

Chapter 4 Privileges, competition and job creation

This chapter shows that policies in MENA have often been captured by a few politically connected firms. This has led to a policy environment that created privileges rather than a level playing field, undermining competition, the ability of all entrepreneurs to pursue opportunities on an equal footing, and job creation. The analysis builds on new data and information on first-tier politically connected firms in Egypt and Tunisia that became available after the Arab Spring – and from more qualitative evidence from other countries in the region – that allow us for the first time to provide direct quantitative evidence on how firm privileges affect competition, the level playing field, and job growth in the region. Taken together, the findings shed light on the entire microeconomic transmission mechanism, from privileges to limited competition and unlevelled playing fields, to weak firm dynamics and slow aggregate job growth.

4.1. **This chapter provides evidence that many policies in MENA favor privileges over innovation and jobs.** In the Schumpeterian growth framework, first-tier political connections provide firms with an outside option to escape competition by tilting regulations towards their favor instead of innovating. Aghion et al. (2001) predict that growth declines if a few colluding market leaders have sizeable cost advantages, which are unbridgeable by competitors operating in the same sector. Chapter 2 documents various examples of policies in MENA countries that favor specific types of firms over others. If these policy privileges are large enough, the model predicts that sectors end up with a few colluding, politically connected market leaders; a potentially large number of unproductive micro firms; and most important, lower productivity and job growth. The more widespread these firm-specific privileges across sectors, the lower is aggregate growth and job creation.

4.2. **We use novel data from Egypt and Tunisia to test if political connections lead to large privileges, and hence lower *neck-and-neck* competition and growth.** Chapter 2 analyzed several policies in MENA that benefit specific types of firms, potentially distorting *neck-and-neck* competition; these include energy subsidies to industry, licenses, access to land, and biased regulatory enforcement. Two novel data sets on politically connected firms in Mubarak’s Egypt and Ben Ali’s Tunisia allow quantifying whether these policies disproportionately benefitted connected firms. They also allow us to quantify if the presence of politically connected firms changes sectors’ market structures in line with the predictions of Aghion et al. (2001).

4.3. In Section 1 and 2, we use novel datasets on first-tier politically connected firms in Egypt and Tunisia which make it possible for the first time to quantify who is benefitting from existing policy distortions. Thereafter, we discuss more qualitative evidence on such policy privileges in other MENA countries (Section 3).⁶³ In Section 4, we highlight the main factors that explain why private sector and jobs outcomes were different in MENA than East Asia, in spite of the presence of politically connected firms in both regions.

1. Political connections and private sector growth in Egypt

4.4. **This section uses novel data from Egypt to demonstrate that policies have often been captured by a few privileged firms, thereby limiting competition, distorting the playing field, and curtailing job creation.** First, we document that politically connected firms profited disproportionately from policy privileges, distorting the playing field in Egypt. Second, we show that

⁶³ The methodologies and additional country specific analysis are described in detail in the corresponding companion papers of this report including Diwan, Keefer, and Schiffbauer (2014); Rijkers, Freund, and Nucifora (2014).

the presence of connected firms reduced the dynamism and growth opportunities for the rest of the economy. Firm entry is lower in sectors where connected firms are already present, and aggregate employment growth declines once connected firms enter new, previously unconnected sectors. The results suggest that distortive policies, such as energy subsidies to industry, trade protection, and burdensome regulation benefit a small group of “profitable” firms, but reduce the total number of jobs created in Egypt.

Data

4.5. **To examine the economic effects of insider privilege, we need both a dataset of politically connected firms under the Mubarak regime in Egypt, and information about firm performance.** To identify politically connected individuals, we followed Fisman (2001) and interviewed managers of banks and private equity funds, lawyers, and NGOs (anti-corruption organizations) to create a list of politically connected businessmen. We confirmed the representativeness of this list in two ways. First, we matched this list with the names of businessmen whose assets were frozen immediately after the revolution of June 2011. Second, we pruned the list to include only those businessmen who had political posts in the ruling party or in the government, or whose immediate family members did. We also had sufficient information to identify long-term friends of the Mubarak family; these were also identified as connected businessmen.⁶⁴ We matched this list with firm data from the OECD Orbis database, which includes information on the board members, managing directors, and major shareholders for 854 firms that are currently or were formerly traded on a stock exchange.⁶⁵ We were able to unambiguously match the names of the 32 businessmen identified in step one with board members, managers, and major shareholders of 104 firms.

4.6. **Several of these firms are holding companies and investment funds.** Using the Internet, we identified the names of all subsidiaries – up to two tiers – of these 104 firms, and matched these subsidiaries with firms in the Orbis database. This process identified 469 firms that are unambiguously controlled, directly or indirectly, by a connected businessman. Of these firms, 47 have at least one politically connected businessman as a general manager (CEO), 140 have a connected board member, and in 334, at least one connected businessman or firm was unambiguously identified to have an ownership stake.⁶⁶ Moreover, politically connected firms are widely spread across the 320 non-farm, non-government 4-digit ISIC Rev.4 sectors: about half (49 percent) of the sectors include connected firms (186 out of 372). Within manufacturing, where 41 percent of the connected firms operate, they are present in 58 percent of the 4-digit industries (73 out of 126).

⁶⁴ Out of the 32 PC businessmen, 18 had high political posts after 2002 (either in the ruling party or in the government) and controlled 307 of the 469 firms we ultimately identified as connected. Among the other 14 businessmen, the most important ones are long-term friends of Hosni Mubarak from his military period or co-founders of a large investment bank partly owned by a Cyprus registered company said to be owned by the Mubarak family.

⁶⁵ Many large firms were listed at stock exchanges in Egypt, since gains from selling shares of listed companies are exempted from taxation. Reportedly, several politically connected firms exploited this legal tax loophole to avoid paying taxes for takeovers; that is, instead of selling firms directly, which is taxable, the transaction was conducted as an untaxed market transaction by first listing the company for sale at the stock exchange (Ahram Online, various issues).

⁶⁶ Note that these types of political connections can be ranked according to their restrictiveness. The incentive of the connected individual to leverage connections on behalf of the firm is strongest if he is the CEO of the company (almost all politically connected CEOs also own at least part of their companies). It is less strong for politically connected owners and weakest for any type of connected firm which received significant investments from politically connected private equity firms. Of course, it also matters how “close” the political connection is to the businessman. However, we do not have information to distinguish between different types of connections, as all connected businessmen are considered to have first-tier political influence over regulations and their implementation.

4.7. **We only observe a subset of politically connected firms in Egypt: those with first-tier political connections to the Mubarak family.** However, there are other connected firms. Reportedly, the most important group of firms is controlled directly or indirectly by the army, which operates businesses in tourism, construction, white goods, vehicles, fertilizer, mineral water, olives, and bread. Most of these businesses initially were financed by the sale of government land in Cairo and on the seaside (Loewe, 2013).

4.8. **We combine the information on political connected firms with four sources of data.** First, the Orbis database has firm characteristics – including firm names – and balance sheet variables for a panel of over 20,000 establishments between 2003 and 2012, which allows us to compare the performance of connected and unconnected firms.⁶⁷ Second, establishment census data from the department of statistics in Egypt (CAPMAS) do not contain firm names, but they do allow us to estimate how the dynamics across detailed 4-digit sectors change depending on the presence of connected firms. The census includes employment and firm characteristics of over two million non-farm economic establishments in 1996 and 2006. Third, World Bank Enterprise Survey (WBES) data allows us to assess correlations between the presence of connected firms and perceived policies.⁶⁸ Fourth, to investigate whether connected firms benefitted from state-supported barriers to entry or energy subsidies, we use information on non-tariff barriers to trade (NTMs) from the World Bank (WITS), and UN data on the energy intensities of manufacturing industries.

Politically connected firms are more profitable

4.9. **Politically connected firms accounted for only 11 percent of total employment, but 60 percent of total net profits.** We note that the Orbis data primarily include medium and large establishments, which are the correct comparison groups when comparing politically connected and unconnected establishments.⁶⁹ The average net profits were 13 times higher for the 49 connected establishments included in the available data, indicating that at least some of the politically connected firms make excessively high profits.

4.10. **The potential advantages of connected firms that lead to their higher profits are specific to the individual firm, or to the product it sells.** Table 4.1 reports the descriptive statistics among politically connected and other large firms. Politically connected firms are larger and more profitable. The fourth column reports the difference in performance between connected and other firms that operate in the same 2-digit sectors. It shows that the performance differences are not specific to the broader sectors in which firms operate. In other words, if connected firms receive preferential benefits or treatment, these must not be sector specific, but rather specific to the connected firm or the individual product it sells. The last column shows that after controlling for detailed 4-digit sectors (product classes), politically connected firms cease to have significantly higher profit margins relative to other firms, suggesting that portions of their higher profits originate from characteristics specific to the product classes they are selling.

⁶⁷ Employment is observed for about 20,000 establishments, while operating revenues and profits are only available for about 700 and 400 large establishments, respectively.

⁶⁸ We pool all available surveys for Egypt between 2004 and 2008 in order to maximize the representativeness of the perceived policy data at the sector level. Overall, there are more than 4,200 firms which are aggregated into 90 (ISIC Rev. 3.1) 4-digit sectors. We exclude sectors for which we observe less than 4 firms, which produces on average 38 firms per 4-digit sector.

⁶⁹ Large firms are well-distributed among connected and unconnected establishments with available data.

Table 4.1 Within-sector differences, politically connected and other firms

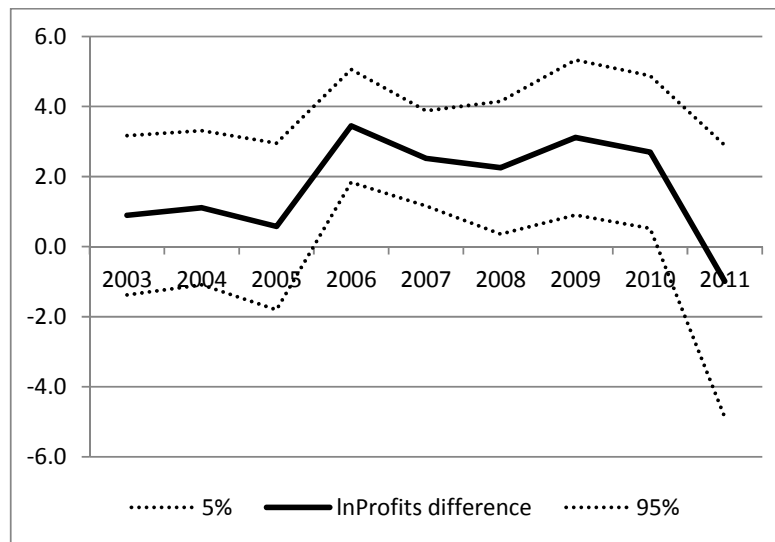
	No. of PC est.	No. of other est.	PC vs. other est.	PC vs. other est., within 2-digit sector	PC vs. other est., within 4-digit sector
Ln(Employment)	436	19,375	1.40** (15.88)	1.02** (12.39)	0.97** (11.82)
Ln(Revenues)	67	611	1.61** (6.46)	1.59** (6.27)	1.50** (5.56)
Ln(Profits)	49	239	1.43** (1.95)	1.37* (1.73)	1.29 (1.33)
Ln(Profits/Rev)	47	236	1.88** (3.03)	2.17** (3.29)	1.02 (1.16)

Notes: Data are from the Orbis database and establishment census. The establishment data are pooled across years (2003-2011). The third and fourth columns report the coefficient and *t*-statistic on the politically connected dummy variable, from an OLS regression of the performance variable (e.g., Ln(employment)) on the dummy variable which is equal to 1 for politically connected establishments and 0 otherwise. In the fourth (fifth) column, we additionally include 2(4)-digit sector dummies so that the connection dummy coefficient measures the difference between connected and unconnected firms operating within the same 2(4)-digit sector. *, ** indicates that the coefficients are significant at the 5%, 10% level.

4.11. **The significantly larger net profits were systematically related to the survival of the regime.** Table 4.1 plots the evolution of the differences in (log) net profits between politically connected and other large firms from 2003 to 2011. After the fall of the Mubarak regime on February 11, 2011, the positive profits differential of politically connected firms suddenly disappeared.⁷⁰ The finding suggests that the larger profits of politically connected firms originated from firm-specific factors directly related to the existing political regime, such as firm-specific privileges in the form of subsidies or trade protection, rather than the greater entrepreneurial skills of the managers, which are independent from regime shifts.

⁷⁰ Longer time series data for profits are not available in Orbis. We note that the precision of estimated profit differential in 2003 and 2004 is low due to the few available observations.

Figure 4.1 The evolution of net profit differentials between connected and other firms



Notes: data are from Orbis establishment database and establishment census.

The Policy Privileges of Political Connections in Egypt

4.12. **In Egypt, the government erected barriers to entry even as it engaged in economic liberalization.** In the early 2000s, President Hosni Mubarak's son, Gamal, working closely with a group of economic experts and ambitious businessmen, shifted the country's policies towards accelerated privatization, and financial sector and trade reforms. Subsequently, politically connected firms captured the opportunities that emerged from the modernization of the economy.⁷¹ Over the next decade ending with the 2011 uprising, these opportunities included massive housing projects and construction, tourism at coastal areas, the oil and gas sectors, the banking sector, telephony, and local distribution of international consumer brands. Government decisions were key in all of these areas – tourist resorts were built on formerly government-owned land; investments in oil and gas required government approval; new banks and factories in specific manufacturing sectors such as cement required government licenses; and so forth. Consistent with this, our data on politically connected firms indicates that they are especially concentrated in tourism (hotels and restaurants, tour operators, transport), real estate, construction, wholesale and retail trade, mining, finance, business services, and manufacturing sectors (see Table A.4 in the Appendix).

4.13. **Trials of leading businessmen since the Arab Spring have shed light on the potential mechanisms through which privileges were granted to connected firms.** On the one hand, connected firms appear to have been the privileged recipients of exclusive licenses to distribute international brands in Egypt, shielding connected wholesale and retail firms from competition. On the other hand, connected families entered the real estate, tourism, and transport sectors by acquiring large sections of prime land from the government, reportedly involving closed and non-transparent deals.⁷² Connected businessmen were well-placed to influence these decisions: they were not only personally well-connected with the political leadership, but they themselves also occupied important posts in government, the ruling party, parliament, and various influential boards and committees. Trials of leading businessmen since the Arab Spring have shed light on land

⁷¹ See Chapter 3 for a detailed review of Egypt industrial policy program at the time.

⁷² The Egyptian military implicitly or explicitly agreed on all government land sales, as they had a de facto veto right to any land deal. The Egyptian Minister of Defense can intervene to block a land deal – especially in coastal areas – if the land is considered strategically important by the military.

appropriation at below-market prices; the manipulation of government regulations to stifle competition; subsidized borrowing from state banks; and privileged access to subsidized energy and state procurement contracts.

4.14. **After the financial crises in the late 1990s, advantages of connected firms shifted away from subsidized access to credit in other policy areas.** The most commonly documented advantage enjoyed by connected firms is access to capital. This was also the case in Egypt prior to the financial crisis at the end of the 1990s, when connected firms enjoyed privileged access to credit from state-owned banks. Subsequent policy reforms circumscribed the activities of state banks.⁷³ Instead, connected firms were insulated from foreign competition. Tariff rates were reduced in Egypt at the end of the 1990s; however the government also increased the use of non-tariff technical import barriers (see Figure 3.1). As a result, Egypt had one of the highest NTM frequencies in the world in 2010 (Malouche et al., 2013). Most NTMs in Egypt are “Class B” NTMs, legal technical barriers to import, including license or registration requirements for importers; regulations on production and distribution processes; traceability; and product quality requirements. These restrictions are imposed on 65 percent (96 out of 147) of the 4-digit manufacturing industries.

4.15. **Politically connected firms are more likely to sell products protected from foreign competition.** Table 4.3 shows that NTMs disproportionately benefitted politically connected firms.⁷⁴ It shows that the manufacturing and mining industries in which politically connected firms are present are more likely to be protected from import competition by NTMs than sectors without politically connected firms. Politically connected firms are also more likely to be protected by NTMs at the individual establishment level; 82 percent of all politically connected manufacturing and mining establishment sell products that are protected by technical non-tariff import barriers. In contrast, only 56 percent of all manufacturing or mining establishments in Egypt in 2006 operated in these sectors.

4.16. **The gap in trade protection between politically connected and other firms increases substantially with the number NTMs imposed on a single product class.** Table 4.3 shows that seventy-one percent of connected firms, but only 4 percent of all firms, sell products that are protected by at least three technical import barriers. Eighty-two percent of connected firms, but only 27 percent of all firms, sell products that are protected by at least two technical import barriers. This difference increases further among firms protected by at least three NTMs (Class B). These benefits accrued to connected firms despite the fact that, at the same time, Egypt was acclaimed for its efforts to reverse decades of state control of the economy.

⁷³ These are only some of the regulatory channels that advantage connected firms. Others include the benefits of FDI restrictions for specific service sectors and fewer licensing restrictions (related to operating licenses), for which we do not have data.

⁷⁴ In order to test this hypothesis, we first match data on NTMs (at the 6-digit product level harmonized system classification) from the World Bank dataset with the Orbis data (which is at the 4-digit industry level). The NTM measures are available for tradable goods, corresponding broadly to the manufacturing and mining industries. We therefore limit the analysis of NTMs to these 147 sectors. Our data includes 200 politically connected firms operating in at least one of these sectors.

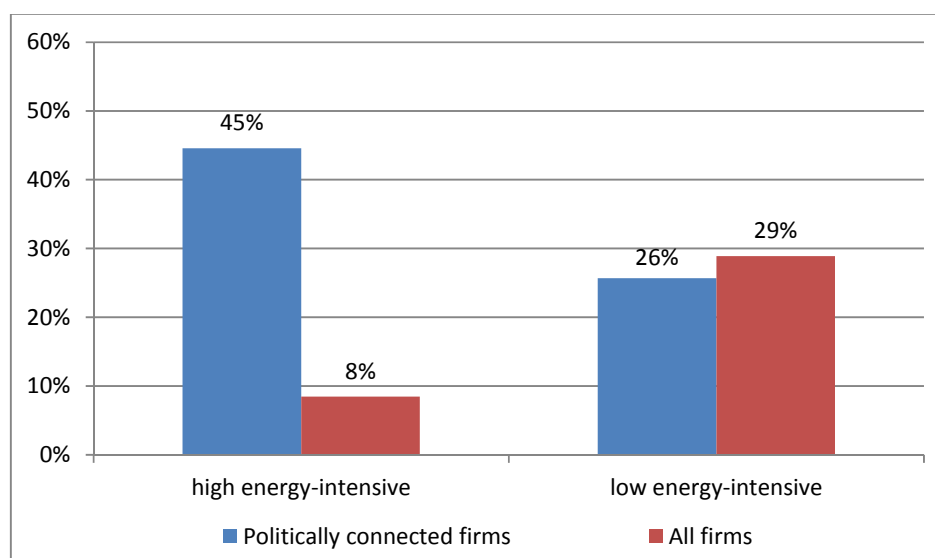
Table 4.2 Share of politically connected and all firms protected by non-tariff trade barriers

Number of Class B NTMs per industry	% PC Firms	% all firms	Pearson Chi 2 – test (p-value)	% PC sectors	% non-PC sectors	Pearson Chi2-test (p-value)
At least 1	82%	56%	0.00	76%	55%	0.01
At least 2	82%	27%	0.00	76%	52%	0.00
At least 3	71%	4%	0.00	59%	38%	0.01
At least 4	26%	3%	0.00	22%	7%	0.01
At least 5	18%	3%	0.00	15%	5%	0.05
At least 6	15%	2%	0.00	14%	5%	0.08
At least 7	13%	0%	0.00	9%	3%	0.09
At least 8	10%	0%	0.00	5%	1%	0.37

Notes: Data on non-tariff trade barriers are from WITS Comtrade. Because of small samples, we use the Fisher test to test for the significance in differences between PC and Non-PC industries (right part) for all comparisons with more than five NTMs per industry.

4.17. **Politically connected firms benefit disproportionately from energy subsidies.** Chapter 2 documented that large establishments are more likely to benefit from the generous energy subsidies to industry in Egypt. Figure 4.2 shows that among large firms, the few politically connected ones are much more likely to operate in energy-intensive industries. That is, 45 percent of all connected establishments operate in energy-intensive industries, compared to only 8 percent of all establishments. In contrast, there is no statistical difference between the number of connected firms and all establishments operating in low or moderate energy-intensive industries. Likewise, at least one connected firm operates in 81 percent of all high energy-intensive industries. In contrast, connected firms are present in only 41 percent of low energy-intensive industries, and entirely absent in 57 percent.

Figure 4.2 Share of politically connected firms in high and low energy-intensive sectors



Notes: The difference between politically connected and all other firms is significant at the 1 percent level in high energy-intensive industries but not significant in low energy-intensive industries. The percentage of firms in medium energy-intensive sectors has been excluded.

4.18. **Firms operating in sectors with more connected firms are more likely to have access to government land, industrial zones, and bank loans.** There is plenty of anecdotal evidence that

politically connected firms in Egypt have superior access to land and credit.⁷⁵ In the manufacturing sector, access to land includes access to industrial zones, which guarantee several benefits relative to competitors outside of these zones, including tax exemptions from corporate taxes and customs duties, better infrastructure, and more streamlined regulations.⁷⁶ In the following, we test if firms in sectors with a higher intensity of political connections are more likely to obtain land from the government or receive it for free, obtain a bank loan, and/or be located in an industrial zone.⁷⁷ To do this we employ the WBES data between 2004 and 2008 which contains information for all of these variables for about 3,000 firms in Egypt. Firm responses to the WBES are anonymous, so we cannot distinguish connected and unconnected firms directly. However, as with NTMs and energy subsidies, we can identify the detailed 4-digit industries in which politically connected firms are active by supplementing the WBES data with the information on the number of political connected firms per 4-digit sector.⁷⁸ We emphasize that all results reflect the most conservative empirical tests, since we only compare differences in the impact of the intensity of political connections among firms located in the same 2-digit manufacturing sector (e.g., textiles), but in different 4-digit sub-sectors (which vary in the number of political connected firms).⁷⁹ We find that with each additional politically connected firm in a 4-digit manufacturing sector, the probability of obtaining land from the government increases by 1.8 percentage points. Thus, assuming linearity, sectors with five connected firm owners are 9 percentage points more likely to have obtained land from the government than sectors without connected firm owners, which is a significant effect.

4.19. Large firms are more likely to be located in an industrial zone if they operate in politically connected industries which contain a higher number of connected firms. Figure 4.3 (left panel) illustrates how the probability that a large firm with at least 100 employees operates in an industrial zone increases with the number of firms led by a politically connected CEO across 4-digit industries. Note that this result is likely to be driven by the connected firms in these sectors, since large firms are generally much more likely to be politically connected.⁸⁰ It shows that approximately 41 percent

⁷⁵ Reportedly, the government not only sold the land but also guaranteed to connect the land with the necessary electricity, telecommunication, and transport infrastructure; this practice immediately increased the value of land, which the businessmen used as collateral to get bank loans far exceeding the initial purchase value of the land. The past practice of selling prime land below market value in closed deals became apparent in the emergence of numerous court disputes filed against the major real estate developers after the regime change in 2011. These trials aimed to force the real estate developers to revalue past land deals with the state and pay the difference. Several of these disputes have been settled outside courts in recent months (Ahrum Online, various issues).

⁷⁶ Industrial zones in Egypt include qualified industrial zones (QIZs) which guarantee firms duty and quota free exports to the U.S. Abdel-Latif and Nugent (2010) review the impact of QIZs in Egypt and find that large firms disproportionately benefit from the QIZ agreement: in the 17 industrial zones hosting QIZ factories, 88 percent of exports are concentrated in firms with more than 500 workers. Textiles and garments account for 89 percent of QIZ exports, followed by plastics and chemicals.

⁷⁷ Reportedly, the type of activities benefitting from tax exemptions in special economic zones was also demand driven; for example, the list of sectors eligible for tax exemptions was expanded to include media companies after the construction of a new media complex (including the media company's offices, hotels, theatres, and so forth) of a politically connected businessman. The complex was declared a special economic zone shortly after, allowing him to benefit from tax exemptions (Ahrum Online, various issues).

⁷⁸ The WBES data include firm-level data for 95 4-digit (ISIC Rev. 3.1) sectors, including 84 manufacturing and 11 services sectors. All of the 11 4-digit services sectors include multiple connected firms (in hotels and restaurants, retail and wholesale trade), so we restrict the analysis to the 4-digit manufacturing sectors including 3,040 firms.

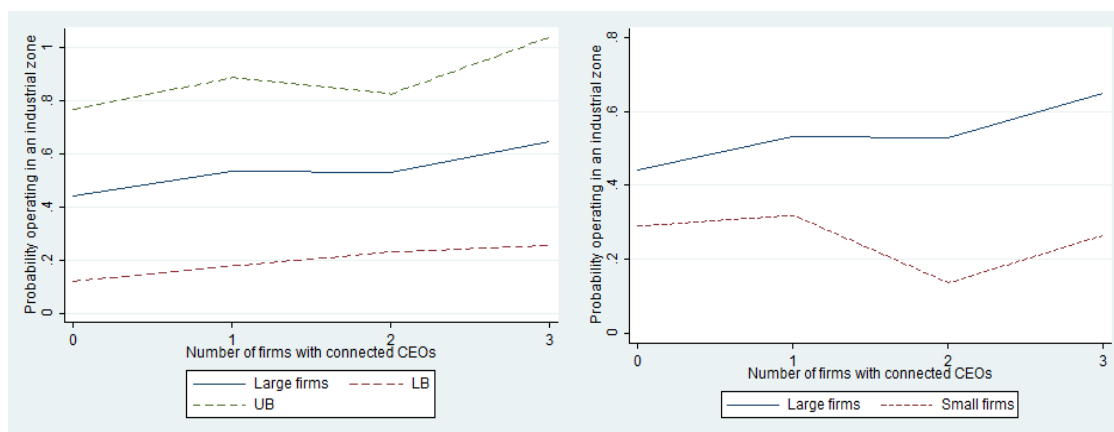
⁷⁹ Table A.6 in the Appendix summarizes the descriptive statistics of the WBES variables across 4-digit sectors with at least one politically connected firm and all other sectors (with zero connected firms). In the following, we test for this correlation more systematically.

⁸⁰ Overall, 85 percent of manufacturing firms with available employment data have at least 100 employees. In contrast, among all manufacturing firm in the WBES, only 33 percent have at least 100 employees (on average, we observe about 12 large firms in a 4-digit manufacturing sector in the WBES data). Thus, large firms in the WBES data are much more likely to be politically connected. We also tested for differences in firm age between connected and unconnected sectors. However,

of all large firms in 4-digit sectors without connected firms operate in industrial zones. This share increases to about 58 (respectively 62 percent) in sectors with one firm (respectively three firms) managed by a politically connected CEO.

4.20. **Among politically connected industries, large firms are more likely to be located in an industrial zone than small firms.** Figure 4.3 (right panel) illustrates how the probabilities that large and small firms operate in an industrial zone increases with the number of firms led by a politically connected CEO across 4-digit industries. Given that the majority of connected firms in our sample are large, the results strongly indicate that it is the connected firms within 4-digit sectors that are located in industrial zones.

Figure 4.3 Large firms are more likely to be located in an industrial zone if they operate in more politically connected industries (left); with connected industries large firms are more likely to be located in an industrial zone than small (right)



Notes: Data are from WBES 2004-2008 and number of politically connected firms. Large firms have at least 100 employees. The graph illustrates how the probability that a large firm with at least 100 employees operates in an industrial zone increases 'the number of firms with a politically connected CEO across 4-digit industries. It is based on a probit regression of a dummy variable if the firm is located in an industrial zone and the number of firms with a politically connected CEO within a 4-digit sector. The regression controls for firm level size, age, export shares, and 2-digit sector dummies. We also include interaction terms between firm size categories (small versus large) and the number of connected firm per 4-digit sector.

4.21. **Connected firms disproportionately benefit from the enforcement of rules.** Politically connected firms also used their connections to minimize their regulatory burden and the threat of predatory behavior by government officials, relative to the burden and threats faced by their competitors. To analyze this situation, we again employ the WBES data, which contains firms' assessments of the implementation of various government policies and regulations. Following Hallward-Driemeier et al. (2010), we also examine within-industry variations of firm reports regarding the regulatory environment. We find that firms in connected sectors report much lower waiting times for construction permits. For example, for the most conservative measure of political connections, the data show that an additional politically connected CEO reduces the waiting time by 51 days. Further, large firms' waiting time is significantly shorter in sectors with more connected firms. Thus, large firms in industries that are less/not connected have to wait substantially longer (between 11 and 48 days, depending on the type of connection) than large firms in sectors with more politically connected firms. Given that politically connected firms are much more likely to be large relative to the average firm in the WBES, the finding suggests that connected firms have access to fact-track enforcements relative to other large firms in the same 2-digit (but different 4-digit) manufacturing sector. Finally, the data indicate that sectors with more politically connected firms exhibit a significantly higher coefficient of variation in the waiting days for construction permits,

the age distribution of politically connected firms and all firms in the WBES data are very similar; the median age among the former is 18, and among all WBES firms it is 19.

consistent with the argument that connected firms are able to access fast-track regulatory services while unconnected firms are not.

The presence of connected firms affects the firms dynamics associated with job creation

4.22. **The theory developed in Aghion et al. (2001) points to an indirect empirical strategy for assessing whether the advantages of political connections constitute a drag on growth in Egypt.** First, if political connections are a drag on growth, it must be the case that the policy privileges of the politically connected firms drive a wedge between the prices of inputs and outputs that they face compared to the prices encountered by unconnected firms. If this is the case, the policy privileges that connected firms receive should account for their better performance relative to unconnected firms. The evidence below shows that this is the case.

4.23. **Connected firms are more profitable because they benefit more from trade protection and energy subsidies.** The joint distribution of NTMs, energy subsidies, and politically connected firms across 4-digit industries accounts for the entire profitability differential between connected and other firms. That is, politically connected firms are significantly more profitable than unconnected firms if their products are protected from import competition, but are not so otherwise. We find similar results once we account for the joint distribution between political connections and energy subsidies in high energy-intensive industries.

4.24. **These results indicate that non-tariff barriers and energy subsidies are targeted to connected firms.** These barriers and subsidies appear to exclude unconnected firms operating in the same sectors. For example, some barriers to entry limit the ability of unconnected domestic firms to benefit from the privileges granted to connected firms. In the case of energy subsidies, firms were required to obtain a government license to legally operate in energy-intensive sectors such as steel and cement. This license was issued by the Ministry of Industry and Trade, or the Ministry of Investment, and had to be renewed annually. The licensing procedure favored politically connected firms, which were both more likely to get the license and less likely to be exposed to predatory behavior (the non-renewal of a license after they had undertaken large sunk investments). In the very profitable energy-intensive and trade-protected cement and steel sectors, by 2010 only a few connected firms had obtained the license guaranteeing access to energy subsidies. In the case of NTMs, some of these measures also required explicit licenses to import specific intermediates from foreign manufacturers (as in the automobile industry). Table 4.3 shows that connected firms are significantly more likely to benefit from authorization requirements for importing. Moreover, enforcement of NTMs requires government action, which has been shown to be uneven across firms operating in the same sector when connected firms are present.⁸¹

4.25. **Given our findings that political connections in Egypt translate into large policy privileges, we also expect to find that the presence of connected firms affects competition and firm dynamics as predicted in Aghion et al. (2001).** Sectors including politically connected firms should see less firm entry and weaker competition among firms. Likewise, sectors dominated by these firms should have a more skewed firm distribution, characterized by a large connected market leader and a potentially large number of small or informal micro firms using vintage technologies to serve local market

⁸¹ In some sectors we observe several politically connected firms, which could in principle lead to competition among them. Instead, however, we observe a web of intertwined ownership structures and co-investments among politically connected firms. For instance, the six (ten) most intertwined businessmen together control stakes directly or indirectly in 240 (322) firms. In addition, 85 firms (18 percent) managed or owned by a connected businessman received significant investments from private equity funds controlled by *other* politically connected investors. Thus, collusion among politically connected firms is much more likely.

niches. In the following, we use our newly constructed dataset to present evidence that is consistent with these predictions.

4.26. Large firms in connected sectors – those with more connected firms – report fewer domestic competitors. The analysis is based on approximately 3,000 firms from the WBES data which report their number of domestic competitors.⁸² The information is observed at the firm-level, allowing us to test for complementarities between the impact of political connections at the 4-digit sector level and specific characteristics of firms in these sectors, such as their size. This is important because large firms in the WBES data are much more likely to be connected. Thus, the data make possible measuring the intensity of domestic competition faced by large firms in connected sectors relative to other large firms in less/non-connected sectors. In other words, the competition results are much more likely to be driven by the politically connected firms (even though we cannot identify them directly in the WBES) when we focus on the sub-group of large firms across all sectors. We find that large firms report fewer domestic competitors when they operate in more connected manufacturing sectors. Moreover, within more connected sectors, large firms are more likely than small firms to report fewer domestic competitors. Taken together, large firms in connected sectors report facing fewer domestic competitors. In sum, the findings suggest that connected manufacturing firms are more likely to be protected from domestic competition than other large firms.

4.27. Low rates of entry in sectors dominated by connected firms – despite higher rents in these sectors – are further evidence that connected firms benefit from barriers to entry. We expect to find that the presence of politically connected firms discourages the entry of unconnected firms, as the latter cannot compete with connected firms' privileges. Thus, unconnected firms would have to specialize in unproductive local market niches in these sectors. While the counterfactual of firm entry in the absence of connected firms in the same sectors is not observable, our empirical strategy is to compare firm dynamics across detailed 4-digit sectors, which differ in their intensity of political connections in a given year and over time. The cross-sector comparison can be biased due to an endogenous selection effect of connected firms into sectors with specific characteristics, such as growth opportunities due to their maturity. The findings in the previous sections help us assess the potential direction of such bias. First, the sizeable rents from energy subsidies, trade protection, and the use of prime land should attract substantial entry into these sectors, implying that the observed correlation between political connections and firm entry is biased downward. Second, the analysis has shown that the presence of connected firms is relatively broad-based across economic activities; including manufacturing and modern service sectors (machinery and ICT services) with arguably higher sector-specific growth opportunities (Table A.4 in the Appendix). Thus, we argue that there is sufficient variation in the distribution of connected firms across sectors with high- and low-growth potential in Egypt in the 2000s to detect whether firm dynamics vary across sectors depending on the presence of connected firms. In addition, we control for sector-specific characteristics that are correlated with sectors' growth opportunities in all estimation specifications (for example, average size and age of establishments in a sector and sector dummies). Thus, we only use 4-digit sectors with comparable characteristics to empirically identify the impact of political connections on establishment entry.

4.28. Sectors with at least one politically connected firm relative to sectors with zero connected firms experience lower firm entry, while the firm size distribution is skewed towards micro firms across sectors and over time. Table 4.3 summarizes the descriptive statistics of the included variables from the establishment census across 4-digit sectors with at least one politically connected

⁸² Table A.6 in the Appendix summarizes the descriptive statistics of the WBES variables across 4-digit sectors with at least one politically connected firm and all other sectors (with zero connected firms). Firms report higher domestic competition in sectors without any politically connected firm(s). In the following, we test for this correlation more systematically.

firm and all other sectors with zero connected firms. Sectors without politically connected firms experienced higher entry (growth) and an increasing share of young firms from 1996-2006, relative to sectors with at least one connected firm. Moreover, the coefficient of variation (skewness) in the establishment size distribution is almost twice as high (50 percent higher) in sectors with at least one politically connected firm, while the share of employment in micro establishments is 1-2 percent higher. The skewness towards employment in micro establishments in connected sectors increases between 1996 and 2006. In the following, we test for these correlations more systematically, estimating the impact of the number of connected firms on the changes in firm dynamics across 4-digit sectors between 1996 and 2006, after controlling for various sector characteristics (such as average establishment size and age and detailed 2-digit sector dummies).

Table 4.3 Comparison between politically connected and non-connected firms

	Sectors with PC CEOs	All other sectors	Sectors with PC owners	All other sectors	Sectors with any PC firm	All other sectors
Level effects in 2006:						
Employment total	25,778	18,195	26,615	13,523	25,524	12,742
Entry rate	6.5%	7.3%	7.0%	7.4%	6.9%	7.6%
Entry rate employment weighted	3.6%	4.6%	4.4%	4.5%	4.2%	4.8%
Share old establishments (age 11-30)	26.1%	24.0%	24.5%	24.1%	25.3%	23.2%
Share micro establishments (5-10 empl)	18.8%	18.8%	19.8%	18.0%	19.8%	17.7%
Coefficient of variation (empl)	2.6	1.5	2.0	1.4	2.0	1.3
Skewness (empl)	8.9	5.8	7.3	5.4	7.4	5.0
Dynamic effects from 1996-2006:						
Growth employment (decade)	54.6%	26.9%	37.6%	29.9%	41.4%	3.7%
Growth entry rate (decade)	0.1%	1.2%	0.2%	2.3%	0.2%	2.9%
Growth entry rate empl-weighted (decade)	0.4%	3.6%	2.0%	4.1%	2.0%	5.0%
Change share young establishments (age<=10)	5.7%	9.1%	7.5%	9.2%	7.4%	13.5%
Change Coefficient of Variation (empl)	2.7	0.5	1.8	-0.3	1.7	-0.4
Change Skewness (empl)	7.5	3.3	6.2	0.9	6.1	0.5

Notes: Connected sectors have at least one politically connected firm while all other sectors include zero connected firms depending on the type of political connection.

4.29. **Firm entry is lower in (more) connected sectors.**⁸³ We find significantly lower (employment weighted) entry rates in sectors with a higher number of politically connected firm owners. For example, an increase in the number of connected firms of any type from zero to nine in a sector reduces the employment-weighted entry rate by one percentage point. Note that the effect is also economically significant given that the overall average entry rate is approximately 4.5 percent. Hence, entry declines by about 21 percent in this case. Thus, firm entry declines when the intensity of political connections across 4-digit sub-sectors within the same 2-digit sector increases.⁸⁴

⁸³ The analysis is based on the establishment census, which includes more than 2 million establishments across all non-agriculture, non-government economic sectors in 2006. The entry rates are computed at the 4-digit sector level and then matched with our information on the number of politically connected firms per sector. Entry rates are weighted by the number of employees in the entering firms relative to the total number of employees in the 4-digit sector.

⁸⁴ Entry rates also declined significantly in sectors with a higher intensity of political connections between 1996 and 2006. As discussed in the industrial policy chapter, there is evidence that the extent of privileges to politically connected firms increased between 1996 and 2006. First, this period witnessed more widespread political connections across sectors. Second, state-business relations intensified as several well-connected businessmen took high political posts, allowing them to directly steer economic policies (Demmelhuber and Roll, 2007; Roll, 2010). Therefore, privileges to politically connected

4.30. **The presence of political connected firms tends to push the majority of unconnected firms towards unproductive small-scale, potentially informal activities.**⁸⁵ Sectors with more connected firms are more concentrated, and have a more skewed size distribution of firms. Moreover, the concentration of jobs in micro establishments is higher and increases over time in connected sectors. In turn, the employment shares of medium and large establishments decline in sectors with a higher intensity of political connections. If we assume that micro establishments are less productive, the result signals that the misallocation of labor across firms increases with the intensity of political connections of the sector. Since most micro enterprises in Egypt are informal, the presence of political connections appears to push the majority of unconnected firms towards informal activities.⁸⁶

4.31. **These findings suggest that unconnected firms are not able to compete with politically connected firms in the same sector because they do not receive the same policy privileges.** Instead, unconnected firms in these sectors are forced to cater to local market niches involving typically small-scale, potentially informal activities. If these activities are also less productive, the dynamic impact of privileges to politically connected firms on the firm size distribution comes with a loss in aggregate productivity, due to a less efficient allocation of resources.

4.32. **The findings thus far provide ample indirect evidence that privileges lead to firm dynamics associated with lower aggregate job growth.** All of these findings – the higher profitability of connected firms due to granted policy privileges and the adverse impact of their presence on competition, entry, and employment in medium and large firms – are consistent with the empirical hypotheses derived from the Schumpeterian growth model of Aghion et al. (2001). They suggest that aggregate employment growth would have been higher if the intensity of political privileges declined. This would necessitate a decline in the intensive margin, measured by the number of firms with a strong political influence within sectors, and the extensive margin, measured by the expansion of politically connected firms into new, initially unconnected sectors.

The presence of connected firms reduces aggregate job creation

4.33. **Employment growth in politically connected sectors between 1996 and 2006 was comparable to other sectors.** Thus, if connected firms indeed have positive employment growth, the effect is offset by the negative employment growth of unconnected firms in these sectors.

4.34. **The nature of our data provides a quasi-experimental setting which allows determining the impact of the entry of politically connected firms into new, initially unconnected sectors.** Of course, we would like to measure directly if sector employment growth would have been higher if the intensity of politically connected firms declined, as suggested by our previous findings. However, the relevant counterfactual, to what extent growth in connected sectors would have been higher in the absence of politically connected firms, is not observable. But we do look at the year in which politically connected firms entered. Therefore, we can observe when connected firms enter into new sectors which were previously unconnected. There are 41 such sectors: 18 service sectors, 16 manufacturing, 8 utilities, and 4 mining sectors. These include several sectors with high growth

firms likely increased over this period, discouraging firm entry into connected sectors over time.

⁸⁵ The analysis is based on the 2006 establishment census. The parameters of the distribution of employment across establishments (coefficient of variation, skewness, and share of micro establishments) are computed at the 4-digit sector level, and then matched with our information on the number of politically connected firms.

⁸⁶ The coefficient of variation and the skewness in the firm size distribution also increased significantly in sectors with a higher intensity of political connections between 1996 and 2006.

potential in Egypt, such as *manufacture of primary cells and batteries, television and radio receivers, wholesale of solid, liquid and gaseous fuels, inland water transport, legal activities, and advertising.*

4.35. **We test if aggregate employment growth over a 10 year period between 1996 and 2006 declined after the entry of politically connected firms into new, initially unconnected (*open*) sectors.** Holding all else constant, entry always increases employment in the sector regardless of whether the entrant is connected or not. Thus, we expect that the entry of connected firms leads to sector employment growth, unless the adverse impact of connected firms on the growth opportunities of their unconnected peers leads to their exit or shrinkage. In contrast, we do not expect to observe the latter adverse effect (or at least expect it to be less pronounced) when connected firms enter into sectors which were already dominated by privileged connected firms in previous years. Therefore, negative aggregate employment growth after the entry of connected firms into previously unconnected sectors implies that the decline in employment in unconnected firms – which cannot compete – outweighs any positive job creation by the connected firm(s).⁸⁷ We test this hypothesis in a difference-in-difference estimation.⁸⁸

4.36. **We find that aggregate employment growth declines once connected firms enter new, initially unconnected sectors.** The economic impact is large. The magnitude of the corresponding coefficient suggests that aggregate employment in these sectors shrinks by 25 percent over the ten-year period from 1996 to 2006. Note that the connected firms did not necessarily enter directly in 1997, so the employment growth might have been positive in earlier years, but then declined substantially due to the sudden presence of the connected firm with access to policy privileges, itself guaranteed a large cost advantage over the existing competitors or potential new, unconnected entrants.

4.37. **These findings provide strong direct evidence that the growth impact of connected firms' entry is more than offset by their adverse impact on the growth opportunities of the majority of unconnected firms that stop growing or exit.** As a consequence, political connections reduce aggregate employment growth in this sector. This conclusion is consistent with the various indirect evidence that political privileges lead to weaker firm dynamics associated with lower aggregate job growth. It is also consistent with the prediction of the model of Aghion et al. (2001), who show that less *neck-and-neck* competition due to large exogenous cost advantages of market leaders reduce aggregate long-term growth. In the case of Egypt, such large exogenous cost advantages are granted by policy privileges such as energy subsidies, trade protection, access to prime land, and biased regulatory enforcement. Even though these policy privileges might help the few benefitting firms grow and create jobs, we show that the aggregate employment impact is negative due to the adverse effects of such policies on competition, and thus on the growth opportunities for the large majority of firms, which are unconnected.

2. Political connections and private sector growth in Tunisia

4.38. **This section uses novel data from Tunisia to demonstrate that costly business legislation in specific service sectors persisted over time to serve the business interests of President Ben Ali and his family.** First, we find that politically connected firms primarily operate in service sectors protected by authorization requirements and FDI restrictions. These restrictive regulations in selected service sectors explain the performance differences between connected and all other firms. Second, the introduction of new FDI restrictions and authorization requirements in narrowly defined

⁸⁷ The estimation procedure and results are outlined in detail in Appendix E.

⁸⁸ The estimation is based on establishment census data from 1996 and 2006, including over 2 million establishments in all non-agriculture, non-government economic sectors. We control for specific sector characteristics such as establishment size and age, and for broad sector dummies in all estimation specifications.

5-digit sectors is correlated both with the presence of connected firms and with their startup, suggesting that regulation is endogenous to state capture. The evidence implies that business regulations in Tunisia were abused as a rent creation vehicle for the president and his family. Notably, most of these business regulations are still in place.

4.39. **In Tunisia, the government erected barriers to entry even as it engaged in economic liberalization.** Tunisia's Investment Law, which was amended several times in the 2000s, was supposed to promote private sector growth and reduce restrictions to FDI. It includes generous tax breaks for firms operating in the offshore economy. In addition, it stipulates the freedom to invest for both foreign and domestic entities. However, it also contains provisions that restrict this freedom, including authorization requirements and FDI restrictions in the onshore economy, which allow the government to control the entry of selected firms in some lucrative service activities.

4.40. **Moreover, the Ben Ali family's involvement in the economy was not a secret.** Tunisia's investment promotion agency advertised his close interactions with the business community as enhancing public welfare. In part because Tunisia registered stable positive growth rates hovering around 4-5 percent per year, Ben Ali also had a somewhat favorable external image. The World Economic Forum repeatedly ranked Tunisia as the most competitive economy in Africa, and the IMF and the World Bank heralded Tunisia as a role model for other developing countries. Yet the Tunisian model had serious flaws. Unemployment and corruption were high, and subsequently contributed to Ben Ali's downfall.

Data

4.41. **The confiscation commission estimates that the combined total value of the confiscated assets of the Ben Ali clan is approximately US\$13 billion,** about one quarter of Tunisian GDP in 2011. In the aftermath of the Tunisian revolution, the assets of the Ben Ali clan were confiscated. The confiscation involved 114 individuals, including Ben Ali himself, his relatives, and his in-laws, and involved the period from 1987 until the outbreak of the revolution. The seized assets included some 550 properties, 48 boats and yachts, 40 stock portfolios, 367 bank accounts, and approximately 400 enterprises, not all of which operate in Tunisia.

4.42. **We combine data on 214 Ben Ali firms confiscated by the Tunisian authorities after the Jasmine revolution with firm census data and information from the Tunisian Investment Law to identify the impact of connected firms' business interests on business regulations.** We obtained a list of 252 confiscated firms from the Tunisian authorities, of which we were able to identify 214 firms with available data in the Tunisian annual firm census (Tunisian Business Register). The census contains information on the size, age, location, and legal form of all private non-agricultural registered firms in Tunisia, including one-person firms without paid employees. The census data are further merged with administrative data from the tax authorities, containing balance sheet information, and information on business regulations from the Tunisian Investment Law from 1993 to 2010. The sample of 214 connected firms is most likely skewed towards the largest and economically most relevant firms since these are easier to identify.

4.43. **Ben Ali firms dominated the telecommunications and air transport sectors in which entry is highly regulated.** Table A.7 summarizes the distribution of politically connected firms in Tunisia across sectors. Most Ben Ali firms operated in services sectors. They dominated the telecommunications and air transport sectors, and were also important players in other transport

sectors and real estate, all sectors in which entry is highly regulated.⁸⁹ In contrast, manufacturing firms accounted for only 13 percent of Ben Ali firms.

4.44. **A direct comparison of the distribution of politically connected firms across countries would suggest that this phenomenon was more widespread in Egypt, especially among manufacturing industries.** These disparities might originate from the different nature of the data. While the number of connected firms should be regarded as a lower bound in both countries, we observe fewer connected firms in Tunisia (214) relative to Egypt (469). The nature of political connections is also different, since the confiscation commission in Tunisia focused exclusively on firms owned by members of the Ben Ali family. In contrast, the Egypt data also include first-tier Mubarak associates – connected businessmen with influential political posts, whose assets were also confiscated in 2011. Despite these differences, the distribution of connected firms across sectors exhibits some similarities. In both countries, connected firms are concentrated in real estate, telecommunications, and transport services. The presence of politically connected firms, however, appears to be more widespread across sectors in Egypt. It is notable that 42 percent of politically connected firms operate in manufacturing in Egypt relative to 13 percent of connected firms in Tunisia. Moreover, authorization requirements and FDI restrictions in Tunisia focused on service sectors in the onshore economy, while trade protection and energy subsidies to industry also profited connected manufacturing firms in Egypt.

Ben Ali firms outperform their peers

4.45. **The 214 confiscated Ben Ali firms appropriated 21 percent of all net private sector profits in 2010.** Profits are measured as operating profits declared to the tax authorities.⁹⁰ In contrast, they accounted for only about 3 percent of private sector output and 1 percent of all wage jobs (Figure 4.4). The high share of net profits is in part due to many firms reporting losses. When only firms reporting positive profits are considered, Ben Ali firms account for about 7 percent of all profits. Still, the statistics demonstrate how a handful of connected entrepreneurs were able to reap a large share of aggregate profits.

4.46. **A few Ben Ali firms account for the lion's share of these profits.** Ben Ali firms are significantly larger than other firms, both in terms of employment and output. They also have higher levels of output per worker, even after looking at within-sector comparisons. Ben Ali firms expand employment and output faster. Their faster growth in labor usage is not matched by a corresponding increase in output, however, such that they exhibit significantly lower growth in output per worker.⁹¹ On average, they do not report significantly higher profits, but are significantly more likely to report losses than non-connected firms. Taken together, the results suggest that only a few Ben Ali firms accounted for the largest share of aggregate net private sector profits in 2010. The group of Ben Ali firms is highly heterogeneous in other dimensions as well. While three connected firms feature in the list of the ten largest firms in Tunisia, 100 connected firms did not report using any paid laborers at any point, and are consequently not included in this table.⁹²

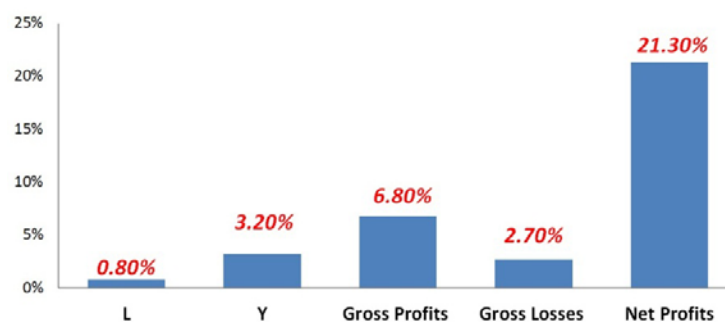
⁸⁹ The aggregate categorizations obscure important variability within broad sectors, as Ben Ali firms are often major market players that account for an important share of output, employment, and profits within subsectors.

⁹⁰ As in any country, we expect that several firms underreport their output, employment, and profits. It is difficult to assess if connected firms are more or less likely to underreport; however, we note that about 100 connected firms in fact did not report positive salaried employment.

⁹¹ Analyzing growth differentials is complicated by the presence of substantial measurement error and survivor bias since our identification of political connectedness hinges on firms surviving up until 2011.

⁹² Some such firms may have served as shell companies for money laundering or to benefit from tax breaks.

Figure 4.4 Macroeconomic significance of connected Firms



Notes: USD:TND exchange rate 1:1.515, data for 2010, L: wage workers (only observations for whom this number is not zero or missing), Y: output, net profits: pre-tax profits declared to the tax authorities (all firms), gross profits=: pre-tax profits declared to the tax-authorities only for firms for whom this is positive. Gross losses: tax profits declared to the tax authorities only for firms for whom this is negative. 100 connected firms did not report using any paid laborers at any point and are consequently not included in the statistics.

Ben Ali firms are protected from competition through entry barriers

4.47. **The Investment Law in Tunisia requires prior authorization from the government in order to operate legally for a number of activities;** including fishing, tourism (travel agencies), air transport, maritime transport and road transport, telecommunications, education, the film industry, real estate, marketing, and health-related industries. If not administered equitably, these authorization requirements can be abused to create market power and stifle competition, both from prospective entrants and incumbents. Anecdotal evidence suggests this happened in the case of the closing of the Bouebdelli School, a highly respected private school from which many of Tunisia’s elite have graduated. This school was perceived to be in direct competition with an international school founded by the Ben Ali family. In spite of widespread public protests, the Minister of Education ordered the school closed for failure to comply with registration regulations.⁹³

4.48. **The Investment Law also stipulates a number of activities for which foreign firms are required to obtain permission from the Investment Commission (CSI),** when their foreign equity exceeds 50 percent of capital. These include transport, communications, tourism, education, cultural production, entertainment, construction, real estate, computer services, and a select number of other services. Obtaining such permission is notoriously difficult. Since 2005, the CSI has been processing between two and three applications per year with roughly half of all applications being successful (OECD, 2012). The list of sectors subjected to restrictions on foreign investment overlaps considerably with those that are subjected to government authorization. We note that many other sectors are also subject to government intervention, but not through the Investment Code.

4.49. **Restrictions on foreign entry likely limit foreign competition and can also be used to direct foreign funds to certain domestic firms.** McDonald’s failed entry into the Tunisian food market is often used to illustrate the Ben Ali family’s hold on specific sectors. McDonald’s exclusion from the Tunisian market followed from their unwillingness to grant the sole license to a franchisee with family connections. The government of Tunisia in turn refused to grant authorization to invest.⁹⁴

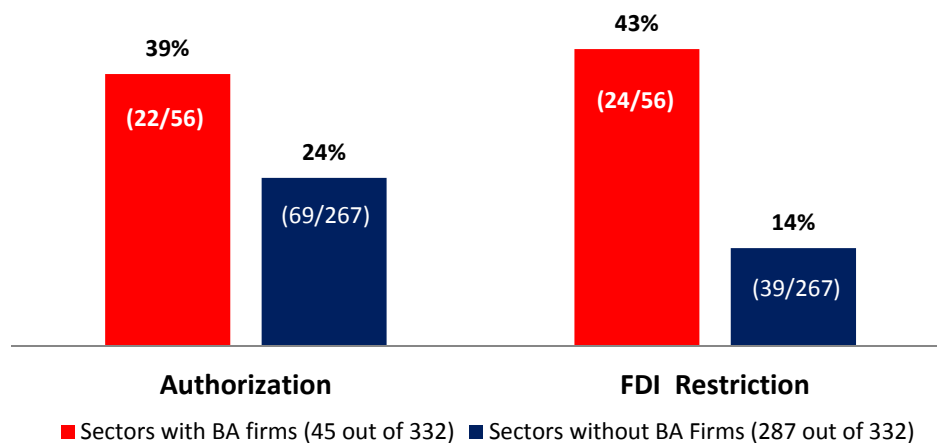
4.50. **Connected firms are more likely to operate in sectors which are subject to entry regulation.** Figure 4.5 illustrates that 39 percent of the sectors with at least one Ben Ali firm require previous

⁹³ Wikileaks cables 09TUNIS372_a and 07TUNIS1489-a: see https://wikileaks.org/plusd/cables/09TUNIS372_a.html, https://wikileaks.org/plusd/cables/07TUNIS1489_a.html, accessed February 23, 2013

⁹⁴ Wikileaks cable 08TUNIS679_a, https://wikileaks.org/plusd/cables/08TUNIS679_a.html, accessed February 23, 2013.

authorization by the government, relative to 24 percent of non-connected sectors.⁹⁵ Similarly, 43 percent of connected sectors are protected from foreign entry relative to only 14 percent of non-connected sectors. Moreover, 64 percent of Ben Ali firms are in sectors subject to authorization requirements and 64 percent are in sectors subject to restrictions on FDI. For non-connected firms the comparable numbers are 45 percent and 36 percent, respectively.⁹⁶

Figure 4.5 Authorization Requirements and FDI Restrictions protect politically connected firms



Notes: Differences between Ben Ali and other firms are measured at the 5-digit sector level (# restricted sectors/total no of sectors). The difference in authorization requirements (Fischer T-test Prob. = 0.04) and FDI restrictions (Fischer T-test Prob. = 0.00) between connected and non-connected sectors is significant at the 5% level.

Entry barriers help explain Ben Ali firms' superior profits

4.51. **Barriers to entry helped create market power for connected firms.** Ben Ali firms only have higher market shares and value added per worker if they are protected by authorization requirements and FDI restrictions.⁹⁷ In sectors covered by the Investment Code but not subject to these regulatory requirements, the differences are statistically negligible once the larger size of connected firms is taken into account. On average, the market shares of Ben Ali firms exceed that of non-connected firms in sectors with authorization requirements and FDI restrictions by 4 percentage points and 6.4 percentage points, respectively. These are sizeable differences considering that the average market share of non-connected firms in sectors subject to authorization requirements is only

⁹⁵ One issue we encountered was matching the activities listed in the Investment Code to specific 5-digit sectors, which do not perfectly overlap. In some cases, the Investment Code provides a more detailed description of activities, whereas in others, the code is more general than the Tunisian NAT 96 classification that we use. With the help of officials at the Tunisian INS we created a correspondence between activities and sectors, but in some cases multiple activities were mapped to the same sector and vice versa. As a consequence, it is possible for some sectors to be subjected to several regulations of the same kind.

⁹⁶ Note that the number of observations on these variables is limited to 64 because we confine attention to enterprises operating in sectors in which the investment code is binding; this reduces the non-connected firm sample to 70,259. This amounts to about 55 percent of the full sample for both connected and non-connected firms. The regressions are also confined to this group of firms.

⁹⁷ The following results are based on regression analysis, including interaction terms between authorization requirements and FDI restrictions (at the sector level) and a dummy variable indication if a firm is politically connected or not. This framework allows testing the hypothesis that Ben Ali firms outperform their competitors when regulatory restrictions are prevalent. All regressions control for 2-digit industry (Tunisian NAT 96 level classification) and year dummies; the sample is confined to activities covered by the investment code. Only firms which report hiring paid workers at some point during the year are included; we exclude the self-employed and those without employees. The sample is confined to 2000-2010 due to lack of profits and output data in earlier years.

0.27 percent. Notably, Ben Ali firms are also significantly larger in sectors with entry restrictions. Ben Ali firms employ 137 percent and 285 percent more salaried employees than non-connected firms when authorization requirements or FDI restrictions are present, respectively. Moreover, we find that the growth differences in these variables between Ben Ali and other firms also fluctuate systematically with the prevalence of regulations.

4.52. **Business regulations helped generating higher profits for Ben Ali firms.** Ben Ali firms are especially more profitable than their peers in sectors subject to authorization requirements and FDI restrictions. In sectors not subject to these restrictions, however, Ben Ali firms make significantly lower profits than their competitors. These results suggest regulatory capture by connected firms.

4.53. **The establishment of new entry barriers was more likely in sectors hosting Ben Ali firms.** The list of activities which are subject to authorization requirements and FDI restrictions changed since 1993; they were supplemented by 22 subsequent presidential decrees, resulting in 73 amendments at the NAT 96 level, which is the 5-digit sector level. Table 4.4 summarizes changes made to the Tunisian investment code between 1994 and 2010 through 22 decrees issued by Ben Ali himself. These decrees introduced new authorization requirements pertaining to 45 sectors and new FDI restrictions in 28 sectors. Table 4.4 (upper panel) shows that connected firms were present in seven (nine) of the 45 (28) sector-years in which new authorization requirements (FDI restrictions) were imposed. The null hypotheses that the likelihood of new FDI restrictions (authorization requirements) does not depend on the presence of connected firms is rejected at the 1 percent (10 percent) significance level. While the number of observations is again small, the data also reject the null hypothesis of independence between the startup of new Ben Ali firms and the introduction of new authorization requirements and FDI restrictions at the 10 percent significance level (Table 4.4, lower panel).

Table 4.4 Correlation between new barriers to entry and the presence of Ben Ali firms

New Regulations and Presence of Ben Ali firms							
<i>Ben Ali Presence</i>	<i>New Authorization Requirements</i>			<i>New FDI Restrictions</i>			
<i>N (All)</i>	<i>N</i>	<i>%</i>	<i>Fisher F-test</i>	<i>N</i>	<i>%</i>	<i>Fisher F-test</i>	
At least one firm	451	7	1.55%	Table Pr	9	2.00%	Table Pr
None	5058	38	0.75%	0.046	19	0.38%	0.000
All	5509	45		P=0.0961	28		P=0.000

New Regulations and Entry of Ben Ali firms							
<i>Ben Ali Entry In the Same or the Subsequent Year</i>	<i>New Authorization Requirements</i>			<i>New FDI Restrictions</i>			
<i>N (All)</i>	<i>N</i>	<i>%</i>	<i>Fisher F-test</i>	<i>N</i>	<i>%</i>	<i>F-test</i>	
At least one entry	168	4	2.35%	Table Pr	3	1.76%	Table Pr
None	5031	41	0.82%	0.043	25	0.50%	0.049
All	5199	45		P=0.0582	28		P=0.0619

Notes: The test for equality is Fisher's Exact T-test. It tests the null hypothesis that the introduction of new regulations referred to in the column heading pertaining to narrowly defined 5 digit sectors is independent of the presence (top row) and start-up (bottom row) of connected firms within such sectors. The entry indicator is a sector-level binary indicator taking the value 1 if a Ben Ali firm entered in the same or following year.

4.54. **A few anecdotal clues support the view that the investment code has been actively manipulated by the Ben Ali family.** For example, *Décret n° 96-1234*, issued in 1996, amended the

investment code by introducing authorization requirements for firms engaging in the handling and transfer of goods in ports and the towing and rescue of ships. The decree also introduced restrictions on FDI for firms involved in the transport of red meat. In the same year, a shipping and logistics company focused on the transport of refrigerated products was established by a member of the Ben Ali family. Moreover, immediately after the entry of a politically connected firm into the cement sector, *Décret n° 2007-2311* was introduced stipulating that government authorization was required for firms producing cement.

Entry barriers in backbone services also limit growth in downstream manufacturing industries

4.55. **Barriers to entry and competition are expected to have reduced the quality of services provided by the few firms authorized to operate in these sectors in Tunisia.** The entry barriers translate into sizeable cost advantages for the few connected firms authorized to operate in these sectors. They lead to a monopolistic market structure that helps the few connected firms shielded from competition to achieve abnormally high profits. Aghion et al. (2001) show that the resulting market structure discourages the incentives of market leaders to improve the quality of their services; hence, it tends to reduce the aggregate service sector performance.

4.56. **While services are an important part of the economy, the results do not directly explain why the generous tax breaks provided to manufacturing firms in the offshore economy did not generate more growth and jobs.** While the model explains the distorted dynamics and firm performances in protected service sectors, it falls short of explaining the modest productivity and job growth of manufacturing firms in the offshore economy. Manufacturing firms in the offshore economy benefitted from generous tax incentives and usually did not have to compete directly with Ben Ali firms. The investment code stipulates that offshore firms – those that export at least 70 percent of their output (Articles 10 and 16 of the code) – do not have to pay profit and turnover taxes. This has helped Tunisia attract foreign investors in spite of the onshore sector being highly protected and largely closed to foreign competition, as discussed below.

4.57. **The protection of Ben Ali firms from competition in Tunisia’s onshore economy is likely to have reduced the quality of backbone services provided to downstream manufacturing firms, limiting their growth.**⁹⁸ The theory of weak links (Kremer, 2001; Jones, 2009) highlights that the performance of manufacturing firms cannot be analyzed in isolation from the performance of non-tradable service sectors. Weak performances in backbone service sectors lead to lower quality services provided to firms in downstream using industries. Hence, despite the generous tax regime, productivity and job growth in the downstream manufacturing industries that use these lower quality services can be limited. Given the sizeable entry barriers in backbone service sectors due to the presence of Ben Ali firms – which primarily operated in service sectors – we would anticipate the potential impact of *weak links* in Tunisia to be significant. The recent work of Marotta, Ugarte, and Baghdadi (2014) suggests that *weak links* led to lower levels of productivity per worker in Tunisia. They further found that firms in inland regions are more likely to be affected by the *weak links* than firms exposed to more international trade.

Barriers to entry limit competition and thus firm dynamics associated with job creation

4.58. **The Schumpeterian growth framework suggests that major policy privileges, such as those granted in the form of entry barriers in Tunisia, distort the firm dynamics associated with job creation.** Chapter 1 documented that the firm dynamics associated with job creation are distorted in Tunisia. Firm turnover is low and employment skewed towards small-scale, unproductive activities

⁹⁸ Arnold, et al. (2012) document that service trade liberalizations - the removing restrictions on FDI in India’s service sectors over the previous decade - led to large productivity gains in downstream using manufacturing industries.

especially in the service sectors. Both stylized facts are symptoms of a lack of private sector competition. Both are also consistent with the predictions of the adopted Schumpeterian growth framework. Aghion et al. (2001) predict that sectors dominated by Ben Ali firms should have a more skewed firm distribution characterized by a large connected market leader and a potentially high number of small and informal micro firms using vintage technologies to serve local market niches. What is more, the large cost advantages of a few connected firms due to the biased legislation in Tunisia are predicted to limit *neck-and-neck* competition among firms, reducing their incentives to invest in new, foreign technologies and hence limit aggregate job growth. All together, the findings in this section suggest that at least in part the distortions to firm dynamics and competition in Tunisia documented in Section Chapter 1 originate from legislative barriers to entry that benefitted a few connected firms.

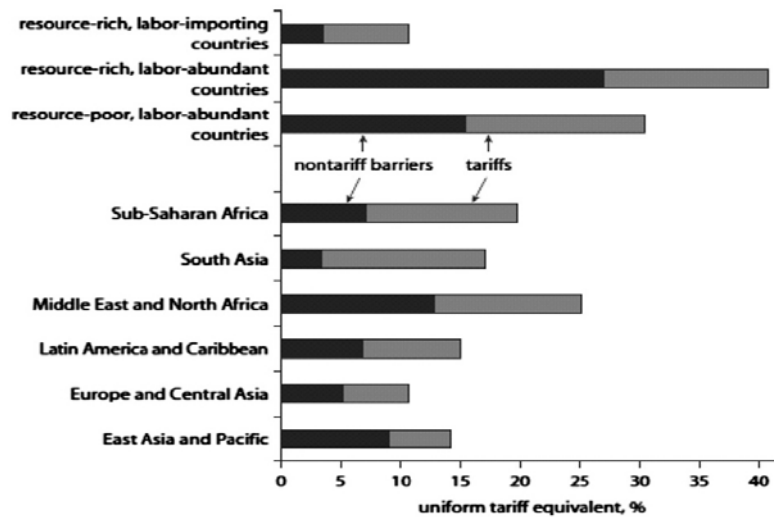
3. Evidence from other MENA countries

4.59. **The results so far show that politically connected firms in Egypt and Tunisia received large privileges that distorted competition and thus firm dynamics associated with job creation.** What is more, the evidence in Tunisia suggests that firms connected to Ben Ali used their political influence to affect the regulatory environment to their favor. In addition, there is direct evidence in Egypt that the presence of firms connected to Mubarak led to similar capture and also to lower aggregate job creation.

4.60. **This section argues that policy privileges and their adverse impact on regulations, competition, firm dynamics, and ultimately job creation are also frequent in other countries of the MENA region.** We do not have comparable detailed data listing politically connected firms for other MENA countries. However, there is ample qualitative evidence from other countries in the region which we review. The section points out that the system of closed deals between the state and businesses in Egypt and Tunisia are not outliers, but rather representative of the way business is conducted in MENA.

4.61. **The frequent use of non-tariff measures in Egypt documented in Section 1 is representative for oil-importing MENA countries.** Malik (2013) indicates that non-tariff measures are more frequently used in MENA countries than in other regions and argues that they are likely exploited to protect connected firms from import competition (Figure 4.6).

Figure 4.6 Non-tariff barriers are frequently imposed in MENA



Notes: from Malik (2013). Figure show the average tariff equivalent value of tariffs and non-tariff measures by region of the world and categories of MENA countries by level of endowment.

Box 4.1 Iran: Privatizations without the private sector

Between 2006 and 2010, Iran engaged in a large and wide-ranging privatization program with a goal of privatizing 80 percent of the public sector. The program had the blessings of Ali Khomeini, Iran’s leader and supreme jurist, who formulated the 80 percent privatization goal.⁹⁹ By late 2009, the government had divested over 800 trillion rials (about US\$80 billion) in more than 370 state-owned enterprises (SOEs), including petrochemical plants, fuel refineries, airlines, banks, insurance companies, telecommunication companies, and so forth. However, in 2010 an Iranian parliamentary commission on privatization found that among all the SOE assets divested since 2006, only about 13 percent of the shares went to the private sector. The remainder of the shares was transferred to what constitutes the pseudo or parastatal state, including military firms, pension funds, state-linked investment and holding companies, endowed foundations, and recipients of the “Justice Shares” program. Harris (2013) shows how different political economy factors have shaped the pseudo-privatization process in Iran and the distribution of privatized assets to various constituencies between 2006 and 2010.

“Justice Shares” and the social politics of privatization. Following his election in 2005, President Mahmoud Ahmadinejad announced that the SOE privatization program, legitimated by Iran’s supreme leader through an executive order, would move forward but with the benefits distributed to the people via a program called “Justice Shares”. The program was designed such that the bottom six income deciles of the population were eligible to buy “justice shares” of the privatized SOEs; the bottom two income deciles were able to buy shares at half their face value, and the third to sixth deciles were permitted to buy “justice shares” at full price (payable over ten years). However the program was expanded to various groups while it was implemented; these included low-income villagers and nomads, public sector retirees, beneficiaries of the Imam Khomeini Relief Committee and other welfare organizations, and families with martyr status. These groups represented already existing categories of beneficiaries within the Iranian welfare system. The Iranian Parliament Research Center found that among 264 privatized SOEs initially valued at US\$54 billion, over 68 percent of shares went to “justice shares.” Harris (2013) further argues that Ahmadinejad’s push for privatization constituted a strategic component of the president’s public relations campaign against its critics.

Pension funds and pseudo-privatization: Harris (2013) suggests that pension financing in Iran created a sizable interest group for pseudo-privatization, namely the Iranian middle class and formal labor force. Fiscal pressures due to an overly generous system pushed the Social Security Organization (SSO) to become more active in the acquisition of SOEs, both in the stock market and in negotiations over government debt. In 2001, for instance, the government transferred assets worth US\$400 million to the SSO to cover mandated

⁹⁹ This section is based on Harris (2013).

obligations to pensioners. In 2011, the SSO claimed that the fund was owed nearly US\$24 billion by the government, pointing to a high likelihood of future demands for pseudo-privatization from the SSO and other pension funds.

Privileged access to SOE privatization for the military. The military establishment (retired and acting) benefitted largely from privileged access to privatized SOEs from 2006-2009. Harris (2013) documents how large divestment scandals involving privileged access to privatization for the military made front pages amid post-election street demonstrations in 2009. For example, 51 percent of the Telecommunications Company of Iran was sold to a conglomerate linked to the Islamic Revolutionary Guards Corps (IRGC) Cooperative Foundation, a large investment company and service contractor. The auction was limited to only two bidders, with the second linked to the *Basij* (voluntary militia) investment cooperative. Hence, two military parastatals were competing for a major share in the lucrative domestic telecom market. The International Exposition Center was also transferred to the Armed Forces Social Security Organization.¹⁰⁰

Political connections and patronage in Yemen

4.62. **Large government spending on maintenance of oil infrastructure has benefitted a small group of Yemeni companies and individuals.**¹⁰¹ Revenues from oil exports substantially contributed to economic growth and imported goods subsidies in the years before 2011. However, the government spent US\$ billions over the past three decades on maintenance of oil infrastructure due to the cost-inflation actions of a small, well-connected business elite. These elites are local intermediaries that connect foreign oil companies with local governments; they have either close ties to former President Saleh and his subordinates, or to powerful tribal sheikhs. Owners of dominant oil-related service providers in engineering and construction, transport and logistics, facilitation, and security sectors are relatives of, or closely connected to, the former president, military generals, and ministers. The most lucrative aspects of the energy sector are oil exports and fuel imports, which in turn are controlled by powerful persons including the former president, sheikhs, and military commanders. Their behavior leads to inflated production costs, lost revenues, diesel smuggling, and likely diminish the multiplier effect of investment in the sector.

4.63. **A handful of firms connected to the military or the former president control the production of water-consuming *Qat* and the lucrative food import market.** Insecure food and water supplies are chronic issues in Yemen. Two problems worsen the situation. First, the production of a water-consuming narcotic leaf, *Qat*. Second, the dominance in the food import market of a small number of private and public players with ties to the regime of former President Saleh. Reforming the water sector has proved to be extremely difficult as the direct beneficiaries of *Qat* production are the Saleh family and other landowners with significant stakes in the political regime. Moreover, Yemen has to import nearly all of its wheat and rice, the two most important staples of national diet. Major importers are a military-run firm (Yeco), and three private entities of which former President Saleh is a shareholder. These few connected firms reportedly influence the regulations in the sector to their own favor.

4.64. **The lucrative telecommunications sector in Yemen has been beset with government monopoly, privileges to politically connected firms, and opacity since market liberalization began in the 1990s.** The state-run public telecommunication corporation (PTC) has been the sole provider of broadband Internet in the country. While the telecom market appears to be competitive when

¹⁰⁰ Harris (2013) also documents how the engineering arm of the IRGC, Hatam al-Anbiya, (which emerged during the Iran-Iraq war and was subsequently involved in postwar reconstruction) has over the past decade (along with its subcontractors) replaced foreign firms in the development of oil and gas fields, pipeline projects and highway and tunnel construction.

¹⁰¹ The following analysis is based on a series of papers analyzing political patronage in different economic sectors in Yemen produced by the Chatham House (2013).

looking at the market shares of three major private and public operators, most entrants in the sector were linked with the former president's family and his close connections. The first two private mobile licenses were granted to business groups supported by, or financially and personally connected to, former President Saleh. The third and last private mobile license was awarded to a company whose ultimate owner remains opaque and is widely seen as an attempt by the Saleh family to take a stake in the lucrative telecom market. Further, former President Saleh and his relatives are widely rumored to own shares in the sole public mobile operator, Yemen Mobile. It has increased its share of subscribers due to substantial government assistance. Some of these supports include applying lower tariffs; privileged access to private infrastructure networks built by other operators; compelling entire ministries to use Yemen Mobile's services; and direct intervention from the former president by refusing import and export licenses crucial to the day-to-day business of other operators. Given the importance of the lucrative sector, it remains to be seen whether the state will allow fairer competition among current and future players in the market.

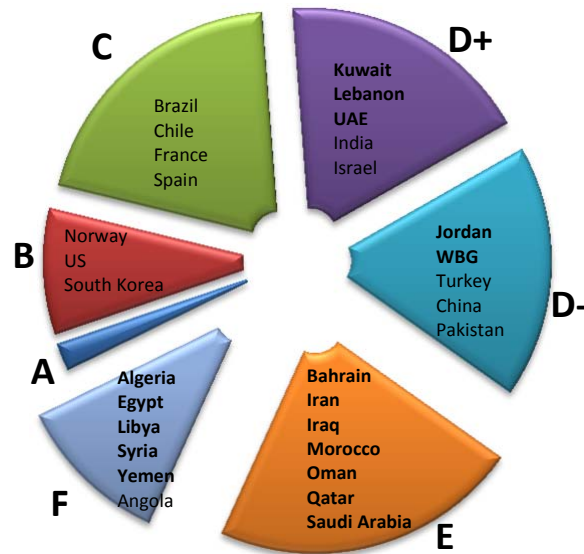
4.65. The structure of Yemen's financial sector in 2012 privileges a small group of politically connected firms. Yemen's formal banking system was small, underdeveloped, poorly regulated, and limited to a small group of elite actors, all of whom had a close relationship with former President Saleh. The banking system is accessible only to the tiny middle class and wealthy elites. This restrains the growth potential of non-connected firms. While the private sector accounts for the largest share of formal banking, its few major financial institutions were founded by elites with strong connections to Saleh's family. The central bank's upper management is well-respected by international institutions, but the bank itself is reputedly used to launder the profits of illicit activities. Moreover, it is hamstrung by poor government fiscal position and limited foreign currency reserves. The informal banking system, on the other hand, is reportedly as large as its formal counterpart; it serves as the source of microfinance, for instance, for firms in food production and water merchants.

Governance and corruption indicators

4.66. The relative prevalence of the role of privileges in MENA can also be characterized through a number of qualitative governance indices, especially in regards to the military sector. For instance, the Transparency International (TI) Government Defence Anti-Corruption Index analyzes corruption risk in defense establishments worldwide. This index assesses and compares levels of corruption risk and vulnerability across countries. TI assessed 82 countries in 2012 and classified each country in a category¹⁰² from A to F, with A being the lowest corruption risk and F the highest. The countries included in this index accounted for 94 percent of global military expenditure in 2011. TI's evidence suggests that poor rankings are associated with patronage networks. The report found that networks based on close family ties between the military and businesses and restrictions on public debate and civil society freedom are features of most MENA countries. All of the MENA countries assessed have high to critical risk of corruption (categories D, E or F). Out of these 18 MENA countries, twelve were placed in category E and F, corresponding to very high or critical corruption risk (33 percent of all countries); these include Egypt, Algeria, Libya, Syria, and Yemen, along with non-MENA countries like Angola. Three were ranked D+: Kuwait, Lebanon, and UAE, along with countries like India, Israel and Thailand (18 percent of all countries surveyed); and two were placed in category D-: Jordan and West Bank and Gaza, along with countries like China, Pakistan, Russia, and Turkey (18 percent of all countries surveyed). Figure 4.7 lists the remaining MENA countries according to their ranking.

¹⁰² These bands are based on scores from an assessment consisting of 77 questions—for each question, the government was scored from 0-4. TI considered a range of institutions in each country: the defense and security ministries, and armed forces in each country, including any other government institutions with the potential to influence levels of corruption risk in the sector.

Figure 4.7 Transparency International: Defence Anti-Corruption Index



Source: Transparency International: Government Defence Anti-Corruption Index.

4.67. **Patronage networks between the military and business are common features in most MENA countries.** Looking at the financial risk subindex of TI’s Government Defence Anti-Corruption Risk Index allows us to refine our qualitative assessment of MENA countries. Countries in the report were categorized into five risk areas: political, financial, personnel, operations, and procurement. Financial corruption risks are linked to the abuse of large, potentially secretive defense budgets and asset disposal and links to businesses. Countries were asked 5 questions (2 for asset disposal and 3 regarding links to businesses); scores were associated according to the responses.¹⁰³ TI reports that military institutions’ commercial interests (military ownership of businesses) creates substantial conflicts of interest and thus an increased risk of corruption. The results for MENA are summarized in Table 4.5. Military-owned businesses are common in 11 MENA countries (out of 18). For example, in Jordan, TI reports that in recent years the line between business and the military has become blurred with the government’s efforts to focus more on profit-generating activities. Anecdotal evidence indicates that this closer relationship between business and military actors has not been accompanied by adequate controls. There is no evidence of military institutions owning commercial businesses at a significant scale in Morocco, Tunisia, and West Bank and Gaza (equivalent to only 1 percent of the defense budget or less). Still, there are reports of military personnel engaging in unauthorized private enterprise in Morocco. In Tunisia, while the armed forces did not appear to own businesses or engage in illicit economic activities, security forces exploited their political power to own commercial businesses and attain licenses and other privileges during the previous regime. Military-owned businesses exist and are lacking scrutiny in Iran and Iraq.

4.68. **There is a severe lack of institutional controls to contain corruption in defense in a number of MENA countries.** There is no evidence of institutional activity and transparency to prevent corruption in the disposal of assets for defense. Military-owned businesses¹⁰⁴ are prevalent in each

¹⁰³ 4 = High transparency; strong, institutionalized activity to address corruption risks, 3 = Generally high transparency; activity to address corruption risks, but with shortcomings. 2 = Moderate transparency; activity to address corruption risks with significant shortcomings. 1 = Generally low transparency; weak activity to address corruption risks. 0 = Low transparency; very weak or no activity to address corruption risks.

¹⁰⁴ Civilian businesses and defense companies owned, in whole or part, by the government defense establishment or the armed forces. This does not include private businesses lawfully owned by individuals in the defense establishment.

country, and are characterized by a complete lack of transparency and absence of any form of oversight. For example, the military in Egypt has considerable economic interests and assets, estimated at between 10 to 40 percent of the country's economy, according to TI. The profits of these firms are deemed "national secrets."¹⁰⁵ In Algeria, an anti-corruption law attempts to prohibit participation of the military in corrupt private enterprises, but this type of illicit activity is still common practice due to the lack of implementation of this law. In Syria, there is no evidence that military-owned businesses are subject to any scrutiny or auditing processes. The entire budget of the military is "off-budget." Defense and security institutions have ownership of several commercial businesses, which are not independently scrutinized.

Table 4.5 Financial corruption risk sub index: Asset disposal and links to business, MENA countries

Countries	Asset Disposal		Links to Business		
	Asset Disposal Controls	Asset Disposal Scrutiny	Mil. Owned Businesses Exist	Mil. Owned Business Scrutiny	Unauthorised Private Enterprise
	Band D+				
Kuwait	4	4	4	..	2
Lebanon	0	0	2	2	2
UAE	2	0	3	2	4
	Band D-				
Jordan	1	2	1	1	2
WBG	1	2	1	1	1
	Band E				
Bahrain	1	1	4	..	3
Iran	0	1	1	1	0
Iraq	0	0	0	0	1
Morocco	1	0	4	..	1
Oman	0	1	4	..	4
Qatar	1	0	2	0	0
Saudi Arabia	2	0	2	1	0
Tunisia	1	0	..	4	2
	Band F				
Algeria	0	0	0	0	2
Egypt	0	0	0	0	2
Libya	0	0	..	0	0
Syria	0	0	0	0	0
Yemen	0	0	0	0	0

Q 22-How effective are controls over the disposal of assets, and is information on these disposals, and the proceeds of their sale, transparent?

Q 23-Is independent and transparent scrutiny of asset disposals conducted by defence establishments, and are the reports of such scrutiny publicly available?

Q 30- Do national defence and security institutions have beneficial ownership of commercial businesses? If so, how transparent are details of the operations and finances of such businesses?

Q 31- Are military-owned businesses subject to transparent independent scrutiny at a recognised international standard?

Q 32-Is there evidence of unauthorised private enterprise by military or other defence ministry employees? If so, what is the government's reaction to such enterprise? Hint: Such enterprises may operate under the pretence of being part of official military activity.

Source: Transparency International: Government Defence Anti-Corruption Risk Index.

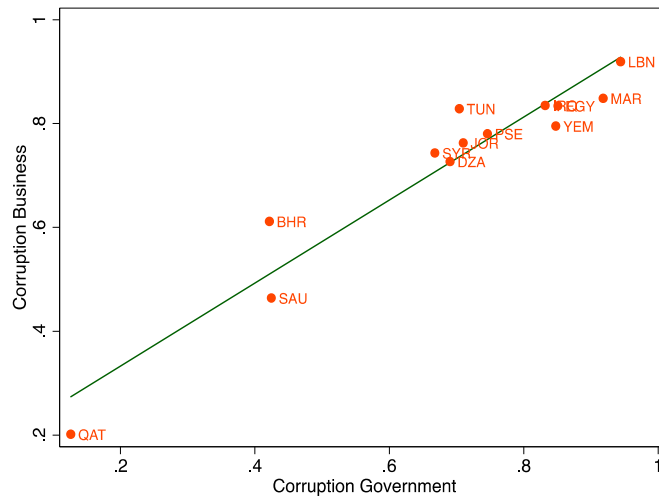
4.69. **Public perceptions of corruption in business are strongly correlated with perceptions of government corruption in MENA.** The favors exchanged between business and political elites include official bribes, illegal funding of political campaigns, and the manipulation of the financial markets for the benefit of both firm and government insiders. These favors have sometimes also been documented in the media, influencing public opinions. Figure 4.8 reveals the consequences: public perceptions of corruption in business are strongly correlated with perceptions of government corruption. As a result, popular perceptions about business elites became negative in the region in the years before the recent uprisings. For example, a Pew survey reveals that in 2010 corruption was the top concern of Egyptians, with 46 percent listing it as their main concern, even ahead of a lack of democracy or poor economic conditions (Pew, 2011).

4.70. **Also, changes in the corruption ratings of MENA countries in the overall Transparency International corruption index confirm popular perceptions.** In 2005, Egypt ranked 70, Tunisia ranked 43, Libya ranked 117, and Yemen ranked 103, out of 158 rankings on TI's Corruption Perceptions Index (CPI). Perceived corruption increased markedly in the following three years. In

¹⁰⁵ This also explains why we were unable to obtain information on politically connected military firms in Sections 1 and 2.

2008, Egypt dropped to 115, Tunisia to 62, Libya to 126 and Yemen to 141, out of 180 rankings on the CPI.

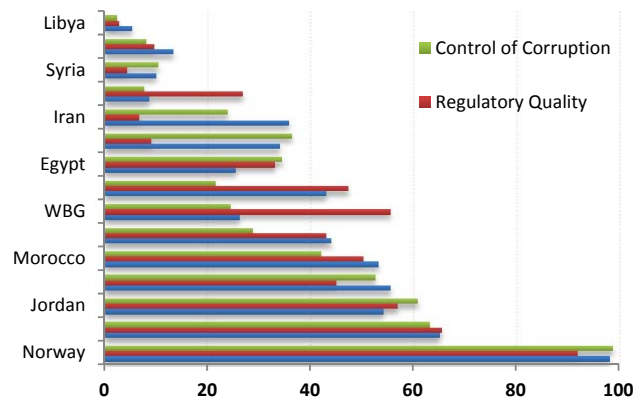
Figure 4.8 Perceptions of corruption in Government and in Business, Arab Countries, 2011



Source: Transparency International Corruption Perception Index; in Diwan and Nabli (2012).

4.71. **Governance indicators suggest that MENA lags behind other regions.** The World Bank Governance Indicators measure government effectiveness, regulatory quality, and control of corruption. Figure 4.9 reports the relative performance of MENA countries. MENA countries are typically ranked in the bottom 40 percent worldwide in all four dimensions.

Figure 4.9 Worldwide governance indicators: percentile rank (normalized to 1-100)



Source: World Bank's Worldwide Governance Indicators.

4. What explains the different outcomes in MENA and East Asia?

4.72. **The analysis suggests that privileges limit job creation in MENA.** The report provides novel empirical evidence on how business regulations in MENA countries are distorted to protect the interests of a few politically connected firms. The results further suggest that these political privileges tend to reduce competition and job creation.

4.73. **However, the occurrence of politically connected firms is not specific to MENA economies.** There is also evidence that politically connected firms were common among East Asian countries at

the time when their economies started to grow at double-digit rates (see the discussion on South Korea in Chapter 3). What is more, the governance framework of East Asian countries at the time appears to be comparable to governance levels among MENA countries. How can we explain the different experiences of these two regions? A comprehensive answer to this important question is beyond the scope of this report. Nevertheless, the theoretical and empirical framework employed in this chapter point to potential explanations.

4.74. **The extent to which political connections hampered competition differed in both regions.** Chapter 3 provides two different arguments that politically connected firms in East Asia indeed faced more competitive pressures, forcing them to become more cost efficient and grow.

4.75. **First, there is evidence that political connections were not sufficient for East Asian firms to escape competition.** The previous analysis has shown that politically connected firms in Egypt and Tunisia were able to transform their connections into firm-specific privileges. They found ways to exclude their competitors from access to these privileges and made higher profits. Chapter 3, however, suggests that government support in the form of subsidies, credit, and other means in East Asian countries was granted at the industry rather than the firm level. Thus, politically connected firms still encountered higher domestic competition and higher firm entry into their sectors once they made high profits (Aghion, et al., 2012).

4.76. **Second, Asian countries credibly linked privileges to performance targets; even those that benefitted insiders and cronies.** Chapter 3 documents that in South Korea a few large businesses families controlled large parts of the economy. These families were often also politically connected through family members in high positions in the ruling party or the bureaucracy (Kang, p. 189). Section 1 reveals similar structures in Mubarak's Egypt.¹⁰⁶ Nevertheless, Chapter 3 provides evidence that in East Asia politically connected firms still had to meet performance (export) targets to continue to benefit from industrial policies.

4.77. **Taiwan provides an example of the enforcement of performance targets in East Asia.** It conditioned its sector subsidies on performance criteria, such as export growth, and performance was regularly reviewed. One target sector, the video industry, fell slightly below its target growth and the government withdrew support. As a result, three large firms went bankrupt and in contrast to other East Asian countries, the industry never developed in Taiwan. However, the example sent a clear signal to firms in all other sectors that benefitted from industrial policy support.

4.78. **East Asia's export orientation exposed firms to competition in highly contested global markets.** Even if politically connected firms faced only a few domestic competitors, which was the case initially in South Korea, they had to meet credible performance targets to continue to benefit from government support. To a certain extent, this policy offset the initial lack of domestic competition. In other words, East Asian governments imported competition through their focus on exports. The destination of exports may also have mattered. East Asian firms targeted highly contested export markets in the US and EU. In contrast, manufacturing exporters in the Middle East often target local market niches in other Middle Eastern or African markets, which are typically less contested. For example, pharmaceutical companies in Jordan are the only foreign firms that are allowed to sell medicines in Algeria.

4.79. **In other words, sector-specific policies in East Asia tended to offset governance challenges whereas in MENA sector-specific policies may have reinforced those challenges.** Thus, while the overall governance framework was comparable in both regions, there is evidence that East Asian

¹⁰⁶ One might argue that the political influence of connected businessmen was still stronger in Egypt, since some of these businessmen were ministers and did not have to rely on the influence of family members to direct economic policies.

countries designed industrial policy to mitigate policy distortions in the few targeted sectors, while firm-directed industrial policies worsened policy distortions in MENA. Moreover, Chapter 3 argues that the costs of catering to vested interests for government officials were higher in East Asia because bureaucrats were committed to, and benefitted directly from economic growth.

4.80. **Finally, in a Schumpeterian world, the impact of privileges to politically connected firms on growth also depends on countries' barriers to innovation.** The process of foreign technology adoption is costly and risky. Therefore, firms are likely to use cheaper options to escape competition if they exist. Political connections provide such an option. More specifically, in the Schumpeterian growth framework, firms are more likely to use their connections if the expected costs of seeking policy protection are lower than the costs of innovating. The argument essentially indicates that the costs to lobby for policy protection were higher in East Asian countries due to their industrial policy design and complementary reforms of the public sector. At the same time, however, firms are also more likely to rely on their political connections to escape competition if they face higher barriers to innovate. Thus, for any given level of governance, growth in a country is more likely to suffer from privileges if firms' costs to innovate are higher. The adopted Schumpeterian growth framework predicts that, among two regions (such as MENA and East Asia) with the same level of governance, the adverse impact of privileges on growth is stronger in the region where firms' face higher costs to innovate. Given a higher regulatory burden for firms to innovate and MENA countries' weaker integration into global markets (through trade or FDI), we should expect higher costs for MENA firms.