Annual Meeting of Arab Finance Deputies

January 2022

Abu Dhabi, United Arab Emirates

Fostering Private Sector Led Growth in MENA: A New Role for the State

Prepared by Staff of the International Monetary Fund[1]

INTERNATIONAL MONETARY FUND

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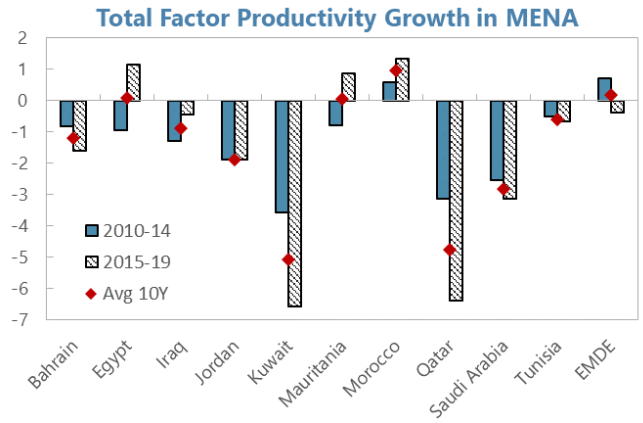
INTRODUCTION

1. The state has historically been a significant economic actor in the MENA region. [2] In the decades following Arab independence, many MENA countries adopted development models based on state capitalism whereby the government spearheaded economic production, investment, and resource allocation. As part of these models, state-owned enterprises (SOEs) were used to support mandates beyond the solely commercial, including to promote industrial and social policies, manage nationalized assets, and create employment (OECD, 2012; OECD, 2013). Many SOEs in oil importing countries, such as Jordan, Morocco, and Tunisia, have roots in enterprises inherited from colonial regimes or formed under strategic policies adopted immediately after independence (Amico, 2017). Across MENA, new SOEs were and continue to be established to develop new sectors; for example, between 2001 and 2010, 350 SOEs were established in Morocco alone (OECD, 2012). While the number of SOEs varies—ranging from over 300 in Algeria and Egypt to around 20 in Lebanon and Saudi Arabia, among countries with available data—they are key economic actors throughout the region.

2. The MENA region is at an important crossroad as the state-led growth strategy has begun to reach its limits. In the coming decade, over 100 million people will enter the MENA workforce. Meaningful jobs are vital for their inclusion in economic activities, ensuring their livelihoods, and preserving the social fabric. Strong state involvement may have been a mechanism for nation building in MENA in the past, but stagnating growth, high unemployment, and increased inequality in the region point to the need for a different strategy. The average annual total factor productivity (TFP) growth during the last 10 years has been negative for many countries in MENA, and particularly low for oil producers. This is a cause for concern as prolonged periods of productivity decline are an eventual drag on economic growth (Eichengreen, Park, and Shin, 2012). Yet despite the high levels of public consumption, investment, and employment, the availability and quality of public services have not kept up with the demands of the population. High public debt levels and eroded fiscal space—both exacerbated after the COVID-19 crisis—leave increasingly limited room for the



Note: TFP is a measure of productive efficiency, i.e., how much output can be produced with a given about of inputs. EMDE refers to Emerging Market and Developing Economies.
Source: Penn World Table 9.1

[2] For this paper, the Middle East and North African region refers to the following countries: Algeria, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, UAE, Yemen.

state to continue to subsidize economic activities while also tackling the mounting social and development needs of the rapidly growing population.

3. Higher and more inclusive growth going forward requires a transition to private-sector-led activities. The low TFP growth could in part reflect the inefficiencies and resource misallocation associated with the relatively large role of the state in the region. Although certain roles of the state, such as the development of legal and administrative institutions, or interventions to correct market failures (including building essential infrastructures) can have positive effects on productivity growth (Ghali, 1998), various studies have shown that an excessively large government sector can generate inefficiencies and policy-induced distortions with a negative impact on overall productivity growth (see, for example, Barro, 1991; Dar and AmirKhalkhali, 2002; Loko and Diouf, 2009).. Several studies find that SOEs tend to underperform private sector firms, and are generally characterized by lower revenue, higher costs per employee, and weaker productivity.[3] These gaps in part reflect the different nature of SOEs, many of which pursue public mandates rather than profit-maximizing goals. However, the lower productivity of public enterprises inevitably lowers the overall productivity of the economy—including indirectly by limiting private sector competition and dynamism—particularly when the public sector is large, as in MENA. Ensuring a more inclusive role for the private sector will be key for generating employment opportunities, particularly given over 90 percent of jobs in developing countries are created in the private sector (International Finance Corporation, 2013).

4. This chapter makes the case for a new role for the state focused on addressing hurdles to private sector development in MENA, particularly those arising from the large state presence. Making way for the private sector to spur growth and job creation will not be without challenges. The entrenched state presence across economic sectors has given rise to various distortions that have limited the development of the private sector, requiring a comprehensive structural reform towards private-sector-led growth. This chapter will first look at stylized facts on the size of the state in MENA compared to other world regions. It then reviews the various distortions and barriers associated with long-run state interventions in economic activities in the region. It then empirically assesses the impact of SOEs on private sector development in MENA using firm-level panel data from Orbis over the period 2006-2018 and concludes with some policy implications.

How Big is the State's Footprint in the MENA Region?

5. The large state footprint in MENA is apparent in the region's high levels of public consumption and investment. At close to 24 percent, the share of public consumption in MENA is larger than in any other region (except the Caucasus and Central Asia (CCA) which carries the Soviet legacy of centralized economies) and has shown limited signs of declining over the past two decades

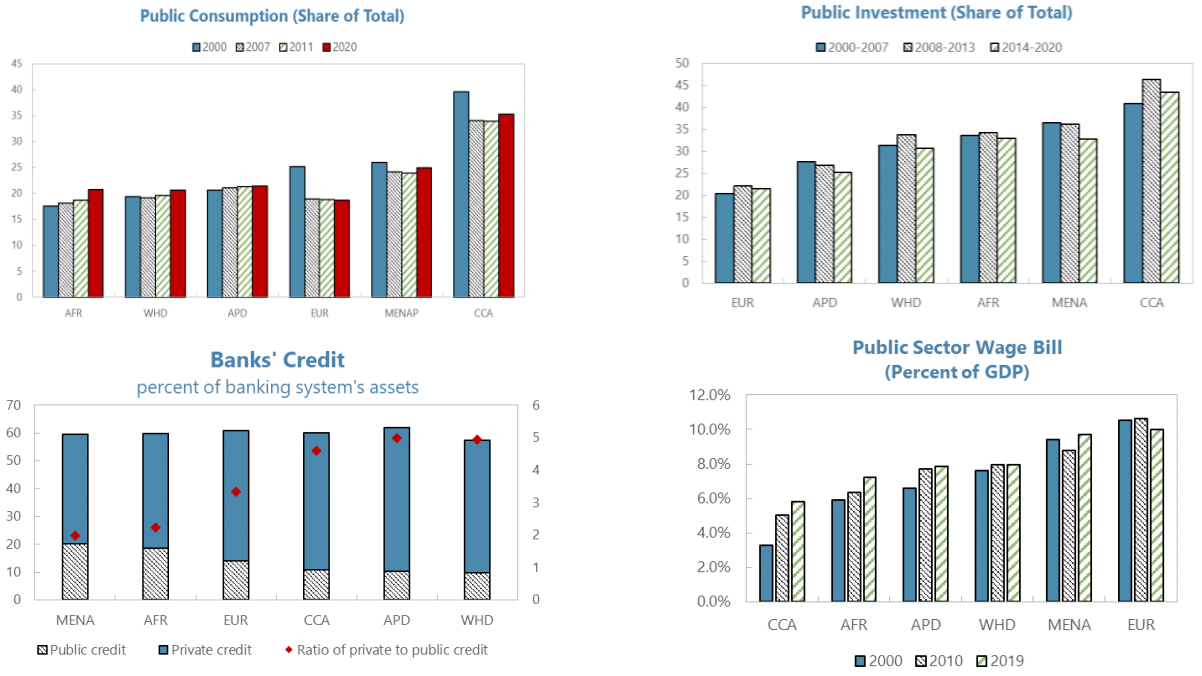
[3] See, for example, Dewenter and Malatesta (2001), European Commission (2016), Wang and Shailer (2018), IMF (2019), Jurzyk and Ruane (2021), and IMF Fiscal Monitor (April 2020).

(Figure 1). Public investment accounts for one third of total investment in MENA, again behind the CCA but roughly in line with average levels in Africa and the Western Hemisphere countries.[4] High public consumption and investment are fueled by a significant share of credit flowing to the public sector: about one third of domestic credit goes to the public sector in MENA compared to less than 25 percent in Europe and less than 20 percent in the CCA, the Western Hemisphere, and the Asia and Pacific regions (Figure 1).

6. Many countries in MENA also have high levels of public employment, usually coupled with relatively high compensation, leading to a high public wage bill. The public sector accounts for 19 percent of employment in MENA—a larger share than in Sub-Saharan Africa, the Asia and Pacific, or the Western Hemisphere regions. The public sector wage bill is around 10 percent of GDP, higher than in all regions except Europe, and showing no signs of declining in recent decades. Governments in the region are often perceived as "employers of first resort," with public sector jobs often used as a mechanism to redistribute wealth or to provide social support. In the wake of the Arab Spring, real wage bills across MENA grew more rapidly as various governments increased public employment and compensation as a way to mitigate social discontent (Tamirisa and Duenwald, 2018).

[4] See Appendix I for country groups.

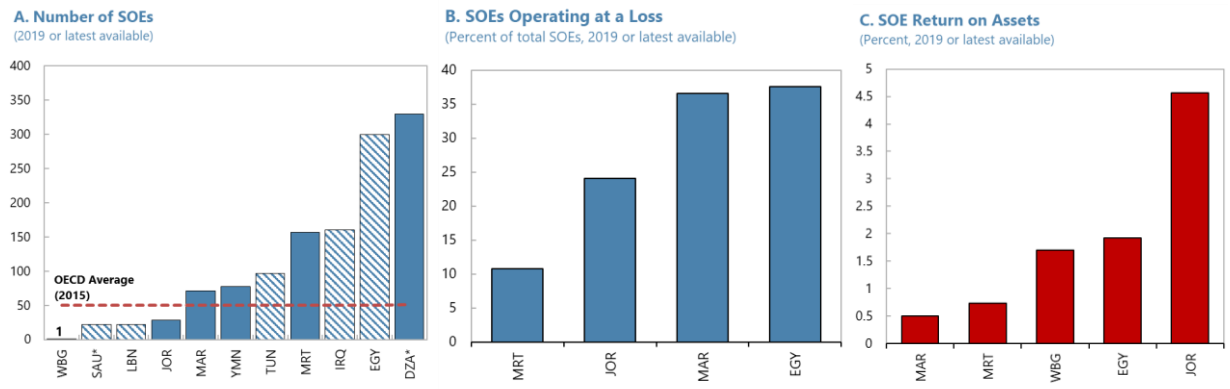
Figure 1: The Size of the Public Sector Across World Regions



Sources: World Economic Outlook; International Financial Statistics.
Note: Comparator countries are emerging market and developing economies (EMDEs). AFR = Africa; APD = Asia and the Pacific; CCA = Central Asia and the Caucasus; EUR = Europe; MENA = Middle East and North Africa; WHD = Western Hemisphere (North, South, and Central America). Public credit as reported in IFS; the total share of public credit may be underestimated if some credit to SOEs is classified as credit to the private sector.

7. The size and scope of SOEs in the MENA region further attest to the large footprint of the state in the economy. The SOE footprint in MENA is on average larger than in OECD countries, albeit with significant heterogeneity among countries (Figure 2). Globally, SOEs are often established in sectors with high natural barriers to entry or high capital intensity (e.g., mining, transport, communication), and in sectors where the social rate of return is higher than the private one (e.g., health, education). Yet in addition to these "traditional" sectors, SOEs in MENA are also active in sectors usually occupied by private firms, including manufacturing and financial services (IMF, 2021). In addition to the broad scope, the footprint of SOEs is also deep: MENA governments often hold shares in the largest companies in key economic sectors such as mining and hydrocarbon, heavy industry (e.g., cement production, steel refining), and telecommunications. SOE assets can be substantial, totaling more than the GDP in Morocco and over 50 percent of GDP in Egypt (IMF, 2021; OECD, 2013).

Figure 2: SOE Footprint in the MENA Region



Source: IMF (2021).

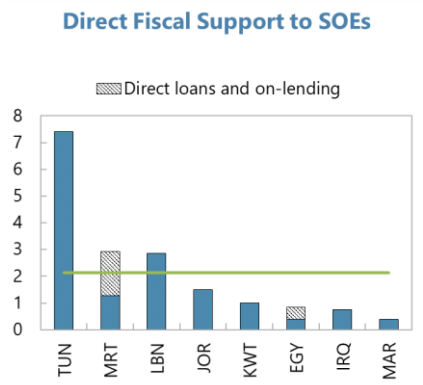
DISTORTIONS ASSOCIATED WITH long-term state interventions

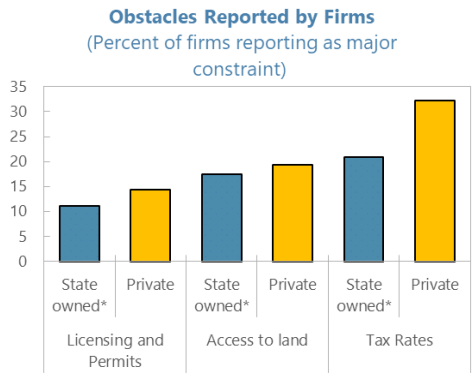
8. In many MENA countries, SOEs suffer from low profitability and must balance commercial and non-commercial mandates. There is no regular comprehensive reporting on the financial performance of SOEs; while Figure 2C suggests the overall SOE sector is profitable in some countries, many individual SOEs are in a weak financial position: IMF (2021) finds that almost 40 percent of SOEs in MENA incurred losses in 2019, including 20 percent of SOEs in Jordan and Mauritania, over 50 percent of those in Egypt, and over two thirds of the largest SOEs in Tunisia (IMF, 2021). SOE losses can be sizeable, ranging between 0.6 and 6 percent of GDP per year in Egypt, Iraq, Morocco, and Tunisia (World Bank, 2015a). Often, poor SOE performance is a direct result of lack of autonomy to establish clear commercial mandates. The OECD (2013), for example, finds that in air transport and heavy industry, SOE profitability in MENA appears to depend on the extent of operational autonomy and the existence of a clear commercial mandate.

9. Several forms of direct and indirect support allow SOEs to survive even when operating at a loss. SOEs often benefit from direct fiscal support in the form of budget transfers or on-lending; this support is sizeable, amounting to two percent of GDP in the region (Figure 3). SOEs also benefit from other privileges such as exclusive rights to operate as monopolies; better or subsidized access to land; or the ability to circumvent bureaucratic red tape. For many countries (e.g., Algeria, Iraq, Jordan, Kuwait, Libya, Qatar, Syria, Saudi Arabia, Tunisia, and Yemen), SOEs are de jure subject to the same tax system as private companies but de facto benefit from various exemptions from corporate income taxes. In Lebanon and Libya, SOEs are not subject to income tax law, while oil producing countries often allow tax privileges for SOEs in the oil sector (World Bank, 2019). Such advantages enable many SOEs to provide lower-priced products, making it difficult for private companies to compete, even if the latter are more efficient.

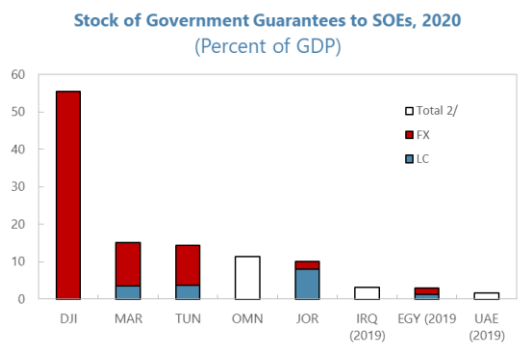
10. SOEs in MENA also benefit from easier access to credit. On average, SOEs have been found to face lower debt-financing costs than their private sector counterparts (Fiscal Monitor, April 2020). Moreover, MENA firms with partial state ownership appear to have more ample access to credit, reporting a higher share of bank financing than private sector firms (Figure 3). Government guarantees to SOEs can lower borrowing costs relative to similar private sector firms by reducing credit risks. In MENA, this practice is widespread, with the stock of public credit guarantees ranging between 2 to 55 percent of GDP (IMF, 2021). SOEs also benefit from implicit guarantees, given government propensity to bail out failing public enterprises. Moreover, state-owned banks (SOBs) serve as a reliable source of financing for SOEs, due to strategic rather than commercial considerations (OECD, 2012). The use of SOBs to finance SOEs at non-market terms has at times led to high levels of NPLs (as previously seen in Algeria and Egypt), which in turn further restrict the ability of these banks to lend to the private sector (OECD, 2013). IMF (2019) illustrates risks from the SOE–SOB nexus, whereby SOB lending to SOEs without rigorous oversight can have fiscal and financial stability implications. Cheaper and more ample credit for SOEs due to the aforementioned advantages implies a lower marginal product of capital vis-à-vis private firms, which points to capital misallocation (Hsieh and Klenow, 2009, and Chapter 2 in this book).

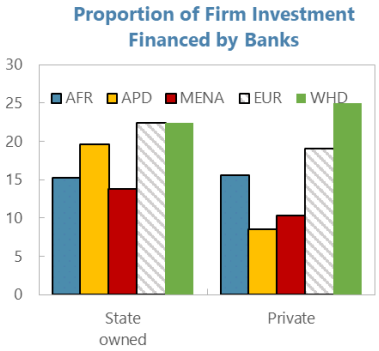
Figure 3: Fiscal Support and Administrative and Credit Advantages for SOEs





State owned refers to firms with >25 % government ownership



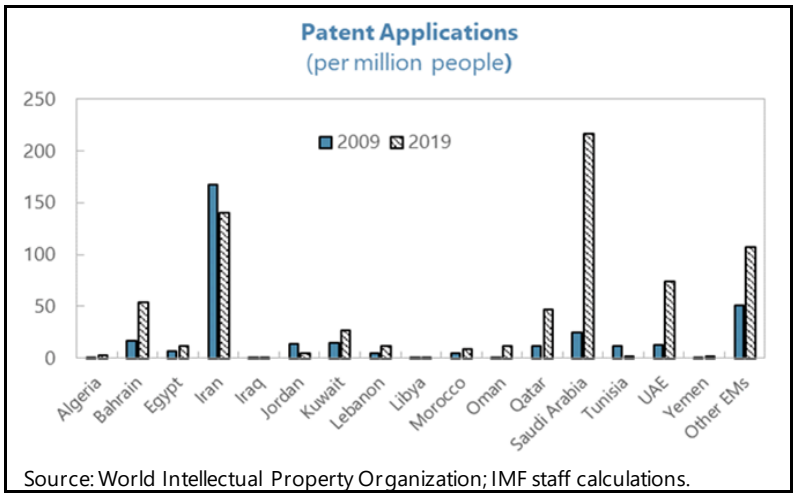


State owned refers to firms with >25 % government ownership

Sources: IMF (2021) and WB Enterprise Surveys.

11. The large public sector employment in the MENA region distorts labor markets and hampers the private sector's job creation potential. Previous research suggests the public-private wage gap is quite high in MENA; for example, public wages in GCC countries are on average two to three times higher than private sector wages, even prior to accounting for substantial nonwage benefits such as pensions and job security (Purfield et al., 2018; Tamirisa and Duenwald, 2018). A public sector wage premium not justified by differences in skill levels or job characteristics distorts labor allocation by making it difficult for productive private firms to attract productive workers. Moreover, more generous wages and nonwage benefits in public employment can lead job seekers to wait for a public sector job rather than accept a private sector one.; referred to as "queuing," this phenomenon partly explains high and often long-term unemployment among young and highly educated workers in the region (Purfield et al., 2018). Large wage gaps also lead to skill mismatches, with the education system in MENA primarily targeted towards preparation for government employment rather than private sector jobs (World Bank, 2018; Purfield et al., 2018). These factors likely contribute to the smaller share of private firms' employment creation in MENA compared to other regions.

12. The dominance of the state in economic activities may distort market neutrality, alter the perception of risk-return tradeoffs, and ultimately stifle competition and private sector development. Previous studies find that private sector firms in MENA are generally smaller, fewer in number, and older than in other regions, suggesting they face barriers to entry and growth; for example, the share of firms with fewer than ten workers is much higher than in other EMs, and small firms account for over 40 percent of firms in Jordan, Yemen, and the West Bank (Purfield et al., 2018). Studies also find evidence of low business dynamism: MENA countries outside the GCC have fewer newly registered firms per working age population than any other world region, while evidence of a low correlation between entry and exit within sectors implies that firm turnover in the region is not driven by creative destruction (Purfield et al., 2018; World Bank, 2015b). Moreover, Arezki, Belhaj, and Mohieldin (2019) argue that the large role of the state in the region shields private citizens from risk taking, ultimately stifling entrepreneurship and innovation. This argument appears to be supported by data on patent applications—a proxy for innovation rates. The MENA region sees significantly lower patent application rates than other emerging markets, albeit with some notable exceptions in Iran and GCC countries (see Box 1). Finally, fiscal support to SOEs and high public wages divert resources away from public investments that would enhance private sector productivity and stimulate a more inclusive and dynamic growth.

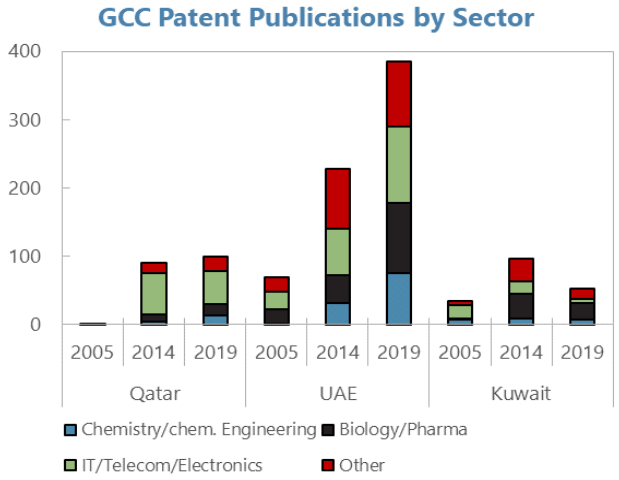


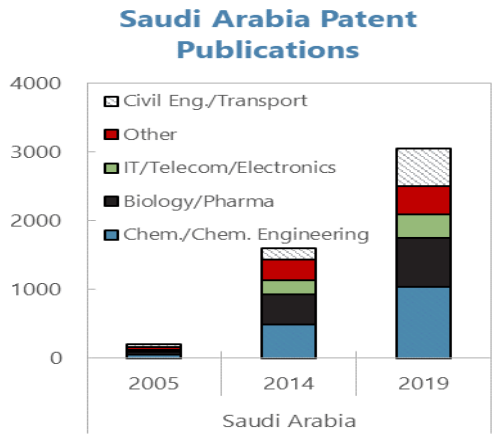
Source: World Intellectual Property Organization; IMF staff calculations.

Box 1: A New Generation of SOEs in the GCC

In recent years, GCC countries have adopted an economic strategy that includes using SOEs to expand to new high-tech sectors, including aviation, semiconductors, and green energy. Sometimes referred to as "third generation SOEs," these SOEs are often funded through Sovereign Wealth Funds (OECD, 2013). Examples include Mubadala Holding Company in the UAE, which owns a variety of assets and invests in aerospace, renewable energy, and semiconductors, Saudi Aramco, which provides direct support to SMEs and conducts research in a variety of areas, and state-owned entities created to invest in solar energy and real estate in Qatar (OECD, 2013).

In these cases, state involvement is intended to initiate economic development in high-productivity and high-externality sectors, thus continuing historic growth strategies of the state as a first mover to overcome market failures resulting in hurdles for private sector expansion. These hurdles include limited incentives for diversification given the economic dominance of the oil sector, the high costs of credit for private start-ups, and the hesitancy of domestic lenders to provide credit in new sectors given inexperience in pricing risks (OECD, 2013; Vorisek et al., 2021).



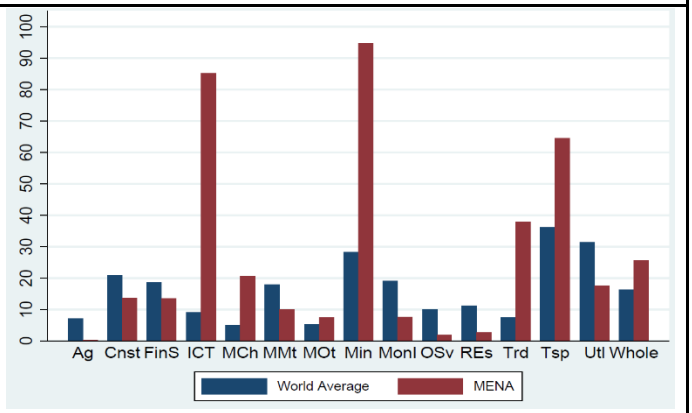


There is some evidence that diversification efforts have begun to bear fruit. Patent grants in the GCC increased nineteen-fold between 2009 and 2019, much more rapidly than in any other world region. Patents applications were largely driven by SOEs and public investment; for example, in 2020, Saudi Aramco alone accounted for nearly half of international patent applications from Saudi Arabia. Trends in patent publications show expansion of GCC economies into varied fields: IT, electronics and telecommunication account for the majority of patent publications in Qatar today, while biology and pharmaceuticals and civil engineering account for a significant share in the UAE and Saudi Arabia respectively. These developments have also started to affect labor composition: Saudi Arabia has seen the largest increase among G20 countries in university and secondary school graduates in the job market in the last five years (Global Competitiveness Report 2020). However, it remains to be seen whether these patents are successfully commercialized, and whether such diversification efforts will also create space for and draw in private sector entrepreneurship.

The impact of SOEs on private sector firms in MENA: An EMPIRICAL ANALYSIS

13. This section uses firm-level data to explore how SOEs differ from private sector firms, and how SOEs' presence affects market dynamics. We use firm-level balance sheet data from Bureau Van Dijk's Orbis database, one of the few harmonized cross-country firm-level datasets that include both SOEs and privately-owned firms (both listed and non-listed). The dataset used covers eight MENA countries (Morocco, Algeria, Egypt, Saudi Arabia, Oman, Iran, Kuwait, and Jordan) and 66 countries in other world regions, over the period 2006-2018. SOEs are identified based on the reported firm owner (firms owned by "Public authority, state, government"). Only firm-year observations where data on assets, liabilities, revenues, and costs are available are included (more details about the data are in Appendix II).

Figure 4: Sectoral Asset Shares of SOEs, MENA and Rest of World



Source: Orbis.
Note. Ag = Agriculture; Cnst = Construction; FinS = Other Financial Services; MCh = Chemicals Manufacturing; MMt = Other Materials Manufacturing; MOt = Other manufacturing; Min = Mining; MonI = Monetary Intermediation; OSv = Other Services; Res = Real Estate; Trd = Trade & Repair; Tsp = Transportation & Storage; Utl – Uitlities & Sanitary; Whole = All sectors.

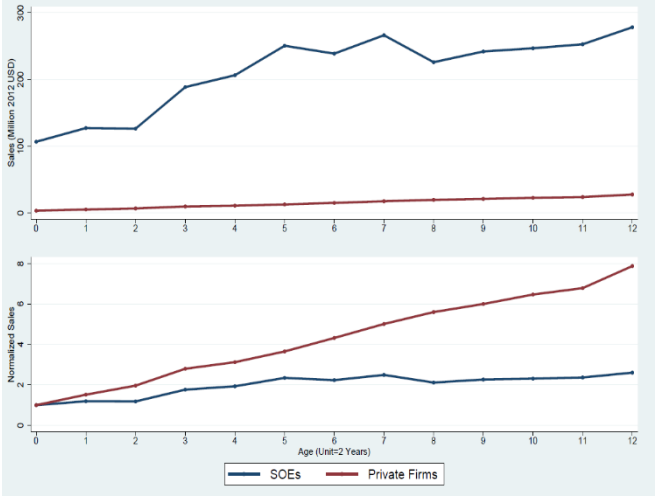
14. Data availability and representativeness vary across countries. SOE presence, measured through their shares of sectors' assets, varies across time and across sectors both within and outside MENA. SOE presence in MENA is on average larger than in other world regions, especially in the mining, information & communication, and transport sectors (Figure 4). Within MENA, the dataset is strongly representative of the universe of both private firms and SOEs for Morocco and Algeria. After substantive data cleaning, we used this data to find a few stylized facts on productivity and profitability of SOEs in MENA region, and to run a series of panel regressions linking these characteristics to firm-specific factors (such as age and size) and sector-specific factors (like sectoral investment, concentration, and entry rates). Empirical results are shown in Appendix III.

15. Our analysis reveals that SOEs in MENA differ from private-sector firms in several key dimensions:

- Compared to private firms, SOEs in MENA (but also in other world regions) have larger sales and assets upon establishment; however, they see ***lower growth rates*** over time (Figure 5).

- SOEs in MENA are ***less profitable*** than private sector firms (they have a lower average Returns on Equity even when controlling for firm and sector-specific characteristics, see Table A1). However, the profitability gap is smaller in MENA compared to the rest of the world (7.5 pps compared to 15.6 pps).

Figure 5: Sales Over Time of SOEs and Private Firms



Source: Orbis.

- The smaller profitability gap for MENA SOEs may reflect their privileged access to factors of production. Indeed, contrary to the rest of the world, SOEs in MENA have ***lower imputed interest rates*** than private-sector firms (by around one to two percentage points, see Table A3)[5]. On the other hand, we could not find evidence that SOEs report paying lower imputed tax rates compared to private sector firms.

- MENA SOEs are on average ***less productive*** than private-sector firms, with lower returns on capital (Table A2), a pattern that stands in contrast to the rest of the world.[6]

16. Moreover, we found that the presence of SOEs has a negative impact on competition and business dynamism. Output market concentration, measured by the Herfindahl-Hirschman Index (HHI), is higher in sectors with larger SOE presence. This effect is stronger in the MENA region: for each one percentage point increase in the SOE asset share in a sector, the HHI increases by 0.26 in MENA compared to only 0.1 in other regions (Table A4). Moreover, business dynamism, measured through entry and exit rates, is lower in sectors with higher SOE asset share, even when controlling for concentration: one percentage point of additional SOE asset share in a sector is associated with a 0.2 percentage point decrease in entry rates and a 0.1 percentage point decrease in exit rates (Table A6). Given the larger market presence of SOEs in MENA, the impact on competition is especially large.

17. Finally, a higher SOE presence is also associated with lower private investment and lower competition in input markets. We find that a larger SOE presence in a specific sector is associated with lower investment by private firms in the same sector in MENA by around US$600 a year, controlling for firm-specific factors. The presence of SOEs also leads to increased concentration

[5] Imputed interest rate is computed as the total interest expenditures divided by total liabilities excluding equity.

[6] Returns on capital and on labor are measured as the firm's revenue divided by its fixed assets and employee costs respectively.

in input markets in the MENA region (but not in the rest of the world): for every percentage point higher SOE asset share in a country, the HHI for capital inputs in that country is 0.8 points higher, and the HHI for labor inputs is higher by 0.5. The positive relationship between SOE presence and concentration in input markets suggests that the large size of the SOE sector limits competition for capital and labor, which can lead to some of the distortions in resource allocation documented above.

18. These empirical findings attest to the distortive effect of state involvement in the economy in MENA on competition in output and input markets and on business dynamism. While some of these distortions are also observed outside MENA, the larger market share of SOEs in MENA – associated with the region's state-led growth model—translates to a more substantial effect on private sector exclusion.

How the State Can Foster Private-Sector-Led Growth

19. Our results point to need for a broad reform of SOEs within a more general reassessment of the role of the state in MENA economies. Fostering a private-sector-led growth model does not mean that the state will not have an important role to play. Rather, it calls for a change in roles, from that of an active player in the economy to that of enabler of private sector development. This would first require the development of a state ownership policy to articulate (i) the rationale for the state's involvement in the various economic sectors, (ii) the objectives and activities of the SOEs, and (iii) their governance structure. The state ownership policy could then underpin a strategy for privatizing SOEs where there is no clear rationale for state involvement. The ownership reform should be accompanied by a modernization of the legal, accounting, and operational frameworks of SOEs with a view to increase transparency and limit fiscal contingent liability risks. SOEs' financial reports should be published on a regular basis, and their financial performances benchmarked against the same standards as the private sector. Currently, no MENA country requires the separation of commercial and non-commercial activities of SOEs (World Bank, 2019); however, best practice would call for operations that fulfill social policy mandates to be clearly separated from SOEs' commercial activities, with the costs of the former explicitly recognized on the government's budget for transparency.

20. Fostering private sector development would require reforming competition policies. Ensuring a level playing field or "competitive neutrality" for all market players is key for private sector growth. As a first step, as recommended in IMF (2021) regular or exceptional government support to SOEs should be governed by clearly circumscribed conditions in order to limit distortionary subsidies. Doing so will not only incentivize better performances by SOEs but also encourage greater participation by the private sector. It is also important to subject SOEs to the same laws, regulations, and tax provisions that apply to their private sector counterparts, (including on public procurement). Reforms to support competitive and regulatory neutrality should include establishing regulatory agencies that have the necessary autonomy, resources, and authority to enforce law and regulations (Aghion, Cherif, and Hasanov, 2021). While SOEs will naturally have some advantages over private

firms, such as more favorable debt financing costs, ensuring that they operate within the same regulatory environment as their private sector counterparts will greatly reduce distortions and allow for more inclusive growth based on stronger contributions of private entrepreneurs to the economy.

21. Improving the business environment is also an important step for private sector growth. In addition to the uneven playing field, MENA private sector contends with several other hurdles to doing business. Removing such hurdles would require

- *Improving infrastructure*. Despite progress made in the last few decades, many countries in the region still face poor transport infrastructure (roads, ports, and airports) and uneven access to broadband connectivity. Investments in infrastructure have both immediate and long-term payoffs in supporting a more inclusive growth; the World Bank estimates that one billion dollars of infrastructure investment in MENA could increase growth by ½ percentage point and create over 130,000 jobs in the short run, and some additional 400,000 jobs over the long run due to crowding in effects on business activities.[7] The transition towards greener and more sustainable development models could offer many economies in the MENA region an opportunity to revamp their infrastructure investment agenda (see Chapter 8 of this book).

- *Improving SMEs' access to finance*. Higher collateral requirements, limited banking competition, and relatively shallow capital markets in MENA make access to credit more challenging than in other regions (OECD, 2019). These challenges are particularly detrimental for SMEs: while it is estimated that SMEs in MENA represent about 96% of registered companies and about roughly half of the employment, they account for only 7% of total bank lending—the lowest proportion in the world (EBRD, 2016; Purfield et al., 2018). Chapter 2 and 6 of this book and IMF (2019) show that SMEs' financial inclusion can lead to economic growth, job creation, and greater effectiveness of fiscal and monetary policy. IMF (2019) estimates that closing the region's financial inclusion gap with EMs' average could boost annual growth rates by up to one percentage point over the medium term, potentially adding about 16 million new jobs by 2025. Improving access to finance for SMEs would require improving the legal and regulatory frameworks, including on collateral registration and insolvency and creditors' rights, and fostering the development of digital banking and e-payment systems.

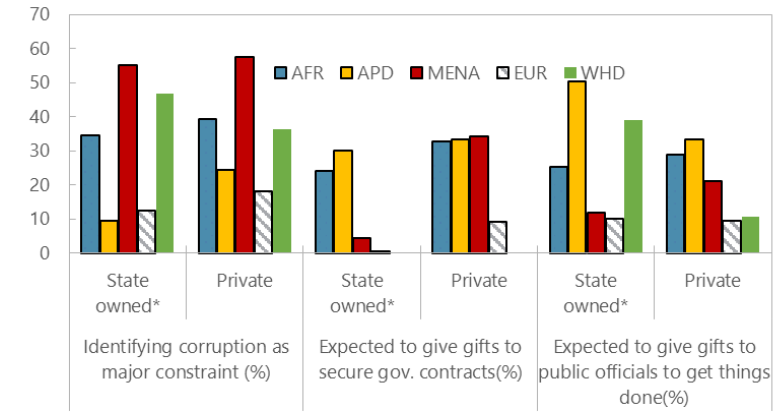
- *Reducing red tape and scope for corruption*. As discussed in Chapter 2, cumbersome regulation and low quality of governance are serious barriers to entry and could well result in resource reallocation from low to high productivity firms. Firms in the region report tax policy and administration to be particularly cumbersome (World Bank Enterprise Survey; EBRD,

[7] https://blogs.worldbank.org/arabvoices/building-forward-better-mena-how-infrastructure-investments-can-create-jobs.

2016). Moreover, over half of private (and public sector) firms in MENA report corruption as a major constraint in the latest Enterprise Surveys, well above levels reported in other regions

(Figure 6). Corruption also favors publicly owned firms: a third of private firms in MENA report being expected to give bribes to secure government contracts (compared to less than 10 percent of SOEs); and one in five private firms (vs. one in nine SOEs) are expected to give gifts to public officials for regular activities. Streamlining regulations and administrative procedures (e.g., customs, tax, business registration, permits) including via digitalization, would be a crucial step in reducing the scope for rent-seeking behaviors and the cost of doing business in the region.

Figure 6: Share of Firms Reporting Facing Corruption



State owned refers to firms with >25 % government ownership

Source: WB Enterprise Surveys.

22. Fostering private sector development in MENA will require the state to pivot towards facilitating rather than leading business activities in the region. The absence of a robust private sector that can generate vast employment opportunities and maintain social cohesion has been used as a justification for the large state's role in economic activities in MENA. But this development model has perpetuated a cycle where the private sector and its employment capacity in the economy are held back due to the state's large footprint. Gradually rolling back the state's role and focusing resources on facilitating private sector growth can lead to greater efficiency, higher productivity, and hence the economy's ability to sustain higher growth. Doing so will also free up fiscal space for pursuing policies that would promote inclusion and ultimately ensure social cohesion.

ANNEX I. Country Groups

Africa (AFR)	South Sudan	**Central Asia and the**	Egypt	Guatemala
Angola	Swaziland	**Caucasus (CCA)**	Iran	Guyana
Benin	Tanzania	Armenia	Iraq	Haiti
Botswana	Togo	Azerbaijan	Jordan	Honduras
Burkina Faso	Uganda	Georgia	Kuwait	Jamaica
Burundi	Zambia	Kazakhstan	Lebanon	Mexico
Cabo Verde	Zimbabwe	Kyrgyz Republic	Libya	Nicaragua
Cameroon	**Asia and the**	Tajikistan	Mauritania	Panama
Central African Republic	**Pacific (APD)**	Turkmenistan	Morocco	Paraguay
Chad	Bangladesh	Uzbekistan	Oman	Peru
Comoros	Bhutan	**Europe (EUR)**	Qatar	St. Kitts & Nevis
Congo, Dem. Rep.	Brunei Darussalam	Albania	Saudi Arabia	St. Lucia
Congo, Rep.	Cambodia	Belarus	Somalia	St. Vincent & the
Cote d'Ivoire	China	Bosnia and Herzegovina	Sudan	Grenadines
Equatorial Guinea	Fiji	Bulgaria	Syria	Suriname
Eritrea	India	Croatia	Tunisia	Trinidad & Tobago
Ethiopia	Indonesia	Kosovo	United Arab	Uruguay
Gabon	Kiribati	Macedonia, FYR	Emirates	Venezuela
Gambia, The	Lao PDR	Moldova	Yemen	
Ghana	Malaysia	Montenegro	**Western**	
Guinea	Maldives	Poland	**Hemisphere**	
Guinea-Bissau	Marshall Islands	Romania	**(WHD)**	
Kenya	Micronesia	Russian Federation	Antigua &	
Lesotho	Mongolia	Serbia	Barbuda	
Liberia	Myanmar	Turkey	Argentina	
Madagascar	Nauru	Ukraine	Bahamas, The	
Malawi	Nepal	**Gulf Cooperation**	Barbados	
Mali	Palau	**Council (GCC)**	Belize	
Mauritius	Papua New Guinea	Bahrain	Bolivia	
Mozambique	Philippines	Kuwait	Brazil	
Namibia	Samoa	Oman	Chile	
Niger	Solomon Islands	Qatar	Colombia	
Nigeria	Sri Lanka	Saudi Arabia	Costa Rica	
Rwanda	Thailand	United Arab Emirates	Dominica	
São Tomé and Príncipe	Timor-Leste	**Middle East and North**	Dominican	
Senegal	Tonga	**Africa (MENA)**	Republic	
Seychelles	Tuvalu	Algeria	Ecuador	
Sierra Leone	Vanuatu	Bahrain	El Salvador	
South Africa	Vietnam	Djibouti	Grenada	

ANNEX II. Data Description

The empirical analysis in this paper uses data from Bureau Van Dijk's Orbis database. The sample covers eight MENA countries (Morocco, Algeria, Egypt, Saudi Arabia, Oman, Iran, Kuwait, and Jordan) and 66 countries in other world regions, over the period 2006-2018. SOEs are identified based on the reported firm owner (i.e., firms with majority ownership by "Public authority, state, government")

The Orbis database is one of the few harmonized cross-country firm-level datasets of key financial variables that include both SOEs and privately-owned firms (both listed and non-listed), allowing for rich quantitative analyses of SOEs. As with most datasets, however, there are some limitations. These include uneven firm coverage across countries, unbalanced data panel, and the inability to identify indirect SOEs (e.g., firms owned by state-owned banks). Extensive data cleaning and robustness checks of the empirical results were done to ensure that data limitations do not result in biased findings.

Variable	Definition
ROE	Return on equity, computed as firm's profit divided by equity
ROK	Return on capital, computed as firm's revenue divided by its fixed assets
ROL	Return on labor, computed as firm's revenue divided by its employee cost
R	Interest rate faced by the firm, computed as firm's interest expenditure divided by total liabilities excluding equity
HHI	Herfindahl-Hirshman Index, $\sum_i$(firm i's revenue/sector's revenue)^2, a measure of market concentration (value of 1 reflects monopolistic market)
HHI^K	Herfindahl-Hirshman Index, $\sum_i$(firm i's fixed assets/sector's total assets)^2, a measure of market concentration for the capital input market
HHI^L	Herfindahl-Hirshman Index, $\sum_i$(firm i's employee cost/sector's total employee cost)^2, a measure of market concentration for the labor input market
Entry/Entry rate	Number of new private firms (based on the year of establishment) divided by number of firms in the sample in that period
Exit	Number of private firms that exit sample (based on last observation) divided by number of firms in the sample in that period
Investment	Change in firm's fixed assets from previous year
SOE	Dummy variable for firms that are more than 50 percent owned by public authority, state, or government
SOE share	Share of SOE assets in the sector's total assets
MENA	Dummy variable for firms located in the MENA region
Age	Age of the firm
Size	(Log of) Assets
Leverage	Firms' total liabilities divided by total assets
Current asset ratio	Firm's stock of current assets divided by current liabilities

Maturity	Firm's noncurrent liabilities divided by total liabilities
Equity ratio	Firm's equity divided by total liabilities
Stock to iv.	Inventory turnover, a measure of efficiency of inventory usage, computed as firm's inventory divided revenue

ANNEX III. Regression results

Table A1: Firm Profitability

VARIABLES	(1) $ROE_{i\{c,s\},t}$	(2) $ROE_{i\{c,s\},t}$	(3) $ROE_{i\{c,s\},t}$	(4) $ROE_{i\{c,s\},t}$	(5) $ROE_{i\{c,s\},t}$	(6) $ROE_{i\{c,s\},t}$
SOE	-8.05***	-33.5	-33.3	-15.6***	-50.3***	-50.3***
	(1.81)	(25.2)	(25.3)	(0.11)	(0.64)	(0.64)
MENA				12.3	0.94	-0.26
					(34.8)	(51.7)
MENAxSOE				8.11***	1.54	1.62
				(1.81)	(1.83)	(1.83)
Age		-0.19***	-0.19***		-0.40***	-0.40***
		(0.030)	(0.030)		(0.0014)	(0.0014)
Age * SOE		0.25***	0.25***		0.38***	0.38***
		(0.079)	(0.079)		(0.0029)	(0.0029)
Size		-0.64***	-0.64***		-1.16***	-1.16***
		(0.21)	(0.21)		(0.0092)	(0.0092)
Size * SOE		1.28	1.27		2.12***	2.12***
		(1.29)	(1.29)		(0.039)	(0.039)
Leverage		-0.00045***	-0.00045***		-0.00017	-0.00017
		(0.000037)	(0.000037)		(0.00017)	0.00017)
Current Asset Ratio		-0.0027***	-0.0027***		-6.9e-09	-6.9e-09
		(0.00090)	(0.00090)		(1.0e-08)	(1.0e-08)
Equity Ratio		-0.00013***	-0.00013***		-0.00046***	-0.00046***
		(9.8e-06)	(1.0e-05)		(0.000063)	(0.000063)
Stock to Inv.		-0.0000014**	-0.0000014**		-0.0000014**	-0.0000014**
		(0.0000064)	(0.0000064)		(0.00000063)	(0.00000063)
HHI (Sector)			4.97			-5.56***
			(4.11)			(0.60)
Entry Rate (Sector)			3.91			77.4***
			(35.9)			(2.27)
Investment (Sector)			-0.00022			0.00039
			(0.00079)			(0.00080)
Fixed Effects	Country X Sector Country X Year	Country X Sector Country X Year	Country X Sector Country X Year	Country X Sector Country X Year	Country X Sector Country X Year	Country X Sector Country X Year
Observations	54.7k(MN)	50.0k(MN)	50.k(MN)	41.1m	39.3m	39.3m
R-squared	0.040	0.035	0.035	0.037	0.041	0.041

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A2: Firm Productivity

VARIABLES	(1) $RoK_{i,t}$	(2) $RoK_{i,t}$	(3) $RoL_{i,t}$
SOE	-2286.6	-587.3***	353.8**
	(1522.3)	(207.9)	(147.7)
MENA	28270.1		-287.4
	.		(261.0)
MENAxSOE	2179.5***		46.2
	(832.8)		(82.4)
Age	-10.1***	-0.99	-3.24***
	(1.07)	(1.82)	(0.50)
SOE x Age	-12.2	5.93*	-0.019
	(1.07)	(1.82)	(0.85)
Size	55.8**	8.17	47.8***
	(19.3)	(14.0)	(6.78)
SOE x Size	249.0*	12.1	-28.9***
	(139.7)	(12.1)	(8.85)
Leverage	0.0044	0.056	0.00028*
	(0.0043)	(0.061)	(0.00016)
Current Asset Ratio	0.00034	-0.015	-0.0000039**
	(0.00036)	(0.013)	(0.0000018)
Stock to Iv.	-0.000027***	-0.00016**	-0.000052***
	(0.0000085)	(0.000066)	(0.0000091)
Equity Ratio	-0.060***	0.00026	-0.00015
	(0.0021)	(0.00020)	(0.00016)
HHI (Sector)	4912.1	-183.9	-82.1
	(4915.9)	(134.9)	(138.4)
Entry rate (Sector)	-819.0	-1068.1	-126.3
	(632.0)	(2339.5)	(321.8)
Investment (Sector)	0.18	0.079	-0.17
	(0.38)	(0.099)	(0.19)
Fixed Effects	Country X Sector Country X Year	Country X Sector Country X Year	Country X Sector Country X Year
Observations	38.7mn	52.6k	26.5mn
Sample region	All	MENA	All
R-squared	0.00043	0.00041	0.000093

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A3: Interest Rates

VARIABLES	(1) $R_{i,t}$	(2) $R_{i,t}$	(3) $R_{i,t}$	(4) $R_{i,t}$	(5) $R_{i,t}$	(6) $R_{i,t}$
SOE	-0.018***	-0.012***	-0.015***	0.48*	-0.31***	-0.36
	(0.0035)	(0.0039)	(0.0038)	(0.29)	(0.26)	(0.26)
MENA				-0.80	-1.06	-0.99
				(1.03)	(0.71)	(0.66)
MENAxSOE				-0.74	0.016	-0.14
				(1.34)	(0.39)	(0.54)
Size		-0.0062**	-0.0040**		-0.042	-0.046
		(0.0025)	(0.0017)		(0.072)	(0.067)
Age		0.00031*	0.00034*		0.016	0.016
		(0.00018)	(0.00018)		(0.014)	(0.014)
ROE		-0.00013***	0.00016***		0.00093	0.00079
		(0.000030)	(0.000039)		(0.00082)	(0.00076)
Leverage			0.0020			0.000011
			(0.0021)			(0.000016)
Current Asset Ratio			0.0015			0.0000020
			(0.0010)			(0.0000017)
Maturity			-0.0018			9.8e-07
			(0.0012)			(8.3e-07)
Equity Ratio			0.031			0.0000051
			(0.019)			0.0000050
Fixed Effects	Ctry. X Sector Ctry. X Year	Ctry. X Sector Ctry. X Year	Ctry. X Sector Ctry. X Year	Ctry. X Sector Ctry. X Year	Ctry. X Sector Ctry. X Year	Ctry. X Sector Ctry. X Year
Observations	54.7k	50.0k	50.k	41.1mn	39.3mn	39.3mn
Sample region	MENA	MENA	MENA	All	All	All
R-squared	0.040	0.035	0.035	0.037	0.041	0.041

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A4: The Impact of SOE Presence on Output Market Concentration

Variables	(1) $HHI_{c,s,t}$	(2) $HHI_{c,s,t}$	(3) $HHI_{c,s,t}$	(4) $HHI_{c,s,t}$
$SOE\ Share_{c,s,t}$	0.11***	0.095***	0.095***	0.096***
	(0.012)	(0.012)	(0.012)	(0.012)
$MENAxSOE\ Share_{c,s,t}$		0.16***	0.16***	0.16***
		(0.052)	(0.052)	(0.053)
Entry			0.10	0.088
			(0.083)	(0.084)
$Investment_{c,s,t-1}$				0.000016
				(0.000011)
Fixed Effects	Country	Country	Country	Country
	Sector	Sector	Sector	Sector
	Year	Year	Year	Year
Observations	8,504	8,504	8,504	8,497
Sample region	All	All	All	All
R-squared	0.406	0.408	0.408	0.408

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A5: The Impact of SOE Presence on Input Market Concentration

VARIABLES	(1) $HHI^K_{c,t}$	(2) $HHI^K_{c,t}$	(3) $HHI^L_{c,t}$	(4) $HHI^L_{c,t}$
SOE $Share_{c,t}$	-0.038	0.74***	-0.35**	0.51***
	(0.087)	(0.11)	(0.17)	(0.19)
MENAxSOE $Share_{c,t}$	0.80***		0.89***	
	(0.14)		(0.27)	
Fixed effects	Country Year	Country Year	Country Year	Country Year
Observations	917	78	917	78
Sample region	All	MENA	All	MENA
R-squared	0.593	0.817	0.476	0.545

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A6: The Impact of SOE Presence on Business Dynamism

Variables	(1) $Entry_{c,s,t}$	(2) $Entry_{c,s,t}$	(3) $Entry_{c,s,t}$	(4) $Exit_{c,s,t}$	(5) $Exit_{c,s,t}$	(6) $Exit_{c,s,t}$
SOE $Share_{c,s,t}$	-0.0021*	-0.0021*	-0.0020*	-0.012***	-0.011***	-0.011***
	(0.0012)	(0.0012)	(0.0012)	(0.0044)	(0.0043)	(0.0043)
MENAxSOE $Share_{c,s,t}$		0.00036	0.00053		-0.015	-0.015
		(0.0047)	(0.0047)		(0.030)	(0.030)
$HHI_{c,s,t}$	0.0017	0.0017	0.0017	0.025**	0.025**	0.025**
	(0.0016)	(0.0016)	(0.0016)	(0.010)	(0.011)	(0.011)
$Investment_{c,s,t-1}$			2.2e-06***			-7.9e-06***
			(5.1e-07)			(2.1e-06)
Fixed Effect	Country Sector Year	Country Sector Year	Country Sector Year	Country Sector Year	Country Sector Year	Country Sector Year
Observations	8,504	8,504	8,497	7,820	7,820	7,814
Sample region	All	All	All	All	All	All
R-squared	0.590	0.590	0.592	0.491	0.491	0.491

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A7: The Impact of SOE Presence on Private Firm Investment

Variables	(1) $Investment_{i,t}$	(2) $Investment_{i,t}$	(3) $Investment_{i,t}$	(4) $Investment_{i,t}$
$SOE\ Share_{c,s,t}$	-835.1	-594.6*	19210.3	3322.3
	(547.58)	(343.93)	(18734.84)	(11016.82)
$MENAxSOE\ Share_{c,s,t}$			-19736.0	-16115.4
			(18624.46)	(13904.51)
MENA			8851.4	270685.6
			(9274.4)	(193959.99)
Size	156.0***	155.8***		1343.3***
	(45.70)	(45.61)		(245.63)
Age	-6.85*	-6.84*		-109.5***
	(4.07)	(4.07)		(23.12)
Leverage	0.018**	0.021**		0.053*
	(0.01)	(0.01)		(0.03)
Current Asset Ratio	-0.019	-0.013		-0.000040*
	(0.02)	(0.02)		(0.00)
Equity Ratio	0.0011*	0.0017*		-0.00071*
	(0.00)	(0.00)		(0.00)
Stock to Inv.	-0.00029***	-0.00024***		-0.00029
	(0.00)	(0.00)		(0.00)
HHI (Sector)		-912.9		41145.1
		(1166.36)		(27849.4)
Entry (Sector)		-12726.0		12138.2
		(10657.45)		(9263.7)
Fixed Effects	Country X Sector Country X Year	Country X Sector Country X Year	Country X Sector Country X Year	Country X Sector Country X Year
Observations	45,010	45,010	39.29 mn	37.69 mn
Sample region	MENA	MENA	All	All
R-squared	0.0047	0.0051	0.00079	0.00080

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

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