International Labour Organization

Productivity growth, diversification, and structural change in the Arab States

Jordan Country Profile

1. Introduction

This country snapshot starts with a historical overview of Jordan's labour productivity trends compared with other non-GCC Arab economies and the global economy.[1] Subsequently, it provides an overview of the contemporary business environment and prospects in Jordan based on two recent enterprise surveys – the 2019 world Bank (WB) enterprise survey and the 2021 ILO survey on productivity growth, diversification, and structural change.

In addition to highlighting the position of Jordan relative to other Arab economies and global frontiers in terms of labour productivity, the first part (section 2) of this snapshot documents the trends in labour productivity and multifactor productivity growth and the relative contributions of labour productivity and employment growth to aggregate GDP growth. The structure of an economy is vital in in determining its productivity trends, both due to technological change and productivity growth within industries. Moreover, the potential for enhancing productivity by shifting resources to more productive uses is enormous in developing economies such as Jordan. Therefore, the section also examines the evolution of the structure of Jordan's economy, in terms of industry composition of employment and output compared to the non-GCC Arab economies' average.

In the second part (Section 3), the snapshot highlights the key findings of the WB and ILO enterprise surveys regarding barriers and challenges that business enterprises face in Jordan, particularly since the Covid pandemic, along with the business impressions regarding the future strategies for productivity improvement.

Finally, in section 4, a few recommendations for future productivity improvement in the country are derived after evaluating the long-term trends in productivity and using insights from the enterprise surveys

2. Historical overview of productivity growth, and structural change

2.1. Relative Labour Productivity levels

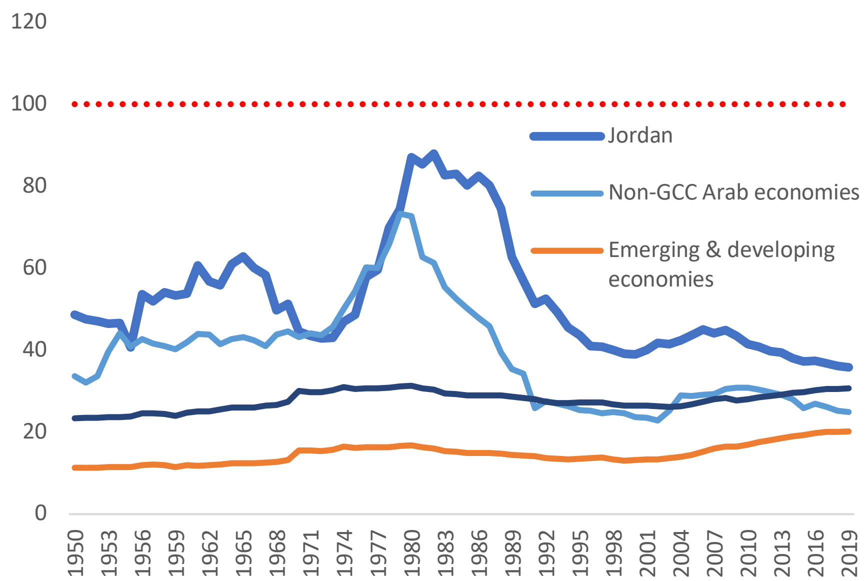
Relative labour productivity levels (i.e., the output per worker in a country relative to a frontier country that is technologically advancing faster) are indicative of a country's productivity catch-up with the global frontier. Figure 1 shows the levels of Jordan's labour productivity (output per worker) relative to the United States.[2] Jordan, which constitutes less than ten percent of GDP and little over six percent of the population in the

1 In this snapshot, when we refer to the Arab states, it consists of six GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) and six non-GCC Arab countries (Iraq, Jordan, Lebanon, the occupied Palestinian territory, the Syrian Arab Republic, and Yemen). The global economy is an average of 132 countries covered in The Conference Board Total Economy Database.

2 Relative labour productivity level is measured as the amount of output an average worker in OPT produces in a year, compared to the amount of output an average worker produces in the United States.

aggregates of six non-GCC Arab economies we considered, maintains a higher level of labour productivity compared to the global and emerging markets averages. However, when compared to the global frontiers, it is just above 1/3rd of the US level as of 2019. Jordan's productivity levels were higher than the aggregate of the non-GCC Arab countries in the 1950s and 1960s until they converged in the 1970s when this group of countries witnessed a substantial productivity catch-up. Jordan's productivity levels reached nearly 90 percent of the US levels in the early 1980s. However, since then, we have seen rapid productivity erosion-both in Jordan and the region. While the average productivity levels in emerging markets and the global economy are still below the Jordan levels, they tend to go up, compared to a concerning downward trend in Jordan.

▶Figure 1: Relative Levels of labour Productivity (US=100)



Note: Labour productivity levels are calculated in purchasing power parity terms for individual economies as GDP per worker and are expressed as a percentage of productivity level in the United States. For the list of countries used to obtain the aggregates of World, and Emerging & developing economies, please see Appendix Table 4 in ILO (2022) [3]. Non-GCC Arab economies consists of Iraq, Jordan, Lebanon, Syria, Yemen and Occupied Palestinian Territory.

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

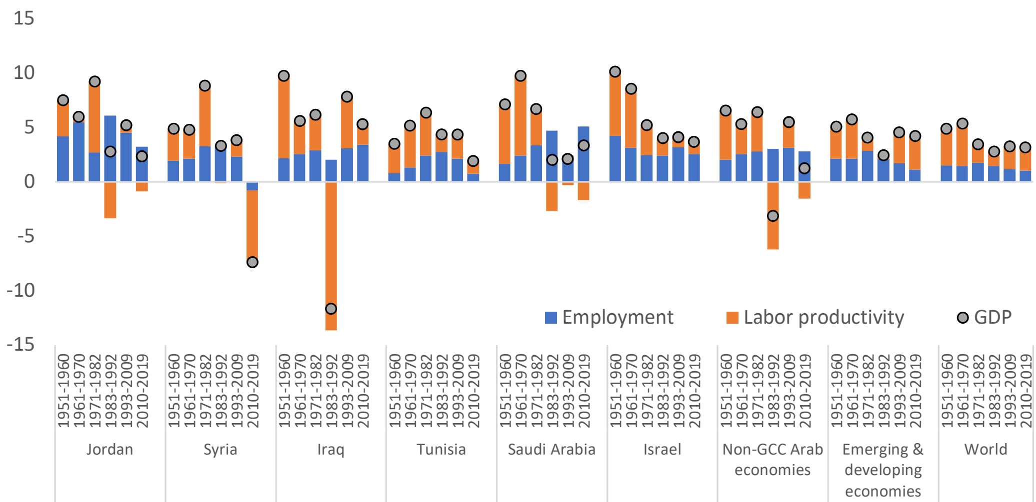
2.2. Labour Productivity growth: Labour productivity vs. Employment

The output of an economy can be increased by adding more workers, increasing working hours, or raising worker productivity. Jordan's divergence in productivity levels from the global frontiers is more visible when we look at the trends in labour productivity growth (Figure 2). Barring episodes of high productivity growth from 1950-1960 and 1971-1982, we see rather a stagnation or even deceleration in most other periods. This is especially noticeable when we compare Jordan with neighboring developing countries. For instance, Syria, Iraq, and Tunisia all had positive and higher productivity growth in most periods, except for

3 ILO (2022), "Productivity growth, diversification and structural change in the Arab States", https://www.ilo.org/actemp/publications/WCMS_840588/lang--en/index.htm

Syria and Iraq in the periods that included their war years. Jordan's productivity trends seem to be more aligned with its oil-rich GCC neighbor Saudi Arabia, particularly since the 1980s. It may be noted, however, that Jordan's labour productivity growth during 1971-1982 was higher than the regional average, but also other developing countries in the region, such as Tunisia, Iraq, and Syria, GCC economy Saudi Arabia and an advanced economy in the region, Israel. However, as we already observed, that dominance was not sustained longer.

▶ Figure 2. Contribution of labour productivity growth and employment growth to GDP growth



Notes: All growth rates are calculated as log changes. Regional growth rates are a weighted average of individual countries, using nominal value added weights. For other notes, please see Figure 1.

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

In line with the emerging markets average, where productivity improvements mainly drove economic growth, the non-GCC Arab countries seem to show a dominance of productivity over employment growth to drive economic growth in most periods. Except for a setback during 1983-1992, which includes years of the gulf war, and the post-global financial crisis periods, the region does not show a major deviation from this trend. In contrast, employment growth dominated productivity growth in driving Jordan's GDP growth except during the high productivity growth period of 1971-1982.

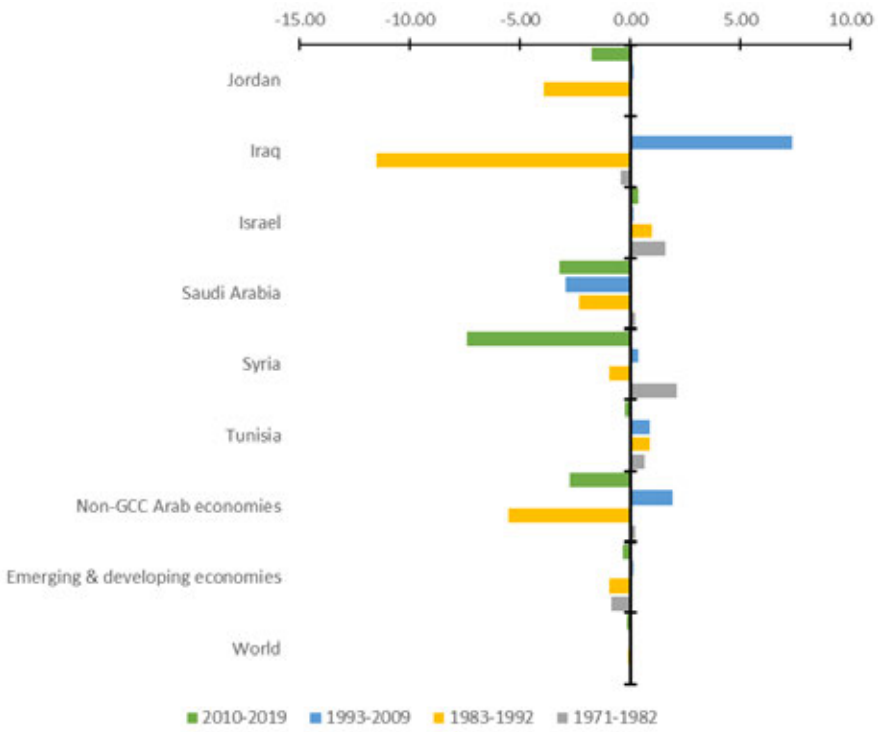
2.3. Multifactor productivity growth

Multi-factor productivity (MFP) growth is an important indicator of technological change and overall efficiency improvement.[4] MFP growth was barely positive in Jordan during the last five decades. Even during the phase of fast labour productivity growth during the 1971-1992 period, Jordan's MFP growth was quite dismal, clearly indicating that this was a period of rapid capital accumulation in the country. In fact, we can see a similar picture in the region's average as well, except during the 1993-2009 period, when MFP growth was better, primarily driven by Iraq during its post-war reconstruction period. Two

4 MFP is generally measured as a residual after allocating output growth accrued due to the accumulation of factor inputs (e.g., labour and capital) to input growth. A multitude of factors, including technology and innovation, macroeconomic and business climate, market conditions, and institutional factors, can influence changes in MFP.

neighboring countries to Jordan that showed consistent positive MFP growth are Israel, throughout the last 50 years, and Tunisia, except during the post-global financial crisis period. While the productivity challenges for GCC economies, including Jordan's neighboring country Saudi Arabia, are less likely constrained by resource scarcity, Jordan, which features the characteristics of developing countries, may have a more comprehensive story to tell. In addition to the structural composition of the economy (see next section), it may be due to a lack (or a mismatch between what is needed and what is available) of human capital, and skills, along with poor investment in technologies and inadequate utilization of existing capital and infrastructure.

▶ Figure 3. Multifactor productivity growth



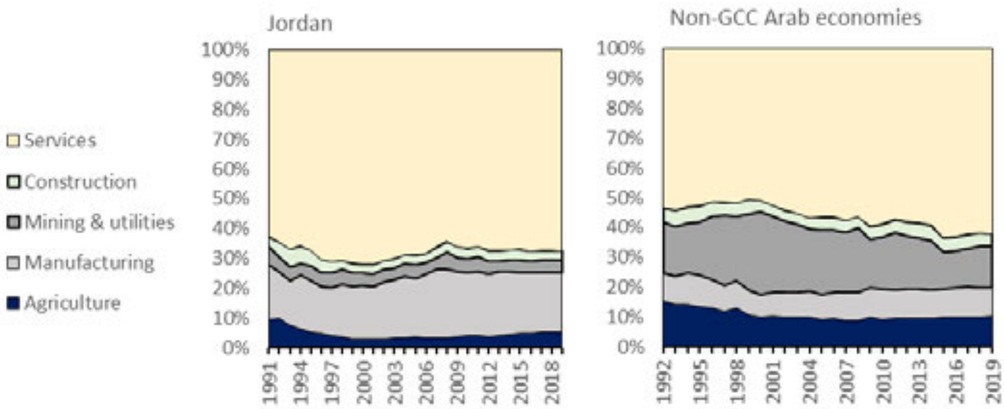
Notes: Multi-factor productivity growth rates are calculated using a growth accounting equation as a residual after accounting for the contributions of capital and labour inputs to GDP growth. For other notes, please see Figure 1.

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

2.4. Industry composition of employment and output

One possible reason for poor productivity performance is industry composition. If resources are increasingly shifting to high value-added sectors, with better productivity levels and growth rates, aggregate productivity will improve. Currently, in Jordan, nearly 3/4th of all jobs are in the service sector, and that was the case almost three decades ago. Most of the changes in employment share happened between agriculture, manufacturing (both witnessed a decline), and construction. While in the region as a whole, the employment share of the manufacturing sector increased along with a rapid increase in the service sector, Jordan's job expansion has been solely in the construction sector. The region's manufacturing job share is nearly 1/5th - an increase from 12 percent in 1992 - whereas in Jordan, it is 11 percent. On the contrary, the construction sector increased its share from below 5 percent to 11 percent in Jordan, falling from 9 percent to 3 percent in the region as a whole. At the same time, output expansion in Jordan was confined primarily to the service sector and marginal improvement in manufacturing. It appears that Jordan is failing to exploit the productivity potential in manufacturing, as the dominance of the low-productivity construction sector and the fall in manufacturing jobs might have contributed to the productivity slowdown.

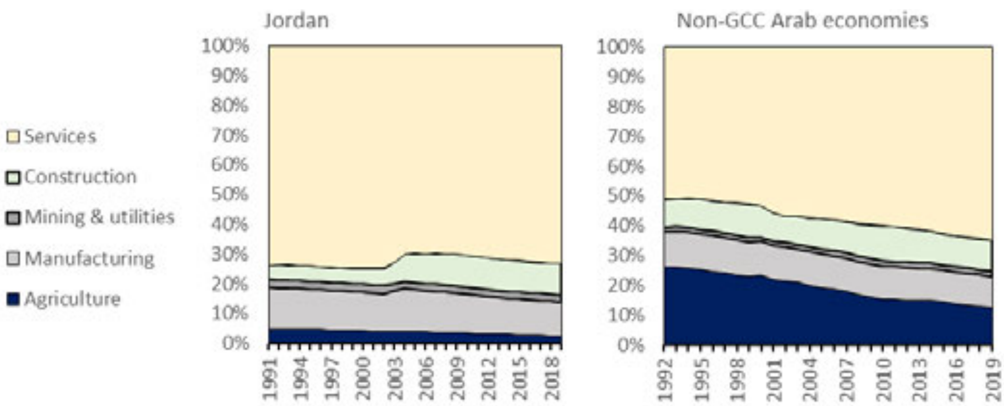
▶Figure 4: Output share of industries



Note: Other industries include the mining sector, which consists of a large oil sector in the GCC economies. For other notes, please see Figure 1.

Source: UNNAS, ILOSTAT.

▶ Figure 5: Employment share of industries



Note: See Figure 1 and Figure 4.

Source: UNNAS, ILOSTAT.

▶ 3. Business environment, productivity, and prospects: insights from Enterprise Surveys

This section highlights the key findings from two enterprise surveys - the 2019 World Bank Enterprise Surveys (WB) and the ILO 2021 survey on productivity growth, diversification, and structural change. The WB survey interviewed 601 formal SMEs and large enterprises from the country's most vibrant governorates. The survey included questions related to the business environment and main obstacles for business operations, employment structure and wages, productivity, and management practices, among other topics. The ILO survey aimed 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 operating and upgrading technology, and factors that impacted productivity growth, among others. The ILO survey covered 182 micro, small, medium, and large enterprises in Jordan. Manufacturing enterprises accounted for the highest share of responses (24 percent), followed by shopkeeping, sales or trade activities (15 percent), and other service activities (10 percent).

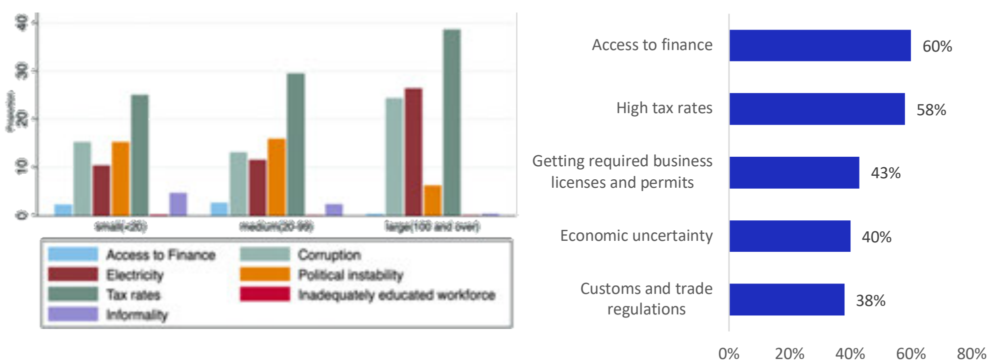
3.1. Obstacles for business operations

An enabling business environment that combines conditions that can improve enterprises' capacity to start up, grow, develop, and create decent jobs, is important for enterprises to harness the benefits of productivity. The extent to which governments influence and encourage innovation through policies and incentives can also have major implications on enterprises' growth and productivity. In the ILO survey, only one out of four enterprises in Jordan agreed that government policies were adequate to promote innovation and technology adoption. Evidently, the business sentiments indicate the potential for more pro-active government intervention in creating a business environment conducive to promoting innovation and productivity.

▶ Figure 6. Obstacles to operate for enterprises

Panel A: World Bank Enterprise Survey

Panel B: ILO survey

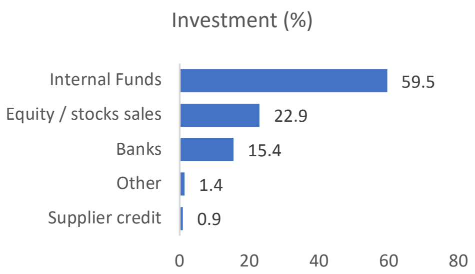


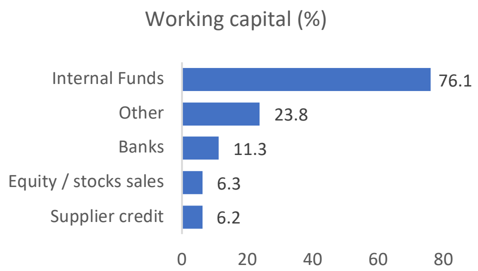
Note: Bars represent % of enterprises. Obstacles that accounted for less than 38 per cent of the sample are not displayed in Panel B.

Source: World Bank Enterprise Surveys 2019 (Panel A), and ILO's 2021 survey on productivity growth, diversification, and structural change (Panel B).

The respondents to both WB and ILO surveys agree on the role of high tax rates as an obstacle to business operations in Jordan (Figure 6 Panel A and B). However, the two surveys differ in the role of access to finance. While it comes out as a very high obstacle in the 2021 ILO survey, the 2019 WB survey does not show it as an important concern. Indeed, one needs to be cautious in comparing the two surveys due to their differences in sampling and approach. Yet, the difference we observe here could, intuitively, indicate the worsening financial situation of enterprises in the country. Limited access to finance seems to have affected business operations, especially after 2019. There has been more severe access restriction to funding from commercial banks during the COVID-19 pandemic. Additional insight from the ILO survey suggests that access to finance was a bigger concern for small enterprises, whereas high tax rates were primarily reported by medium and large enterprises. Similarly, while access to finance was more prevalent among service sector firms, the high tax was a concern for manufacturing and retail enterprises.

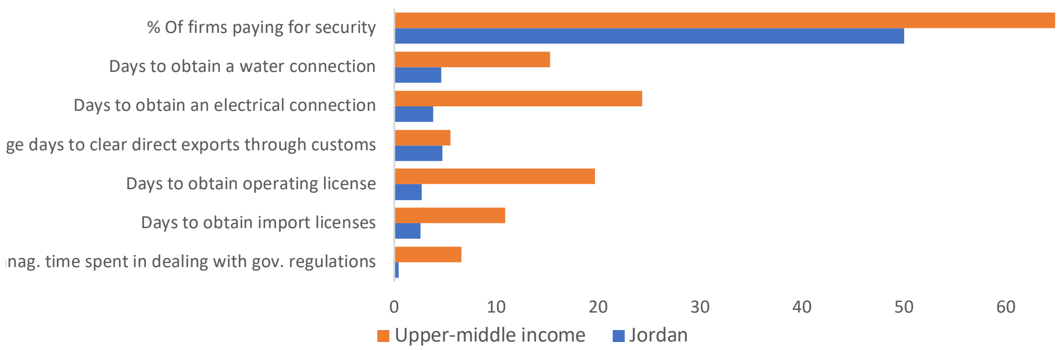
▶ Figure 7. Investment (left) and working capital (right) funding





Source: World Bank Enterprise Surveys 2019.

▶ Figure 8. Business environment main areas of concern



Source: World Bank Enterprise Surveys 2019.

Enterprises were funding their working capital needs mainly with internal funds (Figure 7). However, due to the restriction on access to credit and to deal with their exceeded obligations to financial institutions, enterprises started looking for other alternatives, such as equity/stock financing, especially to deal with working capital shortages. The ILO survey further reveals that most micro (73 percent) and small (55 percent) enterprises relied on their own resources to support operations. On the contrary, access to local private banks was most prevalent among medium (46 percent) and large (40 percent) enterprises. The WB survey also indicates corruption and access to electricity as major obstacles to business operations for many enterprises. The ILO survey also highlights the difficulty in getting business licenses, customs and trade regulations, and economic uncertainty as important obstacles.

International trade is often considered an important driver of productivity. Therefore, factors that facilitate trade are essential for enterprises. Compared to upper-middle-income economies, Jordan exhibits better export/import conditions related to the number of days to obtain import and operating licenses (Figure 8).

3.2 Impact of Covid on enterprises

The Covid-19 outbreak strongly impacted enterprises' operations in Jordan in terms of sales, employment, and wages. Around 25 percent of firms in the WB survey reported a reduction of permanent and temporary workers as well as a reduction of salaries since the outbreak of Covid-19 until mid-2020. Temporary workers seem to be the most affected after the pandemic, although the situation improved in 2021. This also corroborates the observation in ILO 2021 survey that many enterprises, primarily medium and large ones, hired new employees during the pandemic. Similarly, half of the respondents to the ILO survey reported revenue declines in the first half of 2021 due to COVID-19. Such revenue decreases were more prevalent among micro and small enterprises than medium and large enterprises.

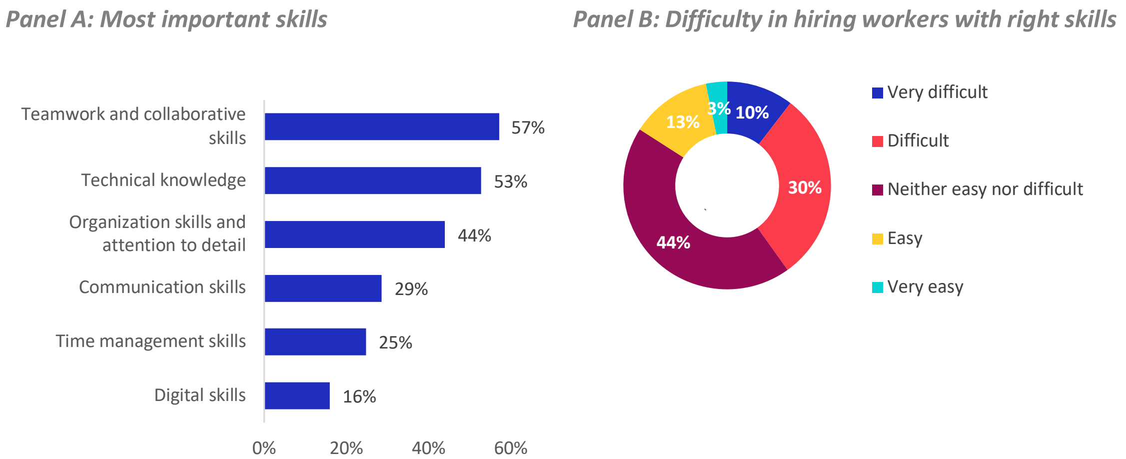
In addition, respondents to the ILO survey highlighted five key challenges they faced during the pandemic. Nearly half of respondents indicated inadequate cash flow to maintain business operations as a challenge to their business during the pandemic. The proportion of enterprises reporting inadequate cash flow was relatively lower among large enterprises compared to micro, small and medium enterprises. While more than 40 percent of respondents considered difficulty accessing customers a hurdle, another 36 percent indicated the hardship from higher material input prices. Above one-third of respondents considered a loss in demand due to the cancellation of orders an important challenge, and more than a quarter of respondents mentioned employee absenteeism as their challenge during the pandemic.

Although the quality of firms' management practices in Jordan is lower than in similar upper-middle-income Arab economies, enterprises seemed to have shown a great ability to face challenges during the pandemic. During 2020/21, firms rapidly adopted delivery services and improved management practices and marketing processes to deal with lockdowns. By mid-2020, almost 40 percent of firms reported using digital technology in response to the COVID-19 outbreak.

3.3 Factors that foster productivity growth

Consistent with our macroeconomic observation in the first part of this snapshot, on average, Jordanian enterprises experienced negative real sales, and employment growth from 2015 to 2018. The survey results suggest that manufacturing enterprises were relatively more productive than service-sector enterprises. Economic theory suggests that exporting firms are more productive than those serving local markets and that large firms are more productive than SMEs. However, the results do not show strong evidence of productivity differences between SMEs and large firms and between exporters and non-exporter enterprises. However, productive firms are mainly concentrated in large, populated regions such as the North and Central areas of the country and are able to pay higher wage bills per worker compared to less productive firms. In addition, we found that firms that introduced new/improved products and processes showed higher productivity rates than those that did not. These observations indicate the importance of productivity for wages and the role of innovation in enhancing productivity.

▶ Figure 9. Skills and their availability



Note: Skills that accounted for less than 15 per cent of the sample are not displayed in Panel A. The numbers are % of enterprises

Source: ILO's 2021 survey on productivity growth, diversification, and structural change.

Another important factor that can help improve enterprise productivity is worker skills. Training opportunities are important to foster worker skills, capacity building, and productivity growth. Respondents to the ILO survey were asked about the most important skills for their businesses. Over half of enterprises highlighted the importance of teamwork and collaborative skills, and technical knowledge. Additionally, 44 percent of enterprises highlighted the role of organization skills and attention to detail (Panel A, Figure 9) These skills were important across enterprises of all sizes and key sectors.

While enterprises realize the need to acquire skilled workers to foster productivity, they also find it hard to obtain these skills in Jordan. Forty percent of enterprises reported that it was difficult or very difficult to find workers with the right skills, compared to only 15 percent saying it was easy or very easy (Panel B, Figure 9). One option to compensate for the talent shortage is to initiate internal worker training. However, about half of enterprises in Jordan reported either not having a separate budget for staff training or allocating only less than 1 per cent of the budget. Large enterprises were more likely to report allocating budget to training than micro, small and medium enterprises. However, 7 out of 10 enterprises reported having incentive compensation programs to reward performance for achieving set results. These programs were relatively common across all enterprises regardless of size.

3.4 Investing for future productivity

Several factors impact the extent to which businesses can thrive, particularly in business environments that might need to be more conducive to sustainable enterprise development. Enterprises, however, can implement strategies to increase revenue while improving business growth and productivity. The ILO survey revealed five important strategies to improve revenue, growth, and productivity in Jordan. Nearly 60 percent of the respondents indicated the importance of offering new products or services. The second most important strategy identified by enterprises was ensuring business continuity planning (43 percent).

More than one-third of respondents each suggested the role of diversifying markets (37 percent), reducing

Recommendations

Policy and regulations to boost productivity

- Jordan needs to reinvigorate its productivity trends, both labour productivity, and total factor productivity (TFP).
- Regulations are often considered to hinder productivity growth in emerging and developing economies. It might also be important for Jordan to work closely with the private sector in policy-making and reform initiatives. Listening to the private sector would help government to implement pro-market reforms more efficiently, considering the constraints and opportunities businesses perceive.

Boosting export

- Being a small economy, its ability to harness productivity potential lies in increasing its external focus. It needs to focus on developing a vibrant export-oriented manufacturing sector, which may help it gain better productivity growth.
- This would require more attention to incentivizing the private sector and foreign investment with an export orientation.

Attracting foreign investments

- Attracting foreign investment and incentivizing private sector investors would require policy actions to improve the business climate, particularly considering the labour market segmentation and very low labour market participation rate of women and enhancing competition in both product and factor markets.

Fostering ITC adoption

- Accelerating investment, and tapping the benefits of technologies, such as information and communication technologies, is also essential for creating productive jobs for Jordan's growing educated workforce.
- The adoption of technology on enterprises processes needs to be strengthened, mainly efforts toward adopting delivery services, digital marketing processes, online sales, the use of digital platforms.
- Develop policies that promote technology adoption through incentives such as grants, subsidies or tax holidays.

Improving access to utility’s infrastructure

- The government has to work as well on improving utility’s infrastructure, in particular access to, and maintenance of, electricity and water supply reliability.

▶ Better access to finance

- Improve access to finance by enhancing competition in commercial banking, devising incentives in cooperation with the Central Bank of Jordan to encourage lending to SMEs, and promoting the development of new financial products, including digital financial services, to meet SME financing needs. Moreover, government and involved stakeholders need to support efforts of equity/stock financing. The latter has become increasingly important due to the restriction of getting a loan from commercial banks.
- Establish initiatives to refinance loans of micro and small enterprises in cooperation with the Central Bank of Jordan and commercial financial institutions. Such measures would be useful to promote economic recovery following the COVID-19 crisis and encourage innovation and technology adoption.

▶ Strengthening managerial skills at firm level

- Enterprises need to focus on upgrading processes for a cleaner production of goods and services, raising resource efficiency, and developing new products in response to changes in demand.
- Invest in managers' and workforce's skills development.

▶ Promoting gender equality and diversity in enterprises and promoting women-led enterprises

- As gender equality and diversity is a key driver of productivity growth, companies need to adopt gender responsive HR policies, including gender inclusive hiring and promotion practices, equal pay policies and practices, child care provision, and learning and career advancement opportunities for women.
- Firms need to establish zero-tolerance for harassment policies and set-up internal grievance mechanisms and referral procedures against violence and harassment.
- Business environment policies need to be gender responsive to enhance access of women to finance, markets, business development services, technology and to promote their access to social protection, land, and property rights.

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