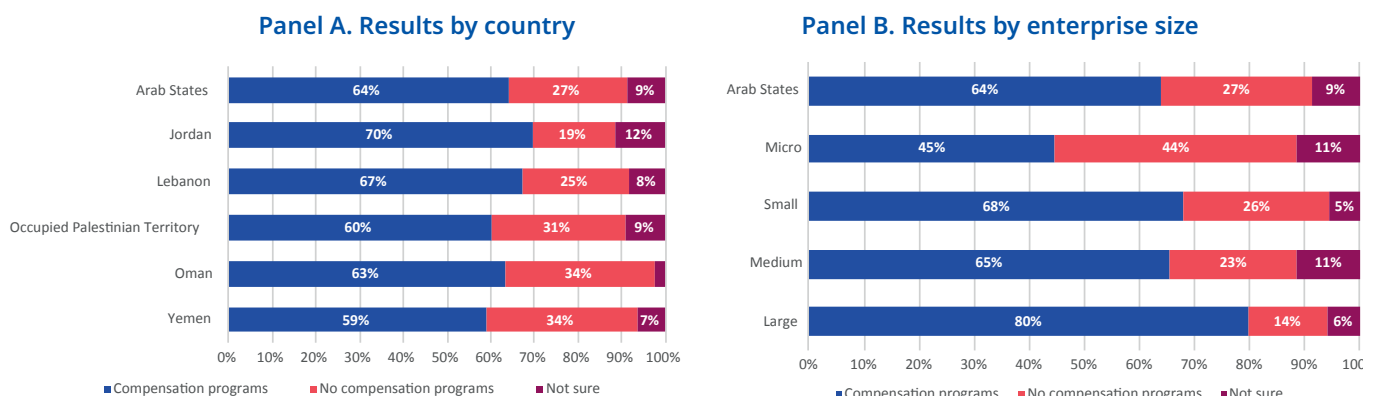
The survey also asked enterprises whether there had incentive compensation programs for workers. Such programs aim to reward individual or group performance through incentives to motivate workers to achieve set results. This is a common method that enterprises use to improve workers' productivity, efficiency, engagement, and retention, among others.

**Six out of 10 enterprises in the sample countries reported having incentive compensation programs for workers.** The highest share of enterprises that reported having such programs in place came from Jordan (70 per cent), followed by Lebanon (67 per cent), Oman (63 per cent), the Occupied Palestinian Territory (63 per cent) and Yemen (59 per cent).

**Micro enterprises were less likely to have incentive compensation programs compared to small, medium, and large enterprises.** Less than half of micro enterprises (45 per cent) said that these compensation programs were in place, compared to almost 70 per cent of small and medium enterprises and 80 per cent of large enterprises. Chapter 2 highlights that large enterprises are generally better managed than small enterprises. Having such incentive compensation programs in place contributes to creating good management practices which can lead to better productivity, efficiency gains, and growth.

The share of large enterprises that had incentive compensation programs grew as enterprises became larger in Lebanon, the Occupied Palestinian Territory and Yemen. In Jordan, relatively high shares of micro and small enterprises (7 out of 10 enterprises) reported having incentive compensation programs. In Oman, 8 out of 10 medium enterprises and 7 out of 10 large enterprises said these compensation programs existed.

► **Figure 12 Enterprises that reported having incentive compensation programs for workers (percentage of surveyed enterprises)**



**The manufacturing sector represented the highest share of enterprises with incentive compensation programs (75 per cent).** Enterprises in other sectors such as information and communications (68 per cent), construction (67 per cent), retail (66 per cent) and service activities (53 per cent) also reported having incentive compensation programs.

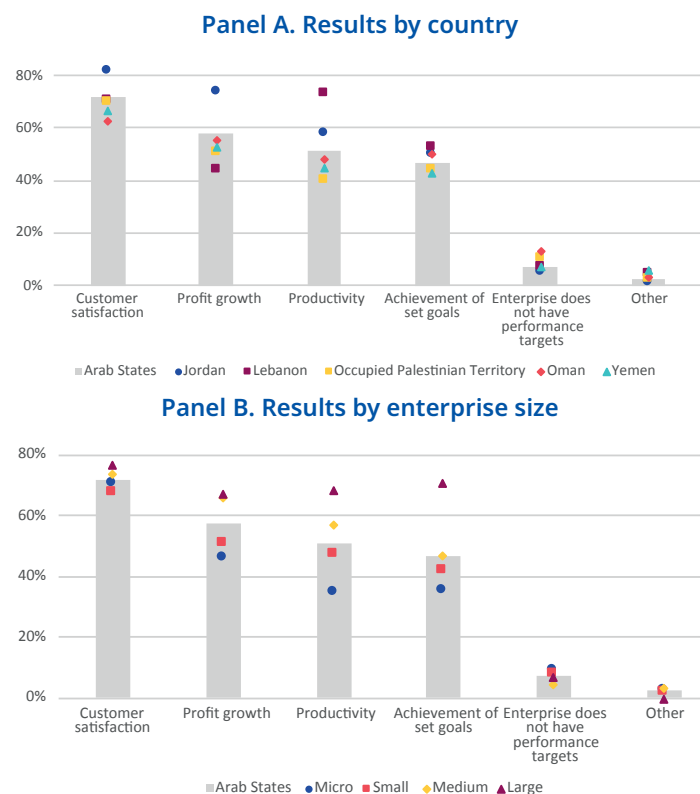
Enterprises that reported having such incentive compensation programs were asked whether these were useful to increase worker's productivity. **The overwhelming majority of enterprises in the sample countries reported that such programs were useful to boost productivity.** Over 90 per cent of enterprises, regardless of country and size, confirmed the usefulness of these programs, except in Oman where 72 per cent of enterprises said that such programs were useful.

Over 90 per cent of enterprises in the manufacturing, service, retail, construction and information and communications sectors confirmed that these programs were helpful to improve workers' productivity.

### Performance targets

Enterprises were asked whether they had performance targets to monitor customer satisfaction, profit growth, productivity, or the achievement of set goals. These targets are generally quantitative indicators that measure progress against set objectives. In a business setting, these indicators can be useful to understand whether workers at an individual or group levels are meeting set goals over time. **Customer satisfaction was the most monitored indicator, as reported by 7 out of 10 of enterprises in the sample countries.** About 6 out of 10 enterprises had performance targets to monitor profit growth, and about half of enterprises monitored both productivity and the achievement of set goals.

►Figure 13 Enterprises that reported having performance targets (percentage of surveyed enterprises)



**Monitoring of customer satisfaction was the most common indicator measured through performance targets in all countries.** Profit growth was the second most monitored indicator in all countries, except Lebanon where 7 out of 10 enterprises monitored productivity. Six out of 10 enterprises in Jordan, half of enterprises in Oman and Yemen, and 4 out of 10 enterprises in the Occupied Palestinian Territory reported monitoring productivity.

**The shares of enterprises monitoring productivity and profit growth grew as the enterprise became larger.** Higher shares of large enterprises (7 out of 10 enterprises) reported monitoring both targets, compared to lower shares of micro, small and medium enterprises. Measurement of these indicators signals higher productivity in large enterprises. In fact, chapter 2 demonstrated that large enterprises exhibited a higher total factor productivity compared to micro, small and medium enterprises.

Key insights by sector are below:

- Above average shares of enterprises in the information and communications (84 per cent), service (77 per cent) and construction (74 per cent) sectors reported having targets to measure customer satisfaction.
- Higher shares of enterprises in construction (76 per cent), retail (70 per cent) and information and communications (65 per cent) reported monitoring profit growth, compared to enterprises in the service (57 per cent) and manufacturing (49 per cent) sectors.
- More than half of enterprises in the manufacturing (71 per cent), construction (60 per cent), and service (54 per cent) sectors reported monitoring productivity. This compares to lower shares of enterprises in the information and communications (42 per cent) and retail (34 per cent) sectors.

**Over 80 per cent of enterprises in the sample countries said that these performance targets were known to managers and staff.** This was the case for over 75 per cent of enterprises in all countries, and more than 80 per cent of enterprises across all sizes and sectors.

## ► 3.5 Looking ahead: future business growth

Several factors impact the extent to which businesses can thrive, particularly in business environments that are not conducive to sustainable enterprise development. They can implement strategies to increase revenue such as innovating with new products or services, investing in new technologies or diversify markets, among others. Technology adoption is another avenue to foster enterprise growth and productivity. However, carrying out such technology upgrades can be particularly difficult for micro, small and medium enterprises, considering that they struggle with limited access to finance.

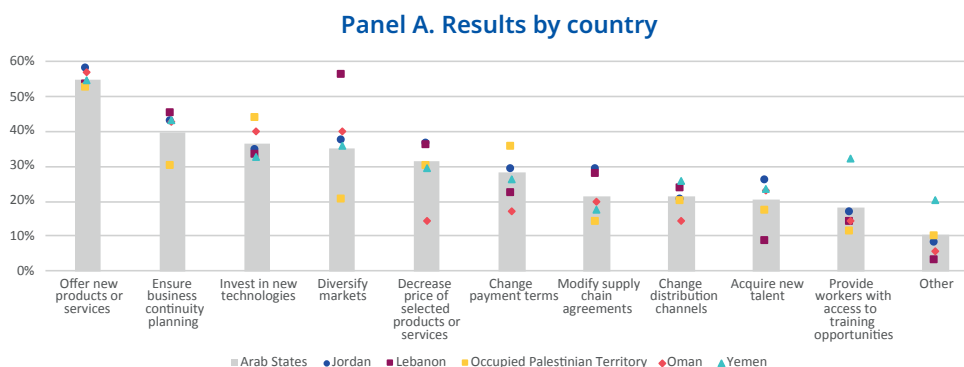
### ► 3.5.1. Strategies to increase revenue

Over half of enterprises in the sample countries reported that offering new products or services was an important strategy to increase revenue during and following COVID-19. Other key strategies included ensuring business continuity planning (40 per cent) and investing in new technologies (37 per cent). These three strategies were important for significant shares of enterprises across all countries. Additionally, over half of enterprises (56 per cent) in Lebanon highlighted the importance of diversifying markets, and a third of enterprises in Yemen stressed the importance of providing workers with access to training opportunities.

While ensuring business continuity planning was the most common strategy to drive revenue among large enterprises, offering new products or services was most reported among small and medium enterprises. This might be explained because large enterprises are more likely to have a higher market share of products or services and better competitive advantage, compared to micro, small and medium enterprises. Therefore, large enterprises would be less inclined to launch new products or services during or following COVID-19 given their already strong position in the market. Chapter 2 highlights that enterprises are more likely to launch new products or services if they have access to financial resources. However, limited access to finance can constrain the extent to which small and medium enterprises introduce new products or services in the market amid the COVID-19 pandemic.

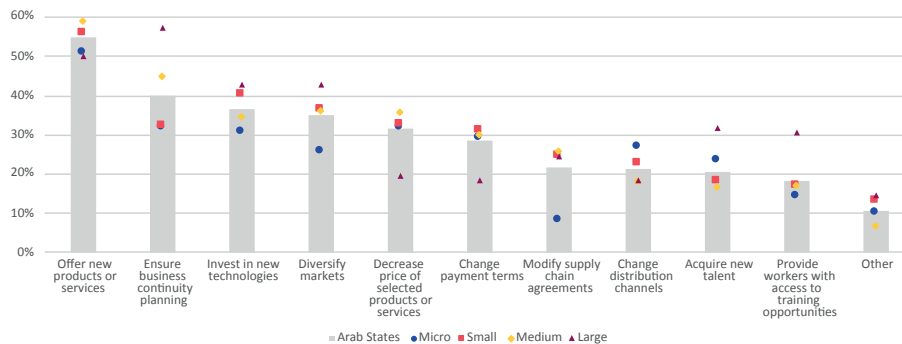
About a third of large enterprises said that acquiring new talent and providing workers with training opportunities were important strategies to drive revenue. Lower shares of micro, small and medium enterprises highlighted the importance of these two strategies.

► Figure 14 Most important strategies to increase revenue during and following COVID-19 (percentage of surveyed enterprises)





Panel B. Results by enterprise size



Key strategies to improve revenue by sector are below:

- About 6 out of 10 enterprises in the manufacturing, retail, service and information and communications sectors said that offering new products or services was important. By comparison, 4 out of 10 enterprises in the construction sector highlighted this strategy.
- Above average shares of enterprises in the information and communications (58 per cent) and construction (52 per cent) sectors thought that ensuring business continuity planning was important.
- Half of enterprises in the manufacturing sector stressed the importance of diversifying markets, compared to 4 out of 10 retail and construction enterprises, 3 out of 10 service enterprises and about 2 out of 10 information and communications enterprises.
- Relatively high shares of enterprises in the information and communications sector (32 per cent) reported that providing workers with training opportunities was important. This compares to 26 per cent of service enterprises, 13 per cent of manufacturing enterprises, 12 per cent of retail enterprises and 2 per cent of construction enterprises.

### 3.5.2. Technology adoption

#### Essential technologies for business operations

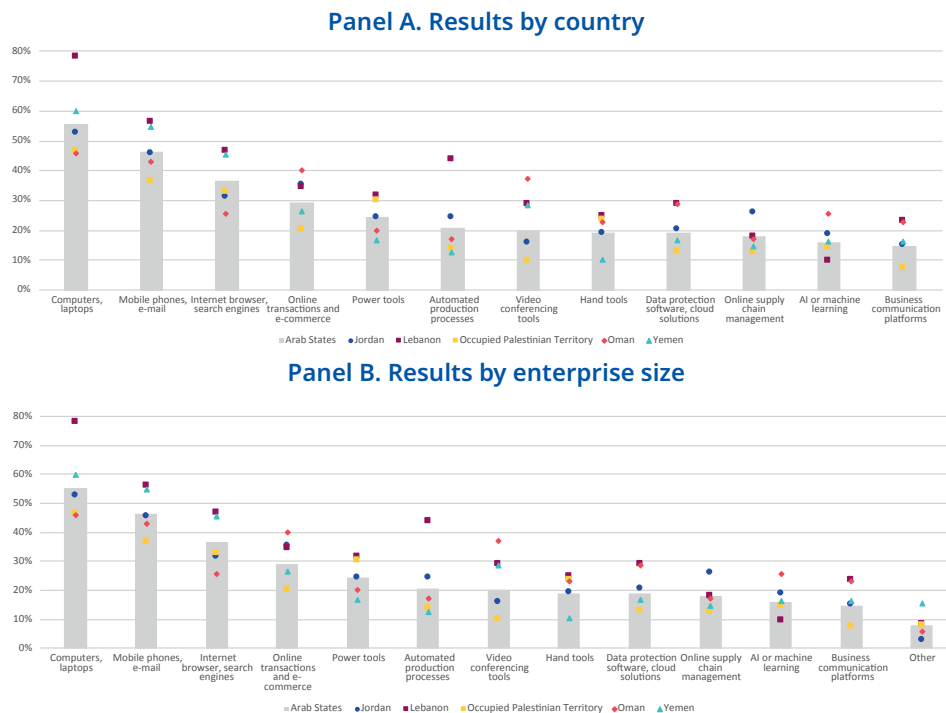
**The most common technologies for business operations were computers or laptops (56 per cent), mobile phones or email (47 per cent) and internet browsing (37 per cent).** COVID-19 and related restrictions of movement accelerated the extent to which enterprises relied on the aforementioned tools to operate. Most enterprises adopted remote working practices and started integrating digital technology into different areas of business operation.

Forty-four per cent of enterprises in Lebanon reported using automated production processes, which is double the sample countries share. A relatively high share of enterprises in Oman (37 per cent) and Lebanon (28 per cent) reported using video conferencing tools – compared to 20 per cent of enterprises that reported using these tools in the sample countries. Additionally, above average shares of enterprises in Jordan (19 per cent) and Oman (26 per cent) reported using artificial intelligence (AI) or machine learning to operate. About a quarter of enterprises in Oman and Lebanon reported using business communications platforms, compared to 15 per cent of enterprises in the sample countries.

**Large enterprises were more likely to use some essential technologies, compared to micro, small and medium enterprises.** These technologies included computers or laptops, online transactions and e-commerce, automated production processes, video conferencing tools, data protection software and cloud solutions, and online supply chain management systems. Large enterprises might have larger budgets to deploy new technologies and provide staff with the necessary training to manage

these technologies. Deploying such technologies can also lead to productivity gains that benefit large enterprises. This is consistent with findings from chapter 2 which revealed a positive correlation between labour productivity and larger enterprises. Additionally, micro, small, and medium enterprises might be more likely to suffer from low productivity which results in low saving rates and low capital accumulation (and profit margins), which coupled with lack of access to finance, can limit the extent to which they can adopt new technologies.

► **Figure 15 Essential technologies for business operations (percentage of surveyed enterprises)**



Note: Other technologies accounting for 8 per cent of the regional sample are not displayed in this figure.

Key findings by sector are as follows:

- About 4 out of 10 enterprises in manufacturing reported using automated production processes. This compares to 1 out of 10 enterprises in the retail and information and communications sectors, and 2 out of 10 enterprises in the construction and service sectors that reported using automation.
- Most construction enterprises reported using power tools (74 per cent) and hand tools (57 per cent) to operate. Less than a third of enterprises in the manufacturing sector and even lower shares of enterprises in other sectors reportedly used these tools.
- About half of enterprises in the information and communications reported using data protection software and cloud solutions (55 per cent), AI or machine learning (52 per cent) and business communication platforms (48 per cent).
- Four out of 10 enterprises in retail, and information and communications reported using online transactions and e-commerce. This compares to 3 out of 10 manufacturing and service enterprises, and 1 out of 10 construction enterprises that reported using this technology.
- Over a third of retail enterprises (35 per cent) reported operating online supply chain management systems. This is significantly higher than shares of enterprises in manufacturing (22 per cent), service (17 per cent), information and communications (16 per cent) and construction (10 per cent) which reported using such technology.

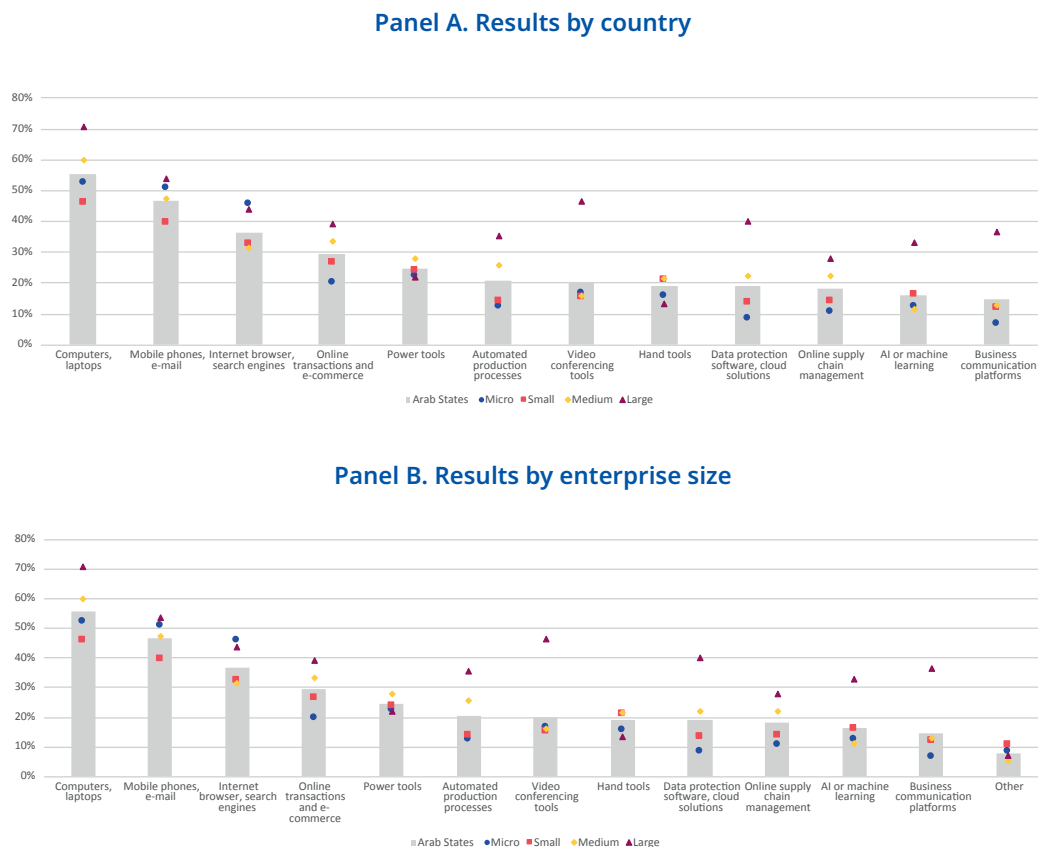
### Biggest barrier to upgrade technology

**High fixed capital costs, high risk and lack of relevant government incentives were the main barriers that enterprises in the sample countries faced to upgrade technology.** Half of enterprises said that one of these three barriers was making it difficult to conduct technology upgrades. Lack of adequately skilled staff to operate the technology was the fourth most common obstacle to upgrade technology, as reported by 10 per cent of enterprises.

**High fixed capital costs were the top barrier to upgrade technology across all countries, except Lebanon and Oman, where high risk and lack of government incentives were the most common obstacles, respectively.** Above average shares of enterprises in the Occupied Palestinian Territory (14 per cent) and Yemen (13 per cent) stressed the limited availability of adequately skilled staff to operate the technology. No internal need was the fourth most common barrier to upgrade technology in Jordan (16 per cent) and Lebanon (14 per cent). Almost 15 per cent of enterprises in Oman said that licensing costs and requirements to upgrade technology would be too high, which is three times the share of enterprises in the sample countries reporting this barrier.

**Higher shares of micro and small enterprises reported high fixed capital costs and high risk, compared to medium and large companies.** In fact, the shares of enterprises reporting either of these obstacles decreased as enterprises became larger. Additionally, 20 per cent of large enterprises highlighted the lack of relevant government incentive to upgrade technology compared to lower shares of micro (13 per cent), small (10 per cent) and medium (14 per cent) enterprises. Lack of skilled staff to operate technology was mostly reported by small (14 per cent) and large (13 per cent) enterprises.

► Figure 16 Biggest barrier to upgrade technology (percentage of surveyed enterprises)



Key obstacles to upgrade technology by country and enterprise size are as follows:

- **Jordan:** relatively high shares of micro (18 per cent) and small (24 per cent) said that fixed capital costs would be too high, about a quarter of medium enterprises said that there was no internal need, and a quarter of large enterprises stressed the lack of government incentives.
- **Lebanon:** No internal need was most reported by small enterprises (25 per cent), high risk was most reported by medium enterprises (32 per cent) and lack of adequately skilled workers was most reported by large enterprises (29 per cent).
- **Occupied Palestinian Territory:** 3 out of 10 micro enterprises reported high fixed capital costs, and 2 out of 10 small and medium enterprises said that the risk was too high.
- **Oman:** High risk and high fixed cost were the most common obstacles for micro and small enterprises, respectively. Lack of government incentives was the top obstacle among medium and large enterprises.
- **Yemen:** High fixed capital costs was the most common obstacle to upgrade technology among enterprises of all sizes.

Main obstacles by sector are below:

- About 2 out of 10 enterprises across all sectors highlighted high capital costs.
- About 20 per cent of enterprises in the manufacturing and service sectors reported the lack of government incentives, compared to 7 per cent of enterprises in retail and construction, and 3 per cent of enterprises in information and communications.
- Eleven per cent of service enterprises said that licensing costs and requirements would be too high. This is higher than the share of enterprises in other sectors reporting this obstacle (under 3 per cent).
- The two most common obstacles for retail enterprises were no internal need (23 per cent) and high risk (21 per cent).
- Above sample countries shares of construction enterprises highlighted the lack of skilled staff to operate technology (14 per cent), no internal need (17 per cent) and no technology availability in their countries (12 per cent).
- Relatively high shares of enterprises in the information and communications sector said that fixed costs were too high (23 per cent), there was not skilled staff to operate technology (16 per cent) and there were limited possibilities to repair technology (13 per cent).

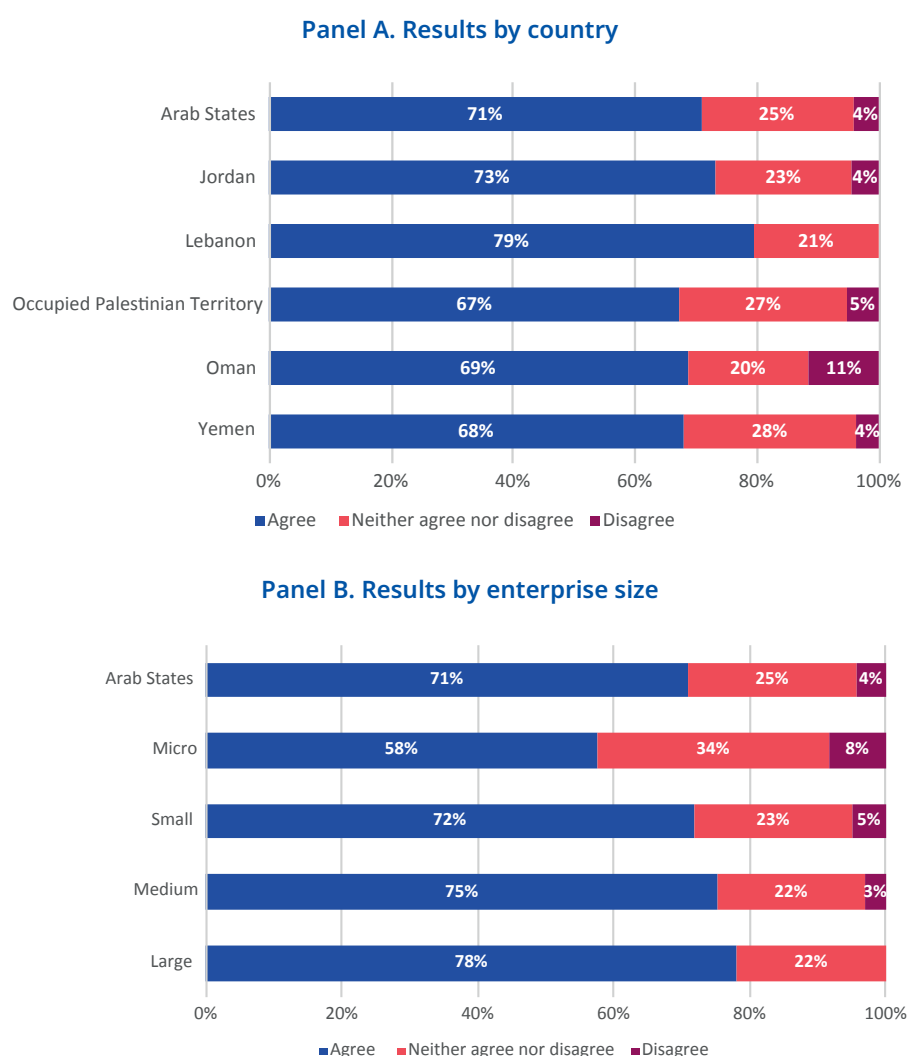
### 3.5.3. Process improvements and future investment

#### Process improvements

Process improvements consist of business practices that enterprises can use to identify and analyse procedures to improve their effectiveness or efficiency. They are useful to enhance business performance and productivity. **Survey findings revealed that most enterprises in the sample countries, 71 per cent, agreed that they implemented frequent process improvements.** The highest share of enterprises that conducted these process improvements came from Lebanon (79 per cent), followed by Jordan (73 per cent), Oman (69 per cent), Yemen (68 per cent), and the Occupied Palestinian Territory (67 per cent).

**A lower share of micro enterprises reported implementing these process improvements, compared to small, medium, and large enterprises.** The shares of enterprises that conducted process improvements grew as the enterprises became larger. Over half of micro enterprises (58 per cent) conducted such process improvements compared to over 70 per cent of small, medium, and large enterprises.

► **Figure 17 Enterprises that agreed that they implemented frequent process improvements (percentage of surveyed enterprises)**



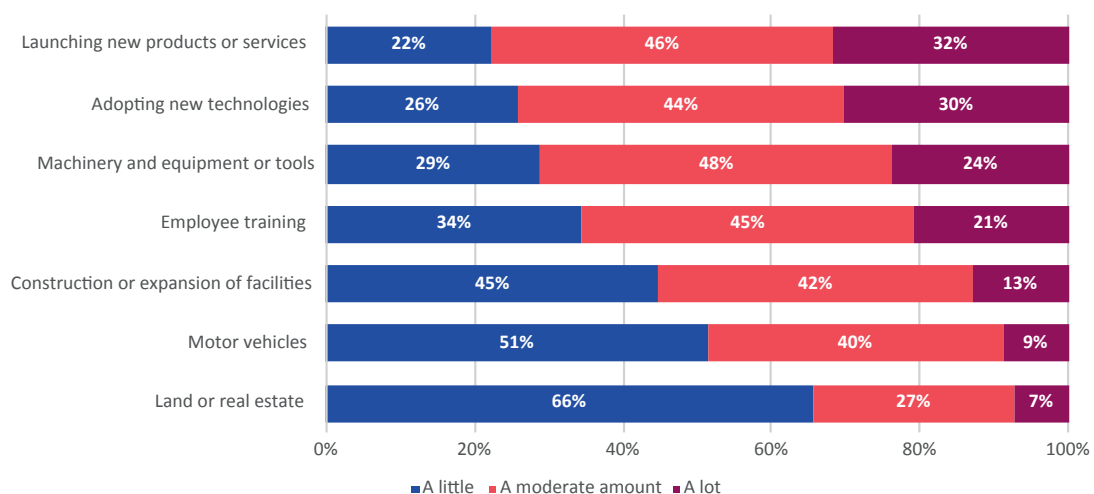
**Higher shares of enterprises in manufacturing (78 per cent) and information and communications (77 per cent) agreed that they conducted frequent process improvements, compared to enterprises in other sectors.** Slightly lower shares of retail (64 per cent), service (65 per cent), construction (69 per cent) enterprises conducted these process improvements.

### Future investment

**Over 70 per cent of enterprises in the sample countries planned to invest a lot or a moderate amount in launching new products or services (78 per cent), adopting new technologies (74 per cent), and buying new machinery and equipment or tools (71 per cent) over the next 5 years.** Most enterprises also expected to invest a lot or a moderate amount in employee training (66 per cent) and construction or expansion of facilities (55 per cent). A lower share of enterprises expected to invest a lot or a moderate amount in motor vehicles (49 per cent) and land or real estate (34 per cent) over the next 5 years.

**Launching new products or services, investing in new machinery and equipment or tools, and adopting new technologies were the top three future investment priorities for enterprises in Jordan, the Occupied Palestinian Territory and Oman.** Most enterprises in Lebanon and Yemen also said that they would launch new products or services and provide employees with training. Additionally, 8 out of 10 enterprises in Lebanon planned to buy new machinery and equipment or tools, and 7 out of 10 enterprises in Yemen expected to adopt new technologies.

► **Figure 18 Investment in the next 5 years, results in the Arab States (percentage of surveyed enterprises)**



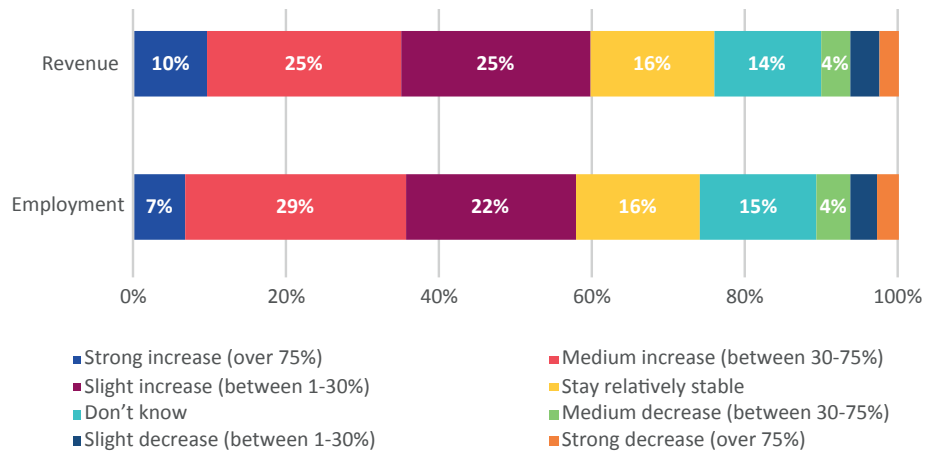
**Large enterprises were more likely to plan to invest in technology adoption, compared to micro, small, medium, and large enterprises.** Almost 90 per cent of large enterprises planned such an investment, compared to 66 per cent of micro enterprises, 70 per cent of small enterprises and 78 per cent of medium enterprises. Additionally, 78 per cent of large enterprises planned to provide employees with training opportunities, compared to lower shares of micro (57 per cent), small (69 per cent) and medium (63 per cent) enterprises. About 80 per cent of enterprises across all sizes planned to launch new products or services over the next 5 years.

The information and communications sector accounted for the highest share of enterprises planning to invest in new technologies (91 per cent), followed by construction (79 per cent), retail (74 per cent), service and manufacturing companies (73 per cent). Likewise, 9 out of 10 enterprises in the information and communications sector planned to launch new products or services, compared to 8 out of 10 enterprises in the manufacturing, service and retail sectors, and 6 out of 10 enterprises in the construction sector. Additionally, 8 out of 10 enterprises in the information and communications sector planned to provide employees with training opportunities. This compares to 7 out of 10 enterprises in the manufacturing and service sectors, and 5 out of 10 enterprises in the retail and construction sectors.

### Revenue and employment expectations

**Despite challenges experienced during the COVID-19 pandemic, most enterprises were hopeful that both revenue and employment would increase in the next 5 years.** Five out of 10 enterprises expected medium or slight revenue and employment increases. Additionally, 1 out of 10 enterprises expected strong revenue and employment increases. Only 1 out of 10 enterprises expected decreases in revenue and employment.

► **Figure 19 Expectations of revenue and employment in the next 5 years, results in the Arab States (percentage of surveyed enterprises)**



Seven out of 10 enterprises in Yemen and 5 out of 10 enterprises in Jordan and Lebanon expected revenue and employment increases in the next 5 years. In the Occupied Palestinian Territory and Oman, 6 out of 10 enterprises expected revenue increases, and about 5 out of 10 enterprises expected employment increases.

**Overall, higher shares of large and medium enterprises expected employment increases, compared to micro and small enterprises.** This trend was found for enterprises in Jordan, the Occupied Palestinian Territory and Yemen. However, micro and small enterprises in Oman and Lebanon accounted for the highest shares of enterprises foreseeing employment increases, respectively.

**Similarly, medium and large enterprises also accounted for the highest shares of enterprises expecting revenue increases across all countries, except Oman.** About 7 out of 10 large enterprises in Jordan, Lebanon, and Yemen, and 8 out of 10 medium enterprises in the Occupied Palestinian Territory foresaw revenue increases in the next 5 years.

About half of enterprises across all sectors, except manufacturing (4 out of 10 enterprises) expected employment increases. Similarly, half of enterprises across all sectors except the service (4 out of 10 enterprises) and information and communications (6 out of 10 enterprises) sectors expected revenue increases.

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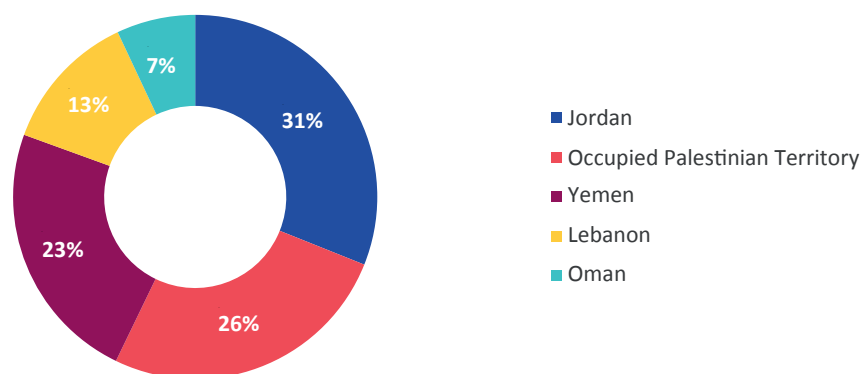
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## ► Annex A. Survey demographics

The regional survey was conducted with 586 enterprises in five countries in the Arab States, namely, Jordan, Lebanon, Occupied Palestinian Territory, Oman, and Yemen. Of total responses, 31 per cent came from Jordan, 26 per cent came from the Occupied Palestinian Territory, 23 per cent came from Yemen, 13 per cent came from Lebanon and 7 per cent came from Oman.

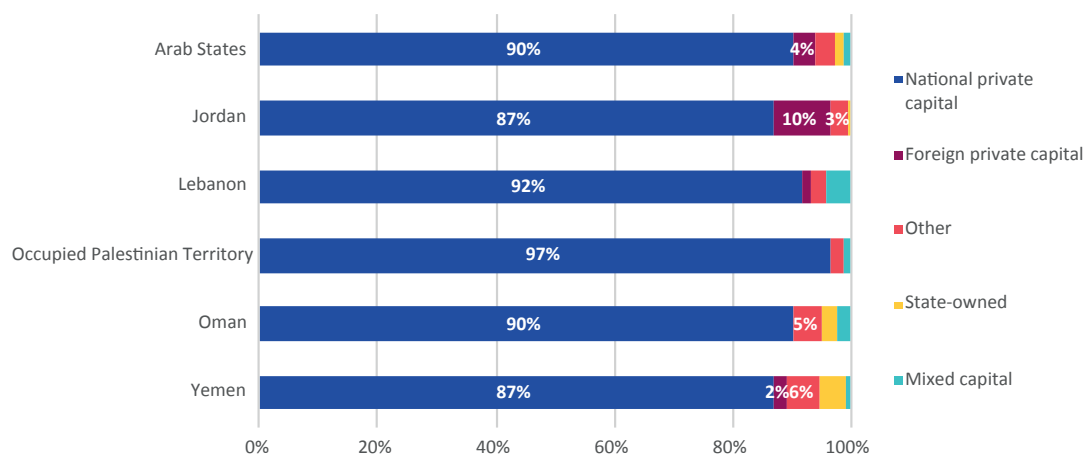
►Figure 22 Survey sample by country (percentage of surveyed enterprises)



**Nine out of 10 surveyed enterprises were national private businesses.** Other types of ownership in the survey included foreign private capital (4 per cent), state-owned (1 per cent), mixed capital (1 per cent), and others (3 per cent).

The Occupied Palestine Territory accounted for the highest share of national private enterprises (97 per cent), followed by Lebanon (92 per cent), Lebanon (92 per cent), Oman (90 per cent) and Jordan (87 per cent).

►Figure 21 Type of ownership, results by country (percentage of surveyed enterprises)

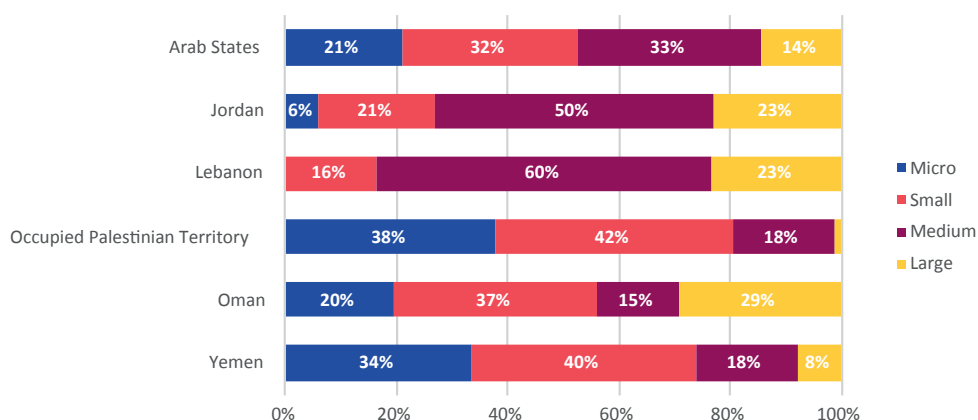


Enterprises in the survey were classified into four types according to the number of workers they employed, namely micro (employing less than 5 workers), small (employing between 5 and 19 workers), medium (employing between 20 and 99 workers) and large (employing over 100 workers).

**About two thirds of surveyed enterprises were small or medium.** Almost equal shares of medium (33 per cent) and small enterprises (32 per cent), 21 per cent of micro enterprises and 14 per cent of large enterprises participated in the survey.

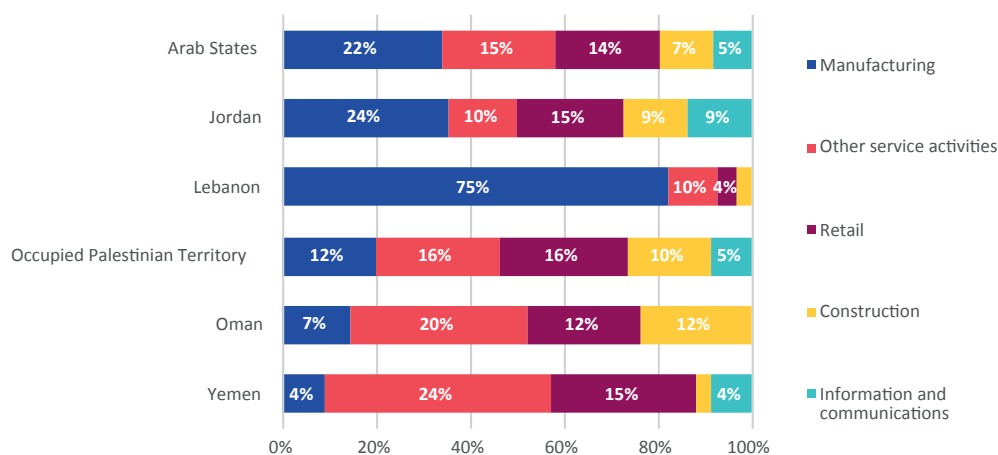
The Occupied Palestine Territory accounted for the highest share of micro (38 per cent) and small enterprises (42 per cent), Lebanon had the highest share of medium enterprises (60 per cent) and Oman had the highest share of large enterprises (29 per cent).

► **Figure 22 Enterprise size, results by country (percentage of surveyed enterprises)**



The highest share of survey responses came from the manufacturing (22 per cent) and service (15 per cent) sectors. The retail sector accounted for 14 per cent of the sample, followed by construction (7 per cent) and information and communications (5 per cent) sectors.

► **Figure 23 Economic sector, results by country (percentage of surveyed enterprises)**



Note: Economic sectors accounting for less than 5 per cent of the regional sample are not displayed in this figure. These sectors include Administrative or support services; Agriculture, forestry or fishing; Arts, entertainment or recreation; Education; Financial or insurance activities; Hotels or restaurants; Human health or social work; Mining or quarrying; Professional, scientific or technical activities; Public administration or defence; Real estate activities; Supply of electricity, gas, water or waste management; and Transportation or storage services.

## ► Annex B. Survey questionnaire

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### ►► 1. Select the type of ownership of your enterprise:

- ☐ National private capital
- ☐ State-owned
- ☐ Mixed capital
- ☐ Foreign private capital
- ☐ Other

### ►► 2. What is your sector of operation?

- ☐ Administrative or support services
- ☐ Agriculture, forestry or fishing
- ☐ Arts, entertainment or recreation
- ☐ Construction
- ☐ Education
- ☐ Financial or insurance activities
- ☐ Hotels or restaurants
- ☐ Human health or social work
- ☐ Information and communications
- ☐ Manufacturing
- ☐ Mining or quarrying
- ☐ Professional, scientific or technical activities
- ☐ Public administration or defence
- ☐ Real estate activities
- ☐ Shop-keeping, sales or trade activities
- ☐ Supply of electricity, gas, water or waste management
- ☐ Transportation or storage services
- ☐ Other service activities

### ►► 3. How many paid total workers (full- and part-time) did your enterprise have. Please insert the number

As of January 2020 \_\_\_\_\_ As of July 2021 \_\_\_\_\_

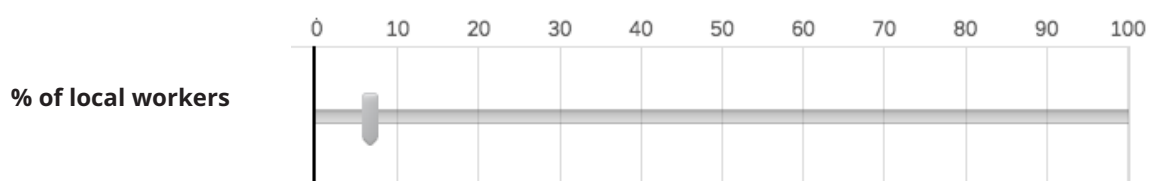
4. What has been the impact of the COVID-19 crisis on your revenue for this year (January-June 2021) compared to the same period in 2019?

- ☐ Strong increase (Over 75%)
- ☐ Medium increase (Between 30-75%)
- ☐ Slight increase (Between 1-30%)
- ☐ Revenue stayed the same
- ☐ Strong decrease (Over 75%)
- ☐ Medium decrease (Between 30-75%)
- ☐ Slight decrease (Between 1-30%)
- ☐ I don't know

5. What are the three main operational challenges that your enterprise has faced since the COVID-19 outbreak? Select the top three options.

- ☐ Cash flow to maintain business operations is inadequate
- ☐ Difficulty finding workers with the required skills and/or qualifications
- ☐ Difficulty accessing customers
- ☐ Loss in demand due to cancellation of orders
- ☐ Difficulty accessing suppliers
- ☐ Worker absenteeism
- ☐ Loss in workers' productivity
- ☐ Corruption and inefficiency in the public system
- ☐ Difficulty securing access to finance
- ☐ Crime and/or insecurity
- ☐ Price of input materials is higher than normal
- ☐ Data or IT related challenges
- ☐ No challenge at all
- ☐ Other

6. What percentage of national workers are currently employed in your enterprise? Adjust slider to the correct percentage. If you do not know the exact percentage, please provide your best estimate.



(Q6.1 shows if respondent selected “0%” in Q6)

**6.1. What are the reasons that no national workers are employed in your enterprise? Select all that apply.**

- ☐ Inadequate level of skills
- ☐ Limited educational attainment
- ☐ Low productivity
- ☐ Financial constraints resulting from the COVID-19 crisis
- ☐ No need to hire (i.e., not enough work)
- ☐ Hiring process is cumbersome and/or expensive
- ☐ Inability to pay for wages
- ☐ Government policies that restrict hiring foreign workers
- ☐ Other, please specify \_\_\_\_\_

**7. What is the main level of education of all (or most) of the following workers employed at your enterprise? Select one.**

	Top and senior managers	Staff without managerial responsibilities	National workers (Option only shows if share in Q7 is higher than 0%)
No primary education			
Primary education			
Secondary or higher technical education			
Bachelor's degree or equivalent			
Master's or doctoral degree or equivalent			

**8. Select the top 3 skills that are the most important for your business. Select three**

- ☐ Technical knowledge
- ☐ Foreign language skills
- ☐ Digital skills (i.e., to manage specific software)
- ☐ Organization skills and attention to detail
- ☐ Communication skills
- ☐ Teamwork and collaborative skills
- ☐ Networking skills
- ☐ Creativity and innovation related skills
- ☐ Strategic thinking/problem-solving skills

- ☐ Innovation
- ☐ Time management skills
- ☐ Cultural sensitivity
- ☐ Other

►► 9. How difficult is it to hire workers with the required level of skills at your enterprise?

- ☐ Very easy
- ☐ Easy
- ☐ Neither easy nor difficult
- ☐ Difficult
- ☐ Very difficult

►► 10. Does your enterprise have incentive compensation programs for workers? (e.g., bonuses for performance, productivity, punctuality, etc.)

- ☐ Yes
- ☐ No
- ☐ I don't know

(Q11.1 shows if respondent selected "Yes" in Q11)

10.1. Are these compensation programs useful to increase workers' productivity?

- ☐ Yes
- ☐ No

►► 11. What is your enterprise's budget for staff training and development with respect to total salary cost?

- ☐ Less than 1%
- ☐ Between 2-5%
- ☐ Between 5-10%
- ☐ Over 10%
- ☐ There is no separate budget for staff training and development
- ☐ I don't know

12. Does your enterprise have performance targets to monitor the following elements? Select all that apply.

- ☐ Achievement of set goals
- ☐ Customer satisfaction
- ☐ Profit growth
- ☐ Productivity
- ☐ Other, please specify\_\_\_\_\_
- ☐ Our enterprise does not have such performance targets

(Q12.1 shows if respondent selected any option other than “Our enterprise does not have such performance targets” in Q12)

12.1. Are these targets known to all (or most) managers and staff in your enterprise?

- ☐ Yes
- ☐ No

13. What are the most important strategies to increase your revenue during and following COVID-19? Select all that apply.

- ☐ Invest in new technologies
- ☐ Offer new products or services
- ☐ Decrease price of selected products or services
- ☐ Change payment terms (e.g., establish a payment plan)
- ☐ Change distribution channels (e.g., promote delivery or online purchases)
- ☐ Diversify markets (e.g., operate in different locations or with new clients)
- ☐ Modify supply chain agreements (e.g., source from other suppliers, negotiate with suppliers)
- ☐ Ensure business continuity planning
- ☐ Acquire new talent
- ☐ Provide workers with access to training opportunities
- ☐ Other

14. Which of the following technologies are currently essential for your business operations? Select all that apply.

- ☐ Hand tools (e.g., hammer, screwdriver, shovel, chisel, saw)
- ☐ Power tools (e.g., electric saw, electric drill, cement mixer)
- ☐ Mobile phones and/or e-mail
- ☐ Computers or laptops

- ☐ Internet browser and/or search engines
- ☐ Automated production processes
- ☐ Artificial intelligence or machine learning
- ☐ Online supply-chain management
- ☐ Online payments, transactions and e-commerce
- ☐ Data protection software and backup drives and/or cloud solutions
- ☐ Video conferencing tools (e.g., Zoom, Skype)
- ☐ Business communication platforms (e.g., Microsoft teams, Slack)
- ☐ Other, please specify \_\_\_\_\_

►► **15. What is the biggest barrier that your enterprise faces to upgrade its technology? Please select one.**

- ☐ Fixed capital costs would be too high
- ☐ Licensing costs and requirements would be too high
- ☐ Lack of suitable investors
- ☐ Lack of skilled staff who can operate the technology
- ☐ Lack of possibilities to repair technologies
- ☐ Lack of relevant government incentives
- ☐ Risk is too high in the current business environment
- ☐ Not available in my country
- ☐ No internal need (i.e., current technologies are adequate enough)
- ☐ Other
- ☐ I don't know

►► **16. Do you agree or disagree with the following statements?**

	Agree	Neither agree nor disagree	Disagree
Our enterprise implements frequent process improvements			
The national government has adequate policies to promote enterprise innovation and technology adoption			



17. How much will your enterprise invest in the following elements over the next 5 years?

	A little	A moderate amount	A lot
Land or real estate			
Construction or expansion of facilities			
Motor vehicles			
Machinery and equipment or tools			
Adopting new technologies			
Launching new products or services			
Employee training			

18. How do you expect your revenue and employment to behave over the next 5 years?

	Revenue	Employment
Strong increase (Over 75%)		
Medium increase (Between 30-75%)		
Slight increase (Between 1-30%)		
Stay relatively stable		
Strong decrease (Over 75%)		
Medium decrease (Between 30-75%)		
Slight decrease (Between 1-30%)		
Don't know		

19. What is the main source of financing for your enterprise?

- ☐ Own resources (i.e., cash or savings)
- ☐ Local private banks
- ☐ International banks or international funds
- ☐ State banks or government programs
- ☐ Microcredit institutions and/or cooperatives
- ☐ Individual lenders
- ☐ Other
- ☐ I don't know

20. What are the main obstacles that your enterprise faces to operate?  
Select all that apply.

- ☐ Access to finance
- ☐ Access to land
- ☐ Getting required business licenses and permits
- ☐ High levels of corruption
- ☐ Crime, theft and disorder
- ☐ Customs and trade regulations
- ☐ Unreliable electricity supply
- ☐ Lack of skilled workforce
- ☐ Labor regulations are complex and expensive
- ☐ Political instability
- ☐ Economic uncertainty
- ☐ Practices of competitors in the informal sector
- ☐ High tax rates
- ☐ Other, please specify\_\_\_\_

(Q21 only shows options selected in Q20)

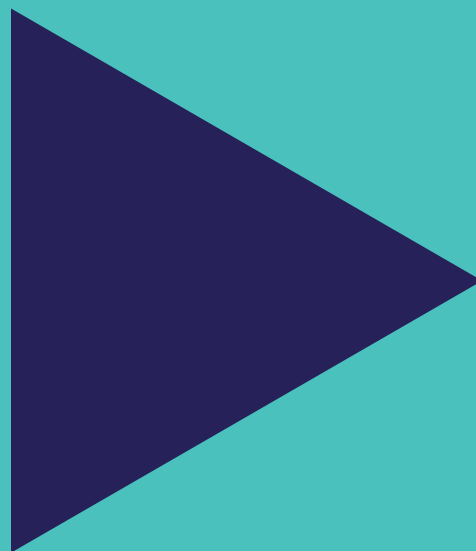
21. What is the single biggest obstacle faced by your enterprise?

- ☐ Access to finance
- ☐ Access to land
- ☐ Getting required business licenses and permits
- ☐ High levels of corruption
- ☐ Crime, theft and disorder
- ☐ Customs and trade regulations
- ☐ Unreliable electricity supply
- ☐ Lack of skilled workforce
- ☐ Labor regulations are complex and expensive
- ☐ Political instability
- ☐ Economic uncertainty
- ☐ Practices of competitors in the informal sector
- ☐ High tax rates
- ☐ Other, please specify\_\_\_\_

# ▶ Chapter 4

**National development plans and their potential as catalyst for productivity-enhancing policies and sustainable enterprise development**

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### ► Main findings

- Productivity as a target in national development plans and visions is generally lacking in the Arab region.
- Most national plans and visions have a significant emphasis on investments in ICT.
- In general, national development plans and visions have a significant component related to the development of human capital.
- The R&D component of the majority of national plans and visions is significant.
- In the area of competition in product and labor markets, most plans and visions do not address the issue.
- Correspondence between plans and visions and ILO productivity Ecosystem is weak in the areas of industrial policy, social and labor institutions and gender equality.
- Correspondence between plans and visions and ILO productivity Ecosystem is good in the areas of diversification, skills development and education, ICT investment, and the environment.
- National development plans and visions in general have diversification objectives especially in the GCC countries. However, structural transformation of the economies is not mentioned explicitly.
- The national plans and visions do not address the issue of informality and its relation to productivity in the Arab region.

## ► Recommendations

To Policy Makers to include in national plans and visions:

- Make the objective of productivity enhancement an integral part of national development plans and visions.
- Adopt quantitative targets for economy-wide productivity and sectoral productivity.
- Establish productivity data collection and measurement capabilities at the national governmental level.
- Enhance competition in product and labor markets.
- Enhance social dialogue to include institutional arrangements conducive to productivity.
- Implement industrial and productive development policies that aim at structural transformation of the economy and productivity enhancement.
- Establish institutional and governance frameworks (efficient and innovative government, civil society organizations,..) that are conducive to productivity.
- Aim at reducing the degree of informality in the economy and the transition to a more formal economy.
- In national plans and visions, include support for enterprises to promote innovation, productive investment and R&D expenditures (e.g. through tax credits).
- Promote gender equality and female labor market participation.
- Implement diversification in the economy in addition to policies that deal with natural capital depletion and environmental damage.
- Development plans must include policies that enhance the meso-level of the productivity ecosystem. Amongst them are the linking of wage increases to productivity increases, increase in formality, industrial policies, competition policies, and gender equality.

To Business Employers Membership Organizations.

- Embrace productivity growth as a priority.
- Advocate for policies promoting innovation.
- Develop a research agenda on productivity.
- Tracking progress of employers' agenda on productivity.

In this chapter, the national development plans for selected Arab states are studied to assess the extent to which they address and are conducive to productivity growth, sustainable enterprise development, diversification and structural change. As shown in previous chapters, productivity growth is driven by a wide set of factors, some of which relate to the quality of the business environment while others to management practices. This reveals the need to devise a long-term, coherent and comprehensive policy framework/strategy to enhance productivity and raise living standards through a concerted public-private sector effort.

In this context, the research question we try to address in this chapter is focused on what changes to national development plans the selected Arab States could take into account to increase productivity and in doing so ensure that productivity growth generates more sustainable enterprises and results in wage growth.

The countries included in this chapter are Iraq, Jordan, Kuwait, Oman and Occupied Palestinian Territory<sup>115</sup>. It is organised as follows. Section 4.1 will study the national development plans identifying policies in the plans that enhance productivity. Section 4.2 identifies the correspondence between plans and the ILO Productivity Ecosystem and proposes the development of an alternative policy framework both at the macro (business environment) and sectoral levels. Section 4.3, proposes policies for Employers and Business membership Organisations (EBMOs) at the micro level for fostering and embracing productivity growth as a priority for development.

## ► 4.1 National Plans and Productivity: Is productivity growth clearly described as a priority?

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In this section, we identify the main elements in the national development plans that are related to productivity as a priority. Specifically, it will identify if the following are present in the respective plans:

1. Productivity as an explicit target
2. Quantitative targets for productivity increases
3. Sectoral productivity targets
4. Other measures related to productivity (GDP per capita, sectoral output, etc.)

In addition, the section will identify the presence of drivers of productivity growth both at the supply-side and demand-side levels. Drivers of productivity growth operate both at the supply-side and demand-side levels<sup>116</sup>. Antenucci et al. (2019) state that the main driver of productivity, in the long run on the supply side, is technical progress which, in turn, is affected by factors such as investment in human capital, innovation stemming from R&D expenditures and knowledge diffusion. In addition

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<sup>115</sup> The UAE was not included in the analysis due to the non-existence of a national development plan but separate plans for areas such as innovation and SDGs.

<sup>116</sup> Antenucci, Fabrizio, Matteo Deleidi and Walter Paternesi Meloni (2019) Demand- and Supply-side Drivers of Labour Productivity Growth: an empirical assessment for G7 countries. Associazione Studi e Ricerche Interdisciplinari sul Lavoro. Working Paper n° 42/2019; Klein, Lawrence (1978) "The Supply Side," The American Economic Review Vol. 68, No. 1 (Mar., 1978), pp. 1-7.

to these supply-side factors, the paper argues, in the old Keynesian tradition, that demand-side factors such as economic growth and effective demand are related to productivity growth through the Kaldor-Verdoorn law that states that productivity growth is stimulated by economic growth through economies of scale and technical progress embodied in new capital goods. In the latter view, higher aggregate demand leading to growth affects productivity. In sum, several supply side factors such as R&D expenditures that affect innovation, investment in ICT, human capital endowments, capital deepening, and competition affect productivity growth on the supply side while increased aggregate demand leading to higher economic growth increase productivity from the demand side. These drivers of productivity growth will be identified in the various plans.

## ■ Jordan

The Jordan Economic Growth Plan 2018 – 2022<sup>117</sup> published by the Economic Policy Council aims at recapturing “the growth momentum and realize Jordan’s development potential.” (p. 4). It came at the heels of a deceleration of economic growth rates from an average of 6.5%, between 2000 and 2009, to 2.5% between 2010 and 2016. In addition to jumpstarting economic growth with the aim of doubling it, the plan aims at macroeconomic stability, increasing competitiveness and investment, encourage investment in infrastructure and economic sectors such as energy, water, transport, construction, manufacturing, agriculture and tourism. It also aims at social development with various measures in education and health. It aims at achieving four general objectives: active citizens with a sense of belonging, a safe and stable society, a dynamic and globally competitive private sector and efficient and effective government. The plan identifies 95 policy actions (USD 895 million), 85 government projects (9.7 billion USD) and 27 private sector investments (13.3 billion USD).

In terms of productivity, Table 1 shows the various indicators and drivers of productivity in the Jordan plan. In this respect, productivity is moderately mentioned. There are no specific targets for productivity growth at the national nor at the sectoral levels but output increase targets are mentioned for sectors. Nonetheless, at the sectoral level, there are investments and policies for the agricultural sector that would play a role in productivity growth. However, the plan contains many factors that drive productivity. In terms of supply-side drivers of productivity, policies to enhance competition, emphasis on digitization of the economy, and education and training for the building up of human capital are present. In terms of R&D, there is scattered mention of enhancing research especially in agriculture. In terms of capital deepening, there is no mention of it as an explicit target but the plan has substantial investments in infrastructure that would lead to capital deepening at the economy-wide level. As for the demand-side drivers of productivity growth, the emphasis on the countercyclical nature of fiscal policy would play a role in propping up aggregate demand in case of recessions. Moreover, the plan aims at achieving a doubling of the growth rate of the economy.

<sup>117</sup> Plans are available at Arab National Development Planning Portal: National Development Plans. <https://andp.unescwa.org/plans>.

► Table 1. Indicators and drivers of productivity in Jordan's national development plan

Productivity as Explicit Target	Quantitative targets for productivity growth	Sectoral Productivity Targets	Competition	R&D	Human Capital	ICT investment	Economic Growth Target	Capital Deepening	Aggregate Demand
Moderate: Productivity is mentioned 12 times in the plan	No	No. However, investments in agricultural sector totalling 798.6 million JD with aim of increasing productivity. Sectoral output targets.	Yes. Policies to enhance competition.	Weak. Scattered mention of research enhancement especially in agriculture	Yes. Investment of 2.8 billion JD in education. Training of labour force.	Yes. Digitization of entire Jordanian economy with a total 430 million JD investment.	Yes. Doubling of growth in five-year period. Sectoral growth rates are identified.	Not explicit. investment in infrastructure totalling 3.47 billion (water) + 4.3 billion (Energy)  + 2.7 billion JD (transportation) + 693.5 million JD (tourism)+	Fiscal policy countercyclical and geared towards capital investments

## Occupied Palestinian Territory

The Palestine National Development Plan (NDP) 2021-2023 published by the prime minister's office advances "a new development paradigm" for the Palestinian territories centred around two objectives: cluster development and disengagement from occupation. The plan aims also at "modifying the Palestinian economic model" (p. 12). The cluster development model is considered compatible with geographic and political realities under occupation where each cluster representing a certain local economy specialized in a certain economic activity. In this respect, the clusters and their specializations are: Jerusalem as a Capital cluster, Jenin and Qalqilya renowned for agriculture, Hebron and Nablus for industry, Bethlehem for tourism, Ramallah and El-Bireh for financial services and ICT and finally Gaza for coastal economic activities. Although the plan mentions such cluster development as the core concept for economic development, it does not elaborate on policies and mechanisms for its achievement. The plan consists of three pillars: ending the occupation; excellent public service provision; and sustainable development. The plan delineates briefly ten national priorities and thirty-three national policies across the three pillars. Pillar 3 has the majority of policy interventions with twenty-one different policies.

In terms of productivity, Table 2 shows the various indicators and drivers of productivity in the Palestine plan. In this respect, productivity is rarely mentioned (only once). Consequently, there are no specific targets for productivity growth at the national nor at the sectoral levels. Nonetheless, at the sectoral level, there are investments and policies for the agricultural sector that would play a role in productivity growth. Moreover, the plan lacks many factors that drive productivity. In terms of supply-side drivers of productivity, there are no policies to enhance competition. In terms of R&D, the



plan has no specific programs or initiatives. There is scant mention of ICT development while there are measures to enhance education and training for the building up of human capital. In terms of capital deepening, there is no mention of it as an explicit target and the plan lacks any investments in infrastructure or other capital-intensive projects. As for the demand-side drivers of productivity growth, there is no mention of target growth rates nor of measures to manage aggregate demand. In sum, the plan is very weak in terms of policies that drive productivity both at the supply-side and the demand-side.

► **Table 2. Indicators and drivers of productivity in Palestine's national development plan**

Productivity as Explicit Target	Quantitative targets for productivity growth	Sectoral Productivity Targets	Competition	R&D	Human Capital	ICT investment	Economic Growth Target	Capital Deepening	Aggregate Demand
Very Weak Productivity is mentioned only one time in the plan	No	No.	No.	Very Weak. Just a passing mention of enhancing Palestinian research capacity.	Yes. Emphasis on education improvement at all levels and vocational training.	Weak. General statement about attracting domestic investments and FDI into the sector.	No	No	No

## ► Kuwait

The Kuwait Mid-range development plan 2015/2016-2019/2020 aimed at achieving the vision of the Emir of Kuwait Sheikh Sabah Al Ahmad Al Sabah in a desired “end state” for Kuwait. The Plan has five vision themes. The themes are citizen participation and respect of the law; effective and transparent government; prosperous and diversified economy; nurturing and cohesive nation; and globally relevant and influential player.

The plan has seven pillars that represent the means by which the vision themes will be realized. The pillars are administration; economy; infrastructure; living environment; health care; education and human capital; and international positioning. The plan aims at defining Kuwait's strategic directions through a set of recognized twenty global indices that include 86 indicators to place Kuwait relative to the rest of the world. The plan has quantitative objectives with respect to these indices. The plan aims at putting Kuwait on the track to achieving by 2025 the position of at least 30<sup>th</sup> percentile and at least 20<sup>th</sup> percentile in 2035 at the global level. Currently, the value of the indices range from 17% to 78%. Hence, the plan, as a stepping-stone towards the achievement of these targets by 2025 and 2035, is very ambitious. Notwithstanding the challenges, the plan contains 17 vision-related tactical projects, 19 enablers and 88 vision-related projects.

In terms of productivity, Table 3 shows the various indicators and drivers of productivity in the Kuwaiti

plan. In this respect, productivity is not mentioned at all in the plan. Consequently, there are no specific targets for productivity growth at the national nor at the sectoral levels. Nonetheless, the quantitative targets approach of the plan in terms of global indices for which mostly are supply-side drivers of productivity may be considered as proxy targets for productivity. Moreover, the plan contains many factors that drive productivity. In terms of supply-side drivers of productivity, there is mention of enhancing competition mainly in energy and transportation sectors. In terms of R&D, the plan promotes research as part of Business Innovation Index; the enhancement of use of clean energy; and the improvement of quality of tertiary education. ICT development is strongly supported by the plan in many areas including government and private sector through a national strategy for ICT. In terms of human capital, there is support for raising the quality of education and labour market training programs. In terms of capital deepening, there is no mention of it as an explicit target but the plan includes substantive infrastructure investment. As for the demand-side drivers of productivity growth, there is no mention of target growth rates nor of measures to manage aggregate demand except in terms of diversification of exports. Infrastructure investment can also play a demand-side role in this respect leading to higher growth and hence to higher productivity. In sum, although the plan does not have explicit targets for productivity growth, the fact that the plan has desired quantitative targets for many drivers of productivity would lead to specific quantitative jumps in productivity at the aggregate and sectoral levels.

► **Table 3. Indicators and drivers of productivity in Kuwait's national development plan**

Productivity as Explicit Target	Quantitative targets for productivity growth	Sectoral Productivity Targets	Competition	R&D	Human Capital	ICT investment	Economic Growth Target	Capital Deepening	Aggregate Demand
Very Weak Productivity is not mentioned in the plan.	No.	No.	Yes. Policies to enhance competition in energy and transport sectors albeit limited.	Strong. Promoting research as part of Business Innovation Index; the enhancement of use of clean energy; and the improvement of quality of tertiary education.	Yes. Improvement in quality of education, Emphasis on training of labour force including women as part of Workers readiness index.	Yes. Promote enabling environment for ICT. Improving ICT in government and infrastructure. Develop national ICT strategy.	Yes. Doubling of growth in five-year period. Sectoral growth rates are identified.	Yes. Investment in infrastructure. In addition to encouraging sophisticated production processes away from labour-intensive and oil technology.	No direct role for government expenditures in growth promotion. However, plans to encourage exports. In addition, the encouragement of new sectors can have demand spillovers.

## Oman

The Omani fifth national development plan 2021-2025 forms the first executive plan for Oman Vision 2040<sup>118</sup>. The plan aims at economic diversification in the manufacturing areas of high technological content, agriculture and fisheries, food production industry and transport. The plan also aims at an increase in the share of the private sector in the various economic sectors, at incentivizing enterprises in innovation and applications of the fourth industrial revolution, and at provision of decent jobs for Omani youth. In the area of economic diversification, the plan uses a set of criteria for choosing the leading sectors based on their comparative advantage, potential for employment of national labour force, growth sustainability, exportability, inter-sectoral spill-over effects and contribution to fiscal sustainability. For each sector chosen, the plan envisages a growth rate with a share of GDP target by the end of the planning period. In addition, there are targets for GDP growth, GDP per capita, investment to GDP, FDI targets, private sector investment share, and growth of non-oil sectors. The plan includes strategic programmes that align with the objectives of Oman 2040 vision. The plan contains four main pillars, fourteen national priorities, 82 strategic objective and 366 programs.

► **Table 4. Indicators and drivers of productivity in Oman's national development plan**

Productivity as Explicit Target	Quantitative targets for productivity growth	Sectoral Productivity Targets	Competition	R&D	Human Capital	ICT investment	Economic Growth Target	Capital Deepening	Aggregate Demand
Strong. Productivity is mentioned as determinant of long-term growth. Increase of productivity is mentioned extensively in the Plan.	GDP per capita as a proxy.	Sectoral output targets.	No.	Strong. Part of national priorities. As part of education strategy. Forty programs for increase research and innovation system.	Yes. Education, as a national priority and development of human capital. Emphasis on youth participation in high productivity sectors.	Yes. Part of national priorities and as enhancer of productivity and competitiveness.	Yes.	Yes. Economic diversification and investments in productive sectors.	Diversification would play a role in increasing AD. Emphasis on competitiveness of Omani economy and increase in exports.

In terms of productivity, Table 4 shows the various indicators and drivers of productivity in the Omani plan. In this respect, productivity is mentioned extensively in the plan. However, there are no specific targets for productivity growth at the national nor at the sectoral levels except for GDP per capita growth. The plan identifies output target growth rates for various sectors. In terms of supply-side drivers of productivity, there is no mention of enhancing competition. ICT development and the role of fourth industrial technologies is a national priority and is emphasized as a driver of productivity growth

<sup>118</sup> The Plan is in Arabic. It is available at <https://omanportal.gov.om/wps/wcm/connect/en/site/home/gov/gov1/gov5government-organizations/scp/scp>.

and competitiveness. In terms of R&D, the plan identifies forty programmes to enhance research. In terms of human capital, education and labour market training programs have extensive mention in the plan including the encouragement of youth to move to higher productivity sectors. In terms of capital deepening, there is no mention of it as an explicit target but the plan has a diversification strategy into productive sectors that can be seen as capital deepening in the non-oil sectors of the economy. As for the demand-side drivers of productivity growth, the target growth rates of output and sectoral output form a basis for demand-driven growth of productivity. In terms of aggregate demand, diversification and export promotion would play a significant role from the demand side of the economy.

## Iraq

The Iraqi national development plan (NDP) 2018-2022 presents a vision of “laying the foundations for developmental-focused, effective and socially responsible state.” Amongst the challenges that the NDP responds to are poor investment climate, disrupted production structure, limited role of the private sector and a large informal sector. The plan has eleven strategic goals amongst them increasing economic growth rates, increasing real per capita income, reducing unemployment rates and boosting sustainable human development indicators. The target growth rate for the period 2018-2022 was set at 7% (7.5% for the oil sector and 6.5% for non-oil activities). It also includes sectoral growth targets for various sectors including agriculture, manufacturing, mining and trade and services. However, the plan has very low targets for agriculture and manufacturing with a planned increase in share of GDP from 2.0 to 2.2% for agriculture and from 0.8 to 1.1% for manufacturing. In addition, the percentage of required investments are only 3.4% for agriculture and 2.2% for manufacturing. The plan also aims at increasing the contribution of the private sector to capital formation from 34.7% to 38.3% with the aim of diversifying the Iraqi economy. The plan also aims at improving the competitiveness of Iraqi products. In terms of private sector development, the plan aims at increasing the contribution of the private sector to 40% of the GDP and to create 50% of new jobs during the planning period leading to lowering of unemployment by 0.5% yearly. The plan has an objective of development of SMEs through various measures chiefly among them the development of science parks and investment in the existing industrial areas during the planning period. In addition, SME development by sector and subsector is envisaged. In the area of manufacturing, various projects are proposed for investment by the private sector totalling around \$ 1 billion. The plan also has extensive sectoral and spatial development programs.

In terms of productivity, Table 5 shows the various indicators and drivers of productivity in the Iraqi plan. In this respect, productivity is mentioned extensively in the plan. However, there are no specific targets for productivity growth at the national nor at the sectoral levels except for mention of increase in per capita income GDP. The plan identifies output target growth rates for various sectors. In terms of supply-side drivers of productivity, there is no mention of enhancing competition. ICT development and the role of fourth industrial technologies are scarcely mentioned and no programmes or initiatives are to be undertaken in this respect. In terms of human capital, education and labour market training programmes have extensive mention in the plan. In terms of capital deepening, there is no mention of it as an explicit target but the plan has a sectoral and spatial development component that can be seen as capital deepening in the non-oil sectors of the economy. As for the demand-side drivers of productivity growth, the target sectoral outputs form a basis for demand-driven growth of productivity.

In terms of aggregate demand, the sectoral and spatial development and post-conflict reconstruction form the demand-side of the economy.

► **Table 5. Indicators and drivers of productivity in Iraq's national development plan**

Productivity as Explicit Target	Quantitative targets for productivity growth	Sectoral Productivity Targets	Competition	R&D Expenditures	Human Capital	ICT investment	Economic Growth Target	Capital Deepening	Aggregate Demand
Strong. The aim to increase productivity is extensively mentioned especially with regard to agriculture, SMEs and public sector.	Mention of increase in per capita income.	Sectoral output targets.	No.	Moderate. Scattered mention of supporting research in universities, partnership with private sector and in agriculture.	Strong. Emphasis on educational objectives including tertiary education. Vocational and labour training is emphasized.	Weak. Mention of making Iraq an ICT regional hub and ICT literacy and safety.	Yes.	Yes. Development of various sectors and infrastructure.	Spatial and sectoral development and post-conflict reconstruction contribute to AD.

## ► 4.2 Economic Visions, Innovation Strategies and Productivity

### ► Qatar Vision 2030

The Qatar National Vision 2030 was published in 2008 by the General Secretariat for Development Planning. The vision aims at “transforming Qatar into an advanced country by 2030, capable of sustaining its own development and providing for a high standard of living for its entire people for generations to come.” The vision includes two stipulations that are very related to productivity targets: first, the rights of the future generations should be safeguarded through the “creation of new sources of renewable wealth” out of the depletion of non-renewable resources; second, Qatar must choose a development path that includes a target for “the size and quality” of the expatriate labour force. In this respect, it is worth mentioning that these two targets can be achieved by increases in productivity in the economy, which lead to higher standards of living for future generations and ensure that the economic growth is not wholly dependent on the growth of the labour force. The vision aims at diversifying the Qatari economy and includes four pillars: human development, social development, economic development and environmental development.

► Table 6. Indicators and drivers of productivity in Qatar Vision 2030

Competi- tion	R&D	Human Cap- ital	ICT in- vestment	Capital Deep- ening	Institutional and Gov- ernance Framework
No.	Moderate.	Strong. Hu- man Devel- opment is a main pillar in the vision. Making up for shortages in local talent with foreign talent.	Not men- tioned.	Yes. Economic diversification and investments in new sectors in addition to infrastructure.	Yes. In the pillar of Social Development. It aims at effective public institutions and active civil society organiza- tions.

In terms of productivity, Table 6 shows the supply drivers of productivity in the Qatar Vision 2030<sup>119</sup>. In terms of supply-side drivers of productivity, there is no mention of enhancing competition nor ICT development or the role of fourth industrial technologies. In terms of R&D, the vision mentions the development of an “effective system for funding scientific research shared by the public and private sectors” as part of the human development pillar. In terms of human capital, the vision emphasizes the development of excellent educational system and the development of training programmes for workers, entrepreneurs and citizens. In addition, the Vision stipulates the making up of shortages

<sup>119</sup> In assessing the importance of productivity in the visions, we retain the supply-side drivers of productivity from the previous analysis; Competition, R&D, Human Capital, ICT Investment and Capital Deepening as these relate more to the long term, which these economic visions target. Capital deepening can be also related to structural transformation of the economy. In addition, the institutional and governance frameworks of visions are taken into consideration.

in local talent with the attraction of foreign skilled labour. In terms of capital deepening, the vision's diversification strategy into "high-value industrial and services activities" and the emphasis of transforming the economy can be seen as leading to capital deepening in the renewable wealth sectors of the economy. In addition, the vision's plan transforming natural assets to "world-class infrastructure" enhances capital deepening in the economy. In terms of governance and institutional framework, the Vision aims in the pillar on social development to establish effective public institutions and civil society organizations that, amongst other goals, provide high quality services, establish secure and stable society and develop a spirit of tolerance and constructive dialogue.

## ■ UAE Innovation Strategy

The UAE Innovation Strategy (NIS) is of the more specific strategies related to productivity enhancement in the region. The UAE strategy was published in 2015 by the Prime Minister's office. The strategy aims "to sustain the UAE's leading position in the region and realise its ambition of becoming one of the most innovative nations in the world." The NIS is structured around three pillars: An innovation-enabling environment; innovative champions; and innovation priority sectors.

► **Table 7. Indicators and drivers of productivity in UAE Innovation Strategy**

Competition	R&D	Human Capital	ICT investment	Capital Deepening	Institutional and Governance Framework
No.	Strong with emphasis on building innovation and scientific research centres	Strong with focus on innovation as an outcome of the educational system and the development of the "innovative individual". Attraction of global talents.	Strong	Strong with emphasis on technology infrastructure and investment in various innovation priority sectors.	Yes. Aims at Innovation-Enabling Environment. In addition, innovative government as an innovative champion in the economy.

In terms of productivity, Table 7 shows the supply drivers of productivity in the NIS. In terms of supply-side drivers of productivity, there is no mention of enhancing competition in the new innovative sectors. ICT development and the role of fourth industrial technologies in the strategy are present. In terms of R&D, the NIS is very ambitious aiming at enhancing R&D in universities and the building of innovation and scientific research centres. In terms of human capital, the vision emphasizes the development of a first-class educational system and specifically the introduction of the concept of "innovative individuals" which would permeate the educational system through all its stages. In this respect, the NIS "focuses on developing individuals and entrepreneurs who exemplify a spirit of innovation. It aspires to empower the nation to drive local innovation by developing innovative national talents and capabilities in science, technology, engineering, mathematics and entrepreneurship while equipping individuals with the 21<sup>st</sup>-century skills." In addition, the NIS stipulates the attraction of global talents. In terms of capital deepening, the innovation strategy aims at building technology infrastructure and investing in various innovative priority sectors such as transportation, water and

space. This will enhance the accumulation of both tangible and intangible capital in the economy. In terms of governance and institutional framework, one of the NIS pillars is to construct an **innovation-enabling environment** that includes innovating regulatory framework, enabling services, technology infrastructure and investment and incentives. Moreover, an innovative government is considered an element in the Innovation Champions pillar.

## ► Vision 2030: Saudi Arabia

Vision 2030 of the Kingdom Saudi Arabia presents a comprehensive vision for the future of society, economy and nation. It is built around three themes: a vibrant society, a thriving economy and an ambitious nation. In each of these themes, the vision highlights a selection of commitments and goals.

► Table 8. Indicators and drivers of productivity in Saudi Vision 2030

Competition	R&D	Human Capital	ICT investment	Capital Deepening	Institutional and Governance Framework
Moderate. No mention of competition per se but enhancement of SMEs and retail industries contributes to competition. .	Moderate. As related to specific industries such as renewable energy and defence,	Strong. As manifested in education related to labour markets, attracting foreign skills, and emphasis on education of youth and women.	Strong. Building digital infrastructure.	Yes. Economic diversification, investment in infrastructure and sectors enhance capital deepening in the economy.	Yes. Effective Government with quantitative targets. In addition to an impactful non-profit sector.

In terms of productivity, Table 8 shows the supply drivers of productivity in Vision 2030. In terms of supply-side drivers of productivity, there is no mention of enhancing competition. However, the Vision by aiming at raising the contribution of SMEs in the economy from 20% to 35% and by modernizing the retail sector will enhance competition in the economy. In terms of ICT, the Vision aims at developing the digital infrastructure of the economy and channel and increasing investments in the sector. In terms of R&D, the Vision aims at enhancing research and development in specific sectors such as the renewable energy market, localized defence industries. In terms of human capital, the Vision emphasizes the development of an educational system that links education with the labour market in addition to developing early childhood education, refining the national curriculum and making “at least five Saudi universities among the top 200 universities”. In addition, there is an emphasis on lifelong learning, youth and women education. It is worth mentioning that for the latter, the Vision aims at increasing women’s labour market participation from 22% to 30%. Finally, in this respect, the Vision aims at attracting foreign talent and skills that contribute to economic development. In terms of capital deepening, the Vision’s aim at diversifying the economy and the build-up of infrastructure, including digital, and the investment in new sectors such as renewable energy and defence industries will lead



to capital deepening in the economy. In addition, the Vision has the goal of increasing the share of non-oil exports in non-oil GDP from 16% to 50%. In terms of governance and institutional framework, the Vision includes goals for effective governance, transparency and government restructuring with specific quantitative targets such as raising the Government Effectiveness Index ranks from 80 to 20 and raising the ranking of the E-Government Survey index from the current position of 36 to top five nations. Finally, the vision calls for an increased role for the non-profit sector raising its contribution to GDP from less than 1% to 5%.

## ► Oman Vision 2040

The Oman Vision 2040 was published in 2019. The Vision aims at Oman's joining the world's developed countries and building the foundations of a knowledge-based society. The Vision consists of national priorities, strategic directions and objectives, policies and five-year development plans. The Vision contains a set of local and international indicators to which progress is measured.

► Table 9. Indicators and drivers of productivity in Oman's Vision 2040

Competition	R&D	Human Capital	ICT investment	Capital Deepening	Institutional and Governance Framework
Yes with quantitative target for HH index.	Strong. The development of a R&D ecosystem.	Yes. Inclusive education and lifelong learning. In addition, the development of society of creative individuals. A labour market that attracts talents.	Yes. Implicitly as part of innovative knowledge-based economy.	Yes. Economic diversification and investments in productive sectors. A drastic reduction in oil to GDP share.	Yes. Economic leadership and management, legislative, judicial and oversight system and the establishment of flexible and innovative governance structures.

In terms of productivity, Table 9 shows the supply-side drivers of productivity in the Omani Vision. In terms of enhancing competition, the Vision has an ambitious quantitative target, the HH Market Concentration Index, for which it aims to have a value below 0.06 from the base value of 0.26. In terms of a world ranking, it aims at placing Oman in the top 20 countries from the current base ranking of 105. In terms of ICT, although it does not receive an explicit mention, however, implicitly by emphasizing new technologies and that "the new economy will capture global trends in technology, innovation and industrial revolutions to keep up with and incorporate such trends in the national plans and programs in a safe knowledge and technology-based environment that ensures transformation to technology, knowledge and innovation-based economy"<sup>120</sup>. In terms of R&D, the Vision has the objective of developing a research and development ecosystem spanning the various sectors and institutions. In terms of human capital, inclusive education and lifelong learning are emphasized in addition to the creation of a society of creative individuals. The targets in education are to be measured by advances

<sup>120</sup> In the Omani national development plan 2021-2025, the development and the role of fourth industrial technologies as a na.

in Education for All Development Index, Skills, Global Competitiveness Index and the Global Talent Competitiveness Index. In addition, the Vision aims at having four Omani universities to be in the top 500 worldwide up from the current one. Finally, the Vision aims at attracting talents and skills to the labour market and raising the skilled labour ratio in the private sector from 57.9% to 83%. The Vision has also quantitative targets for well-being and social protection. It aims at rescuing the Gini coefficient from 0.31 to 0.28 and moving to the top 20 countries in the Social Progress Index. In terms of capital deepening, the Vision has a diversification strategy into productive sectors – mainly capital deepening in the non-oil sectors of the economy. The target is to reduce the share of oil in GDP from the current 39% to 8.4% and increase the Economic Complexity Index from the current -0.004 to above 1.577 or in the top ten countries. In terms of governance and institutional framework, the Vision has multifaceted priorities and strategic directions that include economic leadership and management, legislative, judicial and oversight systems and the establishment of flexible and innovative governance structures.

## ► 4.3 Towards better policy coherence for enhanced productivity: development of alternative policy frameworks for the Arab States to build back better

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### ► 4.3.1 Correspondence between visions, plans and the ILO Productivity Ecosystem

In the previous section, the various individual plans were studied concerning productivity as a target and the potential drivers of productivity from both the demand and supply sides. It was found that the plans with various degrees have programmes and initiatives embedded that would affect productivity in the respective economies. However, the plans, by and large, lack a coherent policy framework that aims at increasing productivity as a way for the achievement of higher standards of living. The ILO, in this respect, has published a policy paper on the importance of productivity for economic growth, employment and decent work. It specifically, introduces a productivity ecosystem that includes macro, meso and micro levels that delineate policies at these various levels that would contribute to productivity growth<sup>121</sup>. The ILO productivity ecosystem includes the following empirical facts, policies and drivers of productivity. The ecosystem is segmented into empirical observations (E), Competition (C), Public Policies (P), Skills and Education (SE), Social and Labour Institutions (SL), Public-Private Interactions (PP), Informational and Communication Technologies (ICT), Economic Structure (E) and Climate Change/Depletion of Natural Resources (CG).

121 ILO (2021). Decent work and productivity. Governing Body paper GB.341/POL/2, February 2021. Available at: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_769282.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_769282.pdf).

## Empirical Observations (E)

There is a lead-lag structure in productivity growth where developing countries lag behind developed countries and microenterprises lag behind small and medium enterprises (SMEs) which in turn lag behind large enterprises. In addition, informal enterprises lag behind formal ones. In terms of public investments, a decline in public investments has jeopardized growth in productivity due to reduced spending on infrastructure, new technologies and innovation, research and development and physical and digital connectivity. Finally, in many countries in the past twenty years, wage growth has lagged behind productivity growth leading to a reduction in median wage, increasing inequalities and declining labour share.

## Competition and Market Structure (C)

Competition gauges the extent to which market structure enables or hinders competition and innovation. In this respect, competitive product and labour markets encourage the entrepreneurial process of “creative destruction”. Competition policy can promote the linkage between productivity and wages by reducing rents in product markets.

## Public Policies (P)

There is a need for an evidence-based integrated strategy with a long-term approach as a joint public-private effort to put productivity growth at the front of societal and economic goals. There is also a need for industrial policies that would improve working conditions (for instance, education and skills development) fostering business linkages and support upstream technologies in various sectors. Moreover, public policy measures in different areas are required. First, various measures in finance (e.g. national development banking, government loans), development of owners and workers skills and other institutional measures accelerate the transition from the informal to the formal economy. Second, national development plans need to support a structural transformation that leads to higher productivity and at the same time create decent work. Third, policies induce employers to undertake productive investments. Fourth, fair business regulations, financial sector development and infrastructure increase productivity. Fifth, policies regulate to engender gender equality.

## Skills and Education (SE)

Public policies that address skills development and lifelong learning can ensure that gains from technological progress are shared with workers. In addition, skills development is essential to harness the full potential of technological innovation and to enable the reallocation of workers from low- to high-productivity economic activities for a process of diversification and structural change.

## Social and Labour Institutions (SL)

Social and labour institutions play a role in the productivity ecosystem in generating virtuous cycles of productivity and distributional gains. First, social dialogue is important in harnessing the potential of technological progress and productivity growth to achieve decent work, sustainable development and a just sharing of benefits for all. Second, social protection for workers has a positive impact on labour productivity. Third, effective workers representation and other work-related conditions increase productivity. Fourth, well-functioning labour institutions and social protection systems

such as minimum wage and collective bargaining can contribute more to equitable distribution of productivity gains while enabling workers to raise their productivity.

### Public-Private Interactions (PP)

It is essential to support enterprises in identifying internal (conducting business environment, the structure of industry) and external factors (foreign markets that may affect input process) that hinder productivity growth. Moreover, PP refers to close collaboration between the government and private sector for policy coordination.

### Information and Communication Technologies (ICT)

Information technology increases productivity when combined with improvement in businesses practices and human capital and access to it is necessary to be part of the digital economy.

### Economic Structure (E)

The economic structure plays also an important role in productivity growth or retardation. First, the private sector and sustainable enterprises are generators of employment, innovation and economic growth. Second, bridging the “global productivity divide” in parts of the economy where informality, small-scale low-productivity enterprises or agriculture prevail is essential for growth and decent and productive employment. Third, labour market polarization has been linked to a decline in manufacturing and the rise of services in many economies. Fourth, free trade and export growth has not led to the reallocation of resources to larger and more efficient enterprises. In this respect, informality persisted alongside a few large formal enterprises. Fifth, productivity growth has not happened in many countries where structural transformation did not guarantee a fast enough rate of industrialization absorb workers from the rural sector which ended in informal labour structures with low productivity. Finally, the participation of SMEs in value chains may also boost productivity.

### Environment and Climate Change (CG)

Climate change, environmental and depletion of natural resources are important dimensions of the productivity ecosystem. In this respect, negative externalities such as climate change or depletion of natural resources must be considered when measuring productivity. The latter can make countries that over-utilize their natural resources being more productive than countries that are more knowledgeable of their use. Moreover, climate change can be a driver of productivity growth through the adoption of new technologies. The policy area refers to the transition to a low-carbon economy, green policy, including enterprise policies to enable business adaptation to climate change without jeopardizing enterprises’ economic viability and competitiveness. This is necessary to prevent or minimize labour market disruptions and massive layoffs. In this respect, there is a need of fostering sustainable social protection systems to support workers during such a transition<sup>122</sup>.

Table 10 presents a correspondence between the different subcomponents of the ILO productivity ecosystem and the plans/visions presented in sections 4.1 and 4.2.

<sup>122</sup> See ILO (2015) Guidelines for a just transition towards environmentally sustainable economies and societies for all. Available at [https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/--emp\\_ent/documents/publication/wcms\\_432859.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/--emp_ent/documents/publication/wcms_432859.pdf).

► **Table 10. Correspondence between selected national development plans/visions and the ILO productivity ecosystem**

Area	Degree of Inclusion in Plans/Visions
<b>Empirical Observations (E)</b>	
Lags between enterprises according to size. Informal enterprises lag behind formal ones.	n/a
A decline in public investments has jeopardized growth in productivity	n/a
Wage growth has lagged behind productivity growth	n/a
<b>Competition (C)</b>	
Promote the linkage between productivity and wages	n/a
Encourage the entrepreneurial process through competition	*
<b>Public Policies (P)</b>	
Evidence-based strategy as a joint public-private effort to put productivity growth at the front of societal and economic goals	*
Industrial Policies	*
Various measures to accelerate the transition from the informal to the formal economy.	*
National development plans/Economic Visions need to support structural transformation that leads to higher productivity and at the same time create decent work	**
Policies that induce employers to undertake productive investments	*
Fair business regulations, financial sector development and infrastructure increase productivity	**
Policies to engender gender equality.	*
<b>Skills and Education (SE)</b>	
Skills development and lifelong learning can ensure that gains from technological progress are shared with workers.	**
<b>Social and Labour Institutions (SL)</b>	
Social dialogue in harnessing the potential of technological progress and productivity growth to achieve decent work, sustainable development and a just sharing of benefits for all.	*
Social protection for workers has positive impact on labor productivity.	*

Effective workers representation and other work related conditions increase productivity.	n/a
Minimum wage and collective bargaining can contribute more to equitable distribution of productivity gains while enabling workers to raise their productivity.	n/a
Management practices are key determinants of productivity growth.	n/a
<b>Public-Private Interactions (PP)</b>	
Support enterprises in identifying internal and external factors that hinder productivity growth.	*
<b>Information and Communication Technologies (ICT)</b>	
Information technology increases productivity only when combined with improvement in businesses practices and human capital	**
<b>Economic Structure (E)</b>	
The importance of the private sector and sustainable enterprises as generators of employment, innovation and economic growth.	**
The importance of bridging the "global productivity divide" in parts of the economy where informality, small-scale enterprises or agriculture prevail is essential for growth and decent and productive employment.	*
Labor market polarization has been linked to decline in manufacturing and rise of services in many economies.	*
Free trade and export growth has not led to the reallocation of resources to larger and more efficient enterprises. Informality persisted alongside few large formal enterprises.	n/a
Productivity growth has not happened in many countries where structural transformation did not guarantee a fast enough rate of industrialization absorb workers from the rural sector which ended in informal labour structures with low productivity.	*
<b>Climate Change/Depletion of Natural Resources (CG)</b>	
The importance of capturing negative externalities such as climate change or depletion of natural resources in measuring productivity.	**
Climate change can be a driver of productivity growth through adoption of new technologies.	**

Source: Own compilation from selected plans. n/a=not mentioned, \*=weak, \*\*=Good, \*\*\*=strong.

### 4.3.2. The Macro level: Structural transformation for the Arab States

In addition to the policies and structures that are included in the ILO productivity ecosystem, the economic structure of the Arab region plays a role in engendering or retarding productivity growth. In this section, elements of structural transformation in the Arab region are delineated<sup>123</sup>. It will specifically discuss macro drivers of productivity that are of relevance to the Arab region such as structural transformation, which entails a transformation of the economy including towards a knowledge-based economy and innovation, diversification, importance of manufacturing, threats from premature industrialization, resource effects, and exchange rates.

#### Structural Transformation in the Arab region

According to Von Arnim et al (2011) structural transformation happens when “development takes place in the form of capital accumulation in the high-productivity sector supported by the migration of labour from the low-productivity sector”. In this respect, only one Arab country, Oman, pass the criteria for classical structural transformation in terms of trends in shares of agriculture, services, industry and manufacturing in the period 1979-2009. Compared with other regions of the world, the Arab region is a laggard in structural transformation and the least industrialized among developing regions including sub-Saharan Africa. One feature of Arab economic development is the role of oil revenues in engendering a service sector economy and producing an economic structure that is less diversified and where manufacturing is marginal. In this respect, diversification and the transfer of resources from low-productivity sectors to higher-productivity economic activities will increase aggregate productivity in the economy.

#### Diversification

The aim of diversifying the economies of the Arab region has been discussed widely (e.g. Sarangi et al., 2019)<sup>124</sup>. In the national development plans and economic visions surveyed in this chapter, diversification as an aim is present especially in the oil-dependent economies of Saudi Arabia, Qatar, UAE, Iraq, Kuwait and Oman<sup>125</sup>. Moreover, fiscal policy can play a role in promoting diversification and enhancing productivity in the Arab region. According to ESCWA (2018) “this depends on increased public investment in strategic sectors that are labour intensive and high in value-added, infrastructure, research and innovation, and education and health”<sup>126</sup>. In this respect, reallocation of resources through the fiscal system may play a major role in promoting diversification. Another key factor that can promote or hinder the process of diversification and structural change is workforce quality and the extent to which workers’ skills are adequate for high value-added economic activities. In the case of the GCC countries, the question of striking the right balance between national workers versus foreign workers and the need to develop national talent according to market needs and national

123 von Arnim, Rudiger, Codrina Rada, Ali Abdel Gadir Ali and Khalid Abu-Ismael (2011) The ADCR 2011: Structural Retardation of Arab Economies: Symptoms and Sources. Arab Development Challenges Background Paper 2011/03. UNDP.

124 Niranjana Sarangi, Alaaldin Mohammed Alameri, Mathilde Lesueur, Rayan Akill (2019) Macro-Fiscal Policy toward Economic Diversification and Employment Generation in Iraq. ESCWA Publications.

125 It is important to distinguish between the upper-middle-income Arab States, fragile states, and GCC. Each group faces different realities and challenges, and each group could develop national development plans and visions to promote productivity, diversification and structural change following different but at the same time complementary development projects.

126 ESCWA (2018) Rethinking Fiscal Policy for the Arab Region. UN-ESCWA Publications.

development plans are crucial, all of which has an impact on productivity growth. In this respect, for example, the economic visions and national innovation strategy surveyed in this chapter stipulate the attraction of foreign talent.

### The Importance of Manufacturing

In discussing productivity growth, Albrizio and Nicoletti (2016) argue that the shift in economic activity from agriculture to manufacturing is a major source of productivity increase in developing countries. Moreover, the shift to services will “put a halt on productivity growth” as services are less capital intensive and less open to international competition due to the non-tradable character of the sector. This relationship between manufacturing and productivity growth is in line with the general argument in new development literature on the importance of manufacturing for economic development that goes beyond the past thirty-year shift in development priorities from production towards poverty reduction and satisfaction of basic needs (Chang, 2011)<sup>127</sup>.

### Premature Deindustrialization

According to Von Arnim et al. (2011), the Arab economies have experienced deindustrialization and the dominance of the service sector engendered by the presence of oil revenues. This “structural retardation” is synonymous with the theory of premature deindustrialization to developing countries advanced by Rodrik (2016). According to Rodrik (2016), “developing countries are turning into service economies without having gone through a proper experience of industrialization. I call this “premature deindustrialization” (p. 2). This trend is detrimental in economic growth and productivity growth and leads to increases in informality<sup>128</sup>. Moreover, with relevance to the Arab region, resource booms magnify the deindustrialization process leading to both manufacturing output and employment contraction.

### Investment and natural capital depletion

One of the issues facing GCC countries and oil-rich countries such as Iraq is the depletion of natural capital. The MENA region, which includes GCC and Iraq, has relatively high rates of investments. However, when accounting for natural resource depletion, genuine investments after subtracting natural capital depletion were negative (-7.09%) in the period 1976-2001 (Arrow et al. 2004)<sup>129</sup>. To secure sustained investment, growth and productivity in the long run with increased investment rates are needed to account for resource depletion and ensure an adequate physical capital stock in the future. This policy is of utmost importance today. According to a recent IMF report, global oil demand will peak in 2041, which will put pressure on the financial wealth of GCC countries estimated at 2 trillion dollars, as it will be depleted by 2034 under current fiscal conditions (high expenditures, low taxes)<sup>130</sup>. The challenge now is to transform this financial wealth into real wealth and new technologies.

127 Chang, Ha-Joon (2011). *23 Things They Don't Tell You About Capitalism*. London: Penguin Books.

128 Rodrik, D. (2016) “Premature deindustrialization,” *Journal of Economic Growth* 21:1–33.

129 Arrow, Kenneth, and others (2004). *Are We Consuming Too Much?* *Journal of Economic Perspectives*, vol.18, no.3, pp.147-172.

130 <https://www.bloomberg.com/news/articles/2020-02-06/middle-east-s-2-trillion-wealth-could-be-gone-by-2034-imf-says>.



## Exchange rates

In countries of the Arab region that are heavily dependent on oil, exchange rate regimes follow a fixed exchange rate system. The fact that there is no vibrant export sector in traded goods shunts the political economy of these countries from developing group interests that would push for a more flexible exchange rate regime (Dibeh, 2014)<sup>131</sup>. In this respect, in respective national development plans, the issue of the exchange rate regime is absent. Hence, it is important to include policies for the exchange rate as an ingredient of any plan for the diversification of the economy.

## 4.3.3. The MESO Level: Reforms for an enabling business environment

In this section, meso level policies that enhance productivity are delineated. They include insights from the ILO productivity ecosystem in addition to policies that boost productivity as presented in the literature on the entrepreneurial state and mission economy<sup>132</sup>. The ILO productivity ecosystem includes the issues of social dialogue, R&D, end markets, skills, and gender equality. In this respect, Arab development plans must include policies that enhance the meso level of the productivity ecosystem. Amongst them are tax policies for R&D, support for innovation, the linking of wage growth to productivity growth, productive development policies, competition policies, and gender equality.

### Tax Policies for R&D

The issue of R&D is analysed in the many plans discussed in this chapter. However, specific policies to increase the ratio of R&D to GDP are not delineated. In this respect, the adoption of tax policies that encourage enterprises to spend on R&D rather than on output is needed. According to Abramovsky et al. (2005), action items for R&D include tax policy for small enterprises such as R&D tax credit and “various enhanced capital allowances for small and medium-sized enterprises (SMEs)” (p. 10). Abramovsky et al. (2005) considered that the R&D tax credits to be “the single largest new policy aimed at increasing private sector innovative activity”<sup>133</sup>.

Examples of such tax policies are capital allowances for SMEs such as offsetting 40% of the cost of new capital investment against taxable profits in the first year of the project and 100% for investments in ICT. These types of measures are needed in the Arab region to raise the R&D expenditures that are central to the process of innovation.

### Productive Development Policies

In fostering innovation and productivity in the economy, it is becoming increasingly clear that a pure market approach will not generate the necessary level of investments in technologies and innovative

131 Dibeh, G., (2014) The Political Economy of Monetary Policy in Resource-Rich Arab Economies. ERF Working Paper Series No. 896.

132 Dosi, D., Lamperti, F., Mazzucato, M., Napoletano, M. and Roventini, A. (2021) Mission-oriented policies and the “Entrepreneurial State” at work: An agent-based exploration. UCL Institute for Innovation and Public Purpose, Working Paper Series (IIPP WP 2021/10). Available at <https://www.ucl.ac.uk/bartlett/public-purpose/wp2021-10>.

133 Laura Abramovsky, Steve Bond, Rupert Harrison and Helen Simpson (2005) Productivity Policy. 2005 Election Briefing Note No. 6.

activities. Productive development policies are necessary to achieve inclusive growth, productivity increases and structural transformation. In this respect, there is a need for the “new visible hand” that according to José M. Salazar-Xirinachs “is now conceived as a collective learning process that builds on public-private cooperation that is the result of broad social or multi-stakeholder dialogue”<sup>134</sup>. The importance of the state in generating an innovative and productive economy is also becoming increasingly popular<sup>135</sup>. The task is for the state to engage in the financing of research and development, investment in high-risk areas, and determine the direction and pace of technological change, in effect launching a “technological” big push<sup>136</sup>. Dosi et al. (2021) argue that direct innovation policies that create institutions, industries and new markets nurture innovation across the economy. Examples of such direct innovation policies are “the creation of a public research-oriented capital-good enterprise and the institution of a national research laboratory, which tries to discover radical innovations that enlarge the set of technological opportunities available in the economy”. The role of the state can be part of a larger industrial policy that guides economic plans in the Arab region. In the same vein, the adoption of productive development policies. In this respect, the literature on new industrial policies that lead to the development of new modern economic activities and promote competitiveness and innovation is of importance for plan construction (Aiginger and Rodrik, 2020; Chang and Andreoni, 2020)<sup>137</sup>. Industrial policies would be also pivotal in the Arab region joining of the fourth industrial revolution.

### The Importance of Formality

There is mounting evidence that informality is negatively linked to productivity growth. Albrizio and Nicoletti (2016) argue that informality plays an important role in arresting productivity growth in developing economies<sup>138</sup>. It plays a role at the macro level in terms of affecting negatively fiscal sustainability and the ability of governments to use fiscal space to invest in infrastructure that is crucial for productivity growth. In addition, informal firms have suboptimal size, misallocate resources, give rise to unfair competition, use backward technologies and have inward orientation. In this respect, Arab economic plans must consider the need to reduce the size of the informal sector of the economy. They must “bridge the global productivity divide”, particularly in parts of the economy where the majority of people work (such as agriculture, small-scale enterprises or the urban informal economy) (ILO, 2020, p. 8).

### Gender Equality and female labour market participation

Despite the achieved progress, gaps still exist between males and females in the Arab region in terms of access to social and economic opportunities. Interactions between economic, socio-economic and other cultural/traditional factors contribute to exacerbating gender inequalities in the region. Gender

134 José M. Salazar-Xirinachs (2015) “Productive Development Policies (PDPs) for Inclusive Growth and More and Better Jobs,” 21<sup>st</sup> Bradford Development Lecture. Available at [https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/documents/state-ment/wcms\\_401186.pdf](https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/documents/state-ment/wcms_401186.pdf).

135 Mariana Mazzucato (2018) *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. Penguin.

136 Murphy, Kevin M, Andrei Shleifer, and Robert W Vishny. 1989. “Industrialization and the Big Push.” *Journal of Political Economy* 97 (5): 1003-1026.

137 Chang, Ha-Joon and A. Andreoni (2020) “Industrial Policy in the 21st Century,” *Development and Change* 51(2): 324–351. Aiginger, and D. Rodrik (2020) “Rebirth of Industrial Policy and an Agenda for the Twenty-First Century,” *Journal of Industry, Competition and Trade* (2020) 20:189–207.

138 Silvia Albrizio and Giuseppe Nicoletti (2016) *Boosting Productivity: A Framework for Analysis and a Checklist for Policy*. Background Paper. Global Forum on Productivity, OECD.

gaps in labour participation rates affect female income, wealth, and retirement welfare. Female labour participation rates in Arab countries vary between 6% (Yemen) to 57% (Qatar), according to World Bank (2018)<sup>139</sup>.

There is no consensus on the reasons for low female labour participation rates in the Arab region. According to Ross (2008), the presence of oil and the structure of Arab countries' economies explain this phenomenon<sup>140</sup>. In addition, the common view that religion plays a role in the low participation of women in the region is also controversial. Hayo and Caris (2013) show that it is tradition, rather than religion, that lowers female labour participation rates in the MENA region, which includes states in the Arab region. Their empirical study finds significant evidence that "those with strong traditional identities have a 5 percentage point lower probability of entering the labour market"<sup>141</sup>. Such results lend support to calls for the enactment of state policies to counter such traditional barriers to the labour market, which create and exacerbate inequality. Notwithstanding the reasons for such low levels of female participation rates in labour markets, such a phenomenon has a negative economic outcome. According to Witte, "a 1 per cent increase in the female percentage of total labour creates in the GCC countries GDP growth equivalent to a 2 per cent increase in the international price of oil"<sup>142</sup>.

## Competition in Product and labour markets

In the Arab development plans surveyed in this chapter, no policies that induce competition in product markets nor the problem of monopolies is discussed. Given the importance of competition as a supply-side driver of productivity (Antenucci et al., 2019), the question of competition must be addressed in future development plans. In the same vein, there is also no mention of labour market structures and the need for competition in labour markets<sup>143</sup>. Given the negative relationship between monopsony and productivity, it is important to enact measures that dismantle monopsonies that exist in the Arab region<sup>144</sup>.

## Wages, Productivity, and minimum wages

According to ILO (2021), the relationship between productivity and wage growth has weakened. Historically, the wage-productivity deals were instrumental in the creation of prosperity and of the mass consumption society in the post-WWII period in advanced capitalist economies. Consequently, for

139 World Bank (2018). World Development Indicators. Available from <https://data.worldbank.org/products/wdi>. Gender inequality in the Arab region has also been measured with the Gender Inequality Index, a composite measure reflecting inequality between women and men in three human development dimensions: reproductive health, empowerment and the labour market. It ranges between 0, where women and men fare equally, and 1, where one gender fares as poorly as possible in all measured dimensions. The Gender Inequality index varies between 0.17 (rank 38) for Libya to 0.77 (rank 159) for Yemen (UNDP, 2016).

140 Ross, M. (2008). Oil, Islam, and Women. *American Political Science Review*, vol.102, no.1, pp.107-123. Available from <https://www.sscnet.ucla.edu/polisci/faculty/ross/papers/articles/Oil%20Islam%20and%20Women%20-%20apsr%20final.pdf>.

141 Hayo, Bernd, and Tobias Caris (2013). Female Labour Force Participation in the MENA Region: The Role of Identity. *Review of Middle East Economics and Finance*, vol.9, no.3, pp.271-292.

142 Witte, Mark David (2011). Female Labor, Western Culture and Growth in the Gulf Cooperation Council Countries. *Review of Middle East Economics and Finance*, vol.7, no.1, pp.20-31.

143 There is increasing evidence of the negative relationship between monopsony and productivity. See Rudiger Bachmann, Christian Bayer, Heiko Stuber, and Felix Welschmied (2021) "Monopsony Makes Firms not only Small but also Unproductive: Why East Germany has not Converged," manuscript. In addition, monopsonies lead to a loss in labour share. See Wyatt J. Brooks, Joseph P. Kaboski, Yao Amber Li & Wei Qian (2019) "Exploitation of Labour? Classical Monopsony Power and Labour's Share," NBER Working Paper No. 25660.

144 Suresh Naidu, Yaw Nyarko, and Shing-Yi Wang (2016) "Monopsony Power in Migrant Labour Markets: Evidence from the United Arab Emirates," *JPE Volume 124, Number 6*. <https://doi.org/10.1086/688877>.

the benefits of productivity growth to be shared fairly, this link between inclusive productivity growth and wage growth must be made an integral part of social dialogue in the Arab region.<sup>145</sup> National development plans, which are currently silent on this matter, must consider these crucial aspects of wage and decent work agenda. Moreover, there is increased evidence on the relationship between minimum wages and productivity. Hence, the issue of minimum wages is also an important aspect of translating productivity growth into wage growth and decent work conditions in the Arab region<sup>146</sup>.

### ► 4.3.4. Towards a new policy framework

The above elements of structural transformation in the Arab region, drivers of productivity and the ILO Productivity Ecosystem lay the foundation for a new productivity-enhancing policy framework for the Arab region. These areas and policies needed to be included in future national economic plans and economic visions so that these plans lead to higher productivity in the region in addition to the fair distribution of the benefits of productivity growth.

## ► 4.4 The Micro level. The role of EBMOs in the process of fostering and embracing productivity growth as a priority for development

According to Albrizio and Nicoletti (2016), productivity research has shown that productivity enhancement is related to structural factors at the industry or firm level. In this respect, enterprises in the Arab region, in order to play a larger role in enhancing productivity, should implement changes in three areas: prioritize innovation, upgrade human resource and management practices, and create institutions that enhance productive entrepreneurship.

### Human resource, management and ownership practices

Most Arab enterprises follow standard or traditional employer-employee relationships, have traditional human resource practices and hierarchical systems. The opening up of Arab enterprises to the possibility of different ownership structures and nonstandard human resource practices would contribute to developing sustainable enterprises in the Region. In this respect, research has shown that such nonstandard ways to approach ownership and management practices have a positive impact on productivity growth. According to Abramovsky et al. (2005), employee share ownership by

<sup>145</sup> According to ILO (2021) "The productivity ecosystem responds to the realities of the twenty-first century by giving everyone a stake in increasing productivity, employability, sustainable growth and more equitable distribution of gains. These are the essence of a social contract fit for purpose to meet the economic, social and environmental challenges of the future of work. Lifting productivity is a win-win situation: it creates greater profits for shareholders, better working conditions for workers, and lower prices for consumers." (p. 16).

<sup>146</sup> The introduction of minimum wages in Germany were associated with "the reallocation of low-wage workers from smaller to larger, from lower- to higher-paying, and from less- to more-productive establishments," according to Christian Dustmann, Attila Lindner, Uta Schönberg, Matthias Umkehrer, Philipp vom Berge (2021) "Reallocation Effects of the Minimum Wage", Quarterly Journal of Economics, <https://doi.org/10.1093/qje/qjab028>.

linking workers' incomes to labour productivity and the performance of enterprises can lead to higher productivity.

In the same vein, according to Albrizio and Nicoletti (2016), nonstandard human resource practices such as incentive mechanisms and high-performance work practices are linked to innovation and increased productivity.

### Collective and productive entrepreneurship

According to the ILO (2021), "This is also the time for collective and coordinated action among enterprises. They can act together in enhancing competition, training more workers, spreading productivity gains broadly and creating strong partnerships with workers and governments.". In this respect, this need for collective action on the part of firms is in agreement with the literature that states that collective entrepreneurship plays an important role in capitalism in fostering cooperation among firms that enhance innovation utilizing combined contributions of scientific infrastructure and networks<sup>147</sup>. Moreover, policies to promote productive entrepreneurship, that is, business ventures that may contribute to generating value added, improved products and services, innovation, and productive employment, are of the utmost importance and should be prioritised.

### Technological innovation in enterprises

According to ILO (2021) "investments in ICT and innovation – whether or not they are based on research and development – are also major drivers of productivity growth by fostering technical progress and efficiency changes". In this respect, the contribution of enterprises at micro level to innovation and the digitization of the economy in the midst of the fourth industrial revolution is crucial<sup>148</sup>. In addition to the role played by the state at the macro and meso levels in terms of industrial policies, R&D investment and tax policies, enterprises in the Arab region should put innovation as a core aspect of business practices. This takes special importance as the products of the fourth industrial revolution are being transferred from consumption to production according to Morgan Stanley (2019). Moreover, innovation is the way by which firms can compete globally as the old developmental model or the "flying geese" approach is not available anymore for developing countries and there is a need for a new development strategy based on productivity growth and new technologies (Sachs, 2019). This entails that enterprises in the Arab region allocate more investment into new technologies such as ICT and digital technologies (e.g. robots, AI systems, and big data)<sup>149</sup>.

147 The importance of collective rather than the traditional view of individual entrepreneurship in capitalism is expounded in Chang, Ha-Joon (2011). *23 Things They Don't Tell You About Capitalism*. London: Penguin Books. . In this process, economies of scope can replace economies of scale as the mode of industrial organization (Scott, 1988). Products became produced by batches of firms interconnected by informational systems, sub contracting, agglomeration economies and sometimes integration of independent producers by a core-brain such as Benetton (Harvey, 1989). Harvey, David (1989) *The Condition of Postmodernity*, Massachusetts: Basil Blackwell. Scott, A. J. (1988) *New Industrial Spaces: Flexible Production Organization and Regional Development in North America and Western Europe*, London: Pion.

148 According to Brynjolfsson and McAfee (2014), digital technologies are exponential general purpose technologies that would produce significant productivity increases, as they spread throughout the economy. Erik Brynjolfsson and Andrew McAfee *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company, 2014.

149 Morgan Stanley (2019) "The Second Machine Age Hits the Tipping Point," Available at <https://www.morganstanley.com/ideas/fourth-industrial-revolution>. Sachs, J. D. (2019) Some Brief Reflections on Digital Technologies and Economic Development," *Ethics & International Affairs*, 33, (2019), pp. 159-167.

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## ► Conclusions

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This report aimed at understanding the contours of a business environment conducive to productivity growth and sustainable enterprise development for decent job creation in selected Arab states. First, it analysed productivity trends in the region during the 1950-2019 period. Second, it examined the role of management practices in business performance. Third it identified challenges and opportunities for diversification and structural change. And, finally, it assessed whether national development plans have addressed productivity growth as a fundamental means to foster economic development and raise living standards.

### ►► Labour Productivity in the Arab States

We found, on average, a **regional slowdown in labour productivity since the late 1970s**. When compared with other regions of the world, the Arab region is the worst performing in terms of productivity growth. This is the result of **poor overall efficiency to transform inputs into output, skills gaps and mismatches, and the region's inability to translate its capital investment into productivity gains**. Persistent challenges for private sector organisations to develop vibrant and competitive business models due to government interventions, and the **limited achievements of diversification policies aimed at fostering a productivity-driven structural change**, are other important contributing factors. This has led to a weakening in growth of per capita income relative to advanced economies, which is particularly worrying in relatively poor Arab economies.

### ►► The ILO Productivity Ecosystem: bottlenecks for productivity growth at the macro, meso and micro levels

With regard to the implementation of the **ILO Productivity Ecosystem**, it is worth highlighting **challenges to conduct empirical assessments at macro, meso, and micro levels, because of a deficiency of reliable and up-to-date sectoral and enterprise-level data across Arab countries**. Nonetheless, using secondary data from the World Bank Enterprise surveys of Iraq, Yemen, Lebanon, Jordan, and Occupied Palestinian Territory, we found a lack of conducive business environments because of persisting challenges to sustainable enterprise development in such countries, especially political instability, access to credit, access to electricity, and tax rates.

At sectoral (meso) level, our assessment found a large wage gap between large enterprises and SMEs rather than across sectors. Large enterprises tend to pay higher wages compared to SMEs, which can be attributed to productivity differentials. Furthermore, medium- and low-tech sectors have a considerable room for improvement toward the technological frontier, hence enabling technology diffusion and adoption is essential to raise productivity.

At enterprise (micro) level, we found that mature enterprises (over 5 years of operation) tend to be more productive than young businesses.

Concerning management practices, we found that enterprises that innovate and have good management practices can, for instance, better cope with political instability and have, on average, better business performance. Low-tech enterprises that introduce a new product and/or improve processes tend to have higher productivity as well. At the level of individual workers, our assessment suggests that years of experience matter in business performance.



## ► The impact of covid-19 pandemic on business

Using the enterprise surveys from the World Bank, the **study found that the COVID-19 pandemic has caused that some enterprises become smaller**. In Lebanon, which is going through a compounded crisis, around 30 percent of medium-sized enterprises became small, and a similar percentage of large enterprises became medium-sized by the end of 2020. In addition, enterprises have struggled to adopt remote work, adapt their operations to online services, and incorporate digital solutions to their processes.

To complement the analysis with primary data, an enterprise survey was also run in Jordan, Lebanon, Occupied Palestinian Territory, Oman, and Yemen. Results confirmed the negative impact of the COVID-19 pandemic on enterprises. Most surveyed enterprises reported decreases in revenue and employment. Across all surveyed countries, the main reported challenge that enterprises faced between August and November 2021 was inadequate cash flow to maintain business operations, followed by increases in input prices and a fall in demand due to order cancellations.

Moreover, we found that business operational challenges during COVID-19 varied by sector. Surveyed enterprises in retail trade were particularly affected by a lack of cash flow to operate. Enterprises in manufacturing reported being impacted by higher prices of intermediate goods while businesses in services were mainly affected by order cancellations associated with a fall in demand and changes in consumption patterns. Finally, enterprises in construction were found to struggle with workers' absenteeism, while companies in information and communication services reported data or IT challenges. These results also reveal the heterogeneity of enterprises, which may operate at different stages of the business development cycle, hence have different needs and face different challenges.

## ► Key issues in the business environment

Regarding the business environment, our survey results confirmed and were in line with our findings from the assessment we conducted using secondary data from the World Bank enterprise surveys. Surveyed enterprises reported that **limited access to finance, economic uncertainty, and political instability**, are key obstacles to operate. Limited access to finance was a relevant obstacle for microenterprises and SMEs, and for businesses in the service and construction sectors. We also found that over half of enterprises facing difficulties to access financing were more likely to finance operations with own resources. This appeared to be more prevalent for micro and small enterprises. Revealingly, most enterprises, across all surveyed countries, sizes, and sectors, did not think that governments had adequate policies to promote innovation and technology adoption.

Our survey also highlighted that most enterprises across all surveyed countries faced **challenges to find workers with the required skills**. Lack of an adequately trained workforce may hold back productivity and structural change, hinder wage growth, and have a negative impact on employment creation and economic growth. This finding suggests that skill development and investment in quality education to meet market needs are of the utmost importance and need to be considered as indispensable elements of a policy framework to foster productivity growth. In this regard, our survey suggests that skills in high demand include technical knowledge, teamwork and collaborative skills, organisation skills and attention to detail, communication and digital skills. This information may be relevant for enterprises, governments, and workers' and employers' organisations alike, to work together in the development of skills development programmes, accordingly.

Moreover, survey results showed that surveyed enterprises consider offering new products or services, ensuring business continuity, and investing in new technologies as key elements of business strategies to increase revenue in the aftermath of the COVID-19 pandemic. In fact, reported investment priorities for the next five years include the acquisition of new machinery and equipment.

Overall, these results suggest that **technology adoption by enterprises in the short to mid-term might strength business resilience, diversification, and productivity growth**. In this context, to harness the full potential of technological change, skills development would be essential to boost labour productivity and prevent technological unemployment. In addition, lowering fixed capital costs along with relevant government incentives would be key to upgrade technology and production processes, which would be particularly relevant for micro and small enterprises.

## Which policy framework to build forward better in the post-COVID-19 economic environment?

An in-depth analysis of national development plans was also conducted. In this respect, we found that such plans, in general, **lack a coherent policy framework to promote productivity growth as the strategic and sustainable means to raise standards of living**. When compared with other regions of the world, the Arab region is the worst performing in terms of productivity growth. Except for Oman in the 1979-2009 period, overall, the Region is lagging behind in structural change. It is the least industrialized among developing regions, including sub-Saharan Africa, and the economic structure is less diversified.

In this context, it is of the essence to **bring productivity growth, diversification, and structural change to the forefront of national development plans**, which need to be designed as coherent and comprehensive policy frameworks aimed at addressing persisting structural obstacles. The adoption of a long-term systemic approach to foster economy-wide productivity and sectoral productivity is a necessity to drive the process, which should be coupled with adequate productivity data collection and measurement capabilities at the national governmental level.

The report identifies a series of common priorities which should be part of such comprehensive policy frameworks. However, given the heterogeneity of countries and the fact that they are at different stages of the socio-economic development process, policies have to be designed according to national circumstances to enhance productivity growth, **diversification in oil-dependent countries**, and **industrialisation and broader structural change in terms of growing the share of high value-added economic activities in non-oil dependent countries**, on the basis that productivity growth is the result of a complex interaction of macro and micro factors.

Firstly, the region needs to continue its **diversification and privatization efforts**, through the design and implementation of **industrial and productive development policies**, to absorb new entrants to the labour market and create employment by **promoting reforms to improve the business environment aimed at reallocating resources to the most productive sectors**. For non-GCC economies, that have experienced premature deindustrialization and the consequent expansion of low productivity and largely informal services sector, the potential of manufacturing sector, which can absorb low-skilled workers, is large.

Exports in the region are estimated to be only a third of their potential. While the challenges are plenty, **attempts to integrate the region's economies by removing trade barriers and create areas where it can act as a single market might help productivity growth**. Regional integration would incentivize private sector enterprises to seize economies of scale and raise productivity. Specific measures supporting internationalization and growth of SMEs should be prioritized.

Overall, the region needs to **develop proactive and comprehensive national employment policies** making the labour market more efficient by creating decent work opportunities, taking into particular account the needs of the private sector. **Promotion of gender equality and female labour market participation and reduction of informality while encouraging the growth of the formal economy** are key and should be central axes of national employment policies.

**Investing in knowledge capital, skills development, and technologies** to improve the overall efficiency of input use is of the utmost importance to shift to a productivity-driven economic development paradigm. Increased engagement with policymakers, businesses, and educational institutions in stimulating **better-coordinated skills policies** is important for the private sector to develop productivity-oriented business strategies. Employers and business membership organizations (EBMOs) are also called to play a strategic role in identifying and anticipating existing or future skills needs by business operational area and in designing skills development and apprenticeship programmes, which are key to raise labour productivity and reduce unemployment.

At firm level, **upgrading management practices** is key to improve productive efficiency, business performance, and working conditions. As part of a policy framework, the provision of incentives to nudge and support enterprises is also recommended. In this regard, EBMOs can also play a strategic role in supporting their members by offering advisory services and developing training materials, hands-on courses, and practical tools to improve essential management practices, from how to design a professional business strategy to Lean, and the like, management methodologies for continuous improvement. SMEs, in particular, require support to improve accounting practices, customer acquisition and retention, implementation of new pricing models, and the development of performance-based incentives. Courses, trainings, and handbooks on how to reduce waste by identifying none-added-value activities, streamline processes, and eliminate poor working arrangements can be instrumental to enhance performance, productivity, innovation, and evolution.

Finally, fostering productivity growth, diversification, and structural change requires a coherent and comprehensive approach and a public-private concerted commitment. This report aims to contribute to this reflection, and we hope that ILO constituents can benefit from the information herein contained to devise pragmatic strategies, with a long-term vision, to **build forward better** in the post-COVID-19 economic environment and raise the standards of living in the Arab countries.



**International  
Labour  
Organization**

