Journal of Development Economics 180 (2026) 103697

Contents lists available at ScienceDirect

Journal of Development Economics

journal homepage: www.elsevier.com/locate/devec

Regular article

Connected national capital: Corporations in colonial and independent Egypt☆

Cihan Artunç [a], Mohamed Saleh [b,*]

[a] Middlebury College, United States of America
[b] London School of Economics, United Kingdom

ARTICLE INFO

JEL classification:
F54
G38
N45

Keywords:
Political connections
Firm dynamics
Colonialism
Industrial policy

ABSTRACT

We use a newly assembled dataset covering all Egyptian corporations, their founders, and political officeholders, to demonstrate the differential impact of political connections on firm performance across two distinctive political and economic contexts. Before Egypt's independence in 1922, political connections reduced firm profitability, as connected firms were perceived to be aligned with the anti-colonial, nationalist movement, unsettling investors. After independence, connections improved firm outcomes by granting preferential access to incorporation and shielding connected companies from competition. These dynamics reflect the shift from a laissez-faire colonial regime to a nationalist industrial policy that selectively favored politically connected firms.

Businesses can secure significant benefits by cultivating close ties with politicians. Firms may seek connections to gain access to state resources, ease regulatory burdens, and shield themselves from competition. However, these ties can also expose firms to political risks or interference in their management. The effect depends critically on the institutional environment: who holds political authority and how that authority interacts with business. In some regimes, connections confer privileged influence over discretionary policy. In others, associating with politicians constrained by external actors – or openly hostile to them – can become a liability. How returns to connections shift when institutions undergo major transformations remain understudied. Decolonization presents a particularly critical case in transferring policymaking from a distant colonizer to newly empowered domestic elites. This transfer expanded opportunities for state-business cooperation but also heightened risks of elite capture. Tracing how the returns to political connections evolved across this transition offers insight into the economic consequences of decolonization and the trade-offs faced by late industrializers.

We investigate these dynamics in Egypt between 1890 and 1950. Its corporate sector operated under two sharply contrasting regimes: a colonial rule dominated by British authorities, committed to laissez-faire, and a post-independence system where policymaking moved to domestic actors, who pursued nationalist economic goals. In the colonial period, connections between corporations and Egyptian politicians were uncommon. After independence in 1922, Egyptian policymakers pursued a modernization agenda to promote a national private sector.[1] The state selectively rationed who could set up corporations, which led to a remarkable increase in the proportion of politically connected firms (Fig. 1).

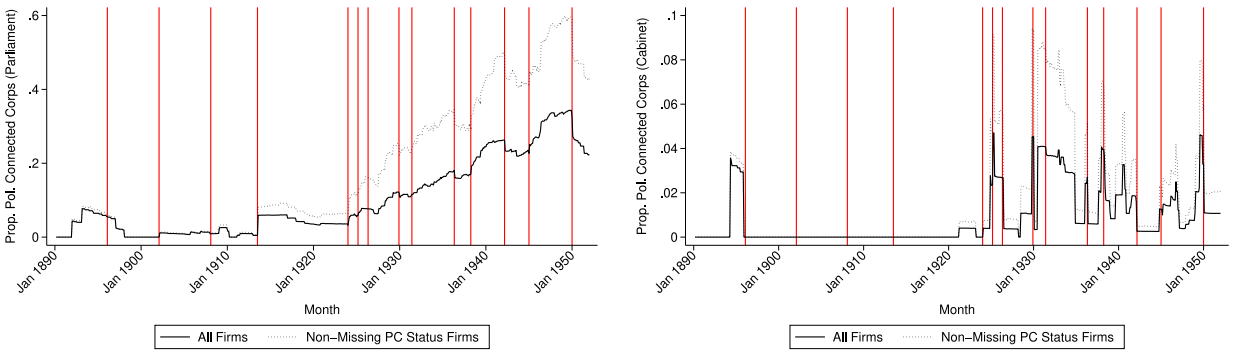
We address this question by assembling a novel, fine-grained dataset that spans the universe of Egyptian corporations (796 firms), their founders, as well as Egyptian political officeholders (Members of Parliament and Cabinet) from 1890 to 1950. This extensive dataset covers both publicly traded and privately held corporations across six decades – an unusually long period in this literature – encompassing both the colonial and postcolonial eras. We measure political connections as time-variant, defined by whether at least one of a corporation's founders served as a political officeholder during a given period. Our primary empirical analysis investigates the effect of these connections on firm profitability, approximated by annual dividend payments (observed for 331 firms in 1898–1939), since Egyptian law mandated that all corporations pay dividends if they achieved positive net earnings

☆ We are grateful to the excellent research assistance by Félix Bajard and Eoin Dignam. This paper is supported by the National Science Foundation, United States under the grant NSF SES 1559273. We benefited from presenting this paper at AALIMS-MIT 2021 Conference on the Political Economy of the Muslim World, IAST-Sciences Po Conference in Political Science and Political Economy, Goethe University Frankfurt, Yale Economic History Conference, Caltech Early Modern Group, Ecole Normale Supérieure de Lyon, New Economic School, University of Paris I Panthéon-Sorbonne, University of Southern Denmark, University of St Andrews, University of Manchester, LSE Department of International Development, Bilkent University, CEPR Economic History Symposium 2024, and American University in Cairo.

* Corresponding author.
E-mail addresses: cartunc@middlebury.edu (C. Artunç), m.saleh@lse.ac.uk (M. Saleh).

[1] There was no outright nationalization during this period (1922–52).

https://doi.org/10.1016/j.jdeveco.2025.103697
Received 15 May 2025; Received in revised form 28 November 2025; Accepted 1 December 2025
Available online 5 December 2025



(a) Founder-Members of Parliament (b) Founder-Members of Cabinet

Fig. 1. Proportion of Politically Connected Corporations in 1890–1950.
Notes: Panel (a) shows the monthly proportion of corporations that have at least one founder who is a serving MP during the month. Panel (b) shows the monthly proportion of corporations that have at least one founder who is a serving MC during the month. The solid line shows the proportion out of all alive corporations in a given month-year, whereas the dotted line shows the proportion out of alive corporations with non-missing political connection status. We define political connection status as missing after 20 years (240 months) following the month-year entry of the firm. The vertical lines in panel (a) indicate the general parliamentary election dates of the upper house in 1890–1913 (which are close to those of the lower house), the unicameral house in 1913–1923, and the lower house in 1924–1950.

above a certain threshold. To provide a credible causal estimate under this kind of staggered treatment, we use the De Chaisemartin and d'Haultfoeuille (2024) (DCDH) difference-in-differences estimator. This estimator is particularly appropriate for our setting as it accommodates non-absorbing treatment – that is, firms both gain and lose political connection status over time – and permits heterogeneous treatment effects across firms and years, as well as past connection status to affect current outcomes. This DCDH estimator makes two sets of comparisons. First, among firms that were initially unconnected, we compare firms that gained connection ("joiners") to firms that remained unconnected. Second, among firms that were initially connected, we compare firms that lost connection ("leavers") to firms that remained connected. The identification assumption is that switchers and non-switchers had similar trends – not necessarily levels – of firm profitability, in the absence of switching connection status. This assumption is violated if, among initially unconnected firms, founders of firms with higher profitability growth were more likely to enter politics. Or if, among initially connected firms, politician-founders of firms with lower profitability growth were more likely to exit politics. The pre-treatment trends in both the colonial and post-independence periods support the parallel trends assumption. A supplementary analysis takes advantage of the same empirical strategy to estimate the impact of connections on monthly stock market returns for the 50 publicly traded firms in 1908–1940.

Our empirical exercises show a striking reversal in the effect of political connections: in the colonial era, connecting to domestic politicians hurt firm profitability and monthly stock market returns, likely signaling alignment with nationalist politicians, and thus, worrying foreign investors. After independence, connections became a critical advantage, raising profitability and stock market returns. In digging deeper into the mechanisms, we show that connections provided these benefits by increasing connected firms' market power. Connected firms enjoyed shorter delays before they were cleared for entry and faced lower exit risk even after facing adverse shocks. Our industry-level analysis shows that a higher proportion of connected incumbents in an industry lowered subsequent entry rates in that industry. So, connections allowed incumbents to deter entry, fostering younger and more "Egyptian", but ultimately less competitive industries. Our results are consistent with the historical narrative that highlight the emergence of monopolies in Egypt during this period. These mechanisms demonstrate how political connections mediated structural change—facilitating industrialization while muting market dynamism.

This study advances three areas of understanding. First, it offers the first systematic evidence on how the returns to political connections evolved across a major institutional transition, using a complete census of Egyptian corporations and political officeholders over six decades. Second, it uncovers the mechanisms through which benefits operated—reducing entry barriers, improving survival, and distorting industry dynamics. Third, it situates these findings within broader debates on state-business relations and development, providing historical insight into why many late industrializers struggled after independence and why similar trade-offs persist today when international institutions constrain domestic policy choices. Our findings highlight a broader tension. Shifting policy discretion to the domestic level can liberate policymaking from foreign control but it can also create opportunities for elite capture. This remains a salient issue for economies navigating oversight from international institutions such as the International Monetary Fund or World Trade Organization, and underscores why many developing economies struggled post-independence.

Our results contribute to a rich literature on how firms can generate significant private benefits from establishing political connections. These benefits are documented in a variety of contemporary settings (Fisman, 2001; Faccio, 2006; Goldman et al., 2009; Akey, 2015; Acemoglu et al., 2016, 2018). Firms can gain significantly thanks to preferential access to government contracts (Goldman et al., 2013; Baltrunaite et al., 2021; Brugués et al., 2024), but execute these contracts less efficiently (Schoenherr, 2019) and charge higher prices (Baranek and Titl, 2024). Connected firms can further benefit from easier access to credit (Johnson and Mitton, 2003; Khwaja and Mian, 2005; Alonso et al., 2022), or reduced regulatory burden (Kroszner and Stratmann, 1998; Fisman and Wang, 2015; Xiao and Shen, 2022). Political firms can also take advantage of their connections to stifle competition (Akcigit et al., 2023), and raise trade barriers for foreign competitors (Grossman and Helpman, 1994; Kruse et al., 2021). Yet, the historical evidence is mixed: connections sometimes hurt firm value or had no effect (Grossman and Imai, 2016; Okazaki and Sawada, 2017; Lehmann-Hasemeyer and Opitz, 2019). Our paper bridges these strands by showing how the returns to connections depend on the institutional environment and can reverse sign across major political transitions. Our paper is closest to Akcigit et al. (2023) as we follow their industry-level specifications to evaluate the impact of connections on within-industry entry rates.

The fact that state-business linkages can have varied effects has special significance for historical development, where these relationships were part of industrial policy. Classic theories of late industrialization

stress the role of state-business cooperation in overcoming institutional obstacles like incomplete markets, low technology-production capacity, and low private savings (Gerschenkron, 1962; Hirschman, 1970). A rich literature has since examined these relationships in diverse contexts: Turkey (Bugra, 1994; Ağır and Artunç, 2021), South Korea, Taiwan, Japan, (Amsden, 1989; Wade, 1990), Brazil, India (Evans, 1995; Calì and Sen, 2011), and Sub-Saharan Africa (Sen and Velde, 2009). As industrial policy and the political forces behind this type of policymaking are receiving renewed attention in the literature (Juhász et al., 2024; Bartelme et al., 2025), the historical experience of the late industrializers who pursued these policies deserve more scrutiny. Our fine-grained empirical findings contribute to this literature by showing how state-business relations were facilitated through political connections to pursue economic modernization. These ties facilitated structural change in Egypt but also entrenched monopolistic practices, illustrating the dual nature of state–private partnerships.

The paper proceeds as follows. Section 1 summarizes Egypt's political and business history. Section 2 describes our datasets on the universe of corporations and political actors. Section 3 establishes our main empirical results on dividends and stock market returns, as well as the mechanisms of entry and exit dynamics. Section 4 concludes.

1. Historical background

For much of the nineteenth century, Egypt was an autonomous vassal state of the Ottoman Empire. Egyptian rulers after 1850 adopted a laissez-faire strategy to pursue ambitious development agendas, transforming the country from a traditional agricultural economy to an export economy based on cotton production (Owen, 1981; Tignor, 1984). Egypt became a center of European economic activity, receiving significant European migration, capital, and business.[2] The government also promulgated new court systems (1875 and 1881) that applied a new commercial code, itself a close transplant of the French code. These reforms formally introduced the corporation into Egyptian law. The only significant departure from the origin country was the lack of general incorporation statutes. Egypt maintained an authorization system, which required all corporations to acquire an executive decree (Artunç and Guinnane, 2019). Before independence, this was a formality, as the government approved all applications within a few weeks (Artunç, 2024).

Given Egypt's precarious legal status as a vassal state, the heavy export orientation of its economy, and its strategic position due to the Suez Canal, the Egyptian government had low bargaining power relative to its European creditors. After the bankruptcy of 1876, it faced harsh terms. When a popular nationalist revolt challenged this increasing European influence, the British occupied Egypt in 1882. Although Egypt remained under nominal Ottoman sovereignty until 1914, it became de facto under British colonial control. With the outbreak of World War I, the British declared Egypt a British protectorate, independent of the Ottoman Empire. Under British occupation, Egypt continued its laissez-faire policy. The government had little interference in markets, there were no significant barriers to entry, applications to incorporate were approved quickly and automatically, and the economy was tightly integrated to world markets.[3]

The 1919 revolution against the British led to Britain's unilateral declaration of Egypt's independence in February 1922, followed by the promulgation of the first constitution in 1923. Egypt formally became an independent constitutional monarchy with a semi-parliamentary system, where the monarch retained significant political power. However, the British continued to control the Suez Canal and still had extensive influence. Britain's unilateral grant of independence fractured the Egyptian executive into three competing groups: the British army, the monarch, and the cabinet (Vitalis, 1995).

Egypt's parliament, which had existed since 1824, went through two main phases during our period of study: the colonial phase (1883–1923), and the post-independence phase (1924–52).[4] MPs were mostly elected, but many MPs in the upper house were appointed by the head of state. From 1883 to 1936, elections were indirect, where the electorate chose "electors", who then selected the MPs, via a majoritarian system in each constituency.[5] After 1936, elections became direct.

The Egyptian state's policy discretion expanded after independence. At the time, most investment and formal businesses in Egypt were European. The state adopted a nationalist economic program to create an industrialized, and "Egyptian", economy. But the government was still constrained by international treaties. At first, it did not have the capacity to implement tariffs, reform tax policy, or change regulation, as these would have applied to incumbent European companies, who were protected by those treaties. However, the government could control the formation of new corporations through the authorization system. And thus, authorization became laborious and selective. Even successful authorizations routinely took more than six months. Talaat Harb, one of the architects of the industrial policy of the new regime, proposed establishing an "Egyptian" bank to create "national" industries, an idea he adapted from Germany's universal banks. This plan was realized with the establishment of Bank Misr in 1920, which was not state owned but was made up of the political elite as its shareholders (Tignor, 2011). After independence, there was a near consensus across the political spectrum to support national industries, and most cabinets became involved in corporations. Corporation founders ran for office and became MPs, just as political representatives and ministers appeared as founders in new corporations (El-Gritly, 1947, p. 439). The bureaucracy and political offices were rapidly populated by families and networks with strong ties to the private sector (Vitalis, 1995, p. xiv). In the subsequent decades, the share of Egyptian-owned corporations swelled. Most of these companies were privately-held – financed by the new Egyptian-owned banks – and many were or would become politically connected. During our period of study, the historical literature shows that these industries became uncompetitive, characterized by monopolies or cartels (El-Gritly, 1947; Issa, 1970). Furthermore, the fragmentation of the Egyptian political class between the pro-British and nationalist camps made coordinating a consistent industrial policy difficult (Vitalis, 1995; Tignor, 2011), especially with the high turnover of cabinets from opposing political factions.

2. Data

Our analysis relies on novel datasets that span Egypt's corporate sector, founders, and members of parliament and cabinet from 1890 to 1950. We assembled these datasets from a wide range of primary sources, and carefully linked them by hand. In this section, we describe our data sources and how we constructed our variables.

2.1. Corporations and founders

We assembled the data on corporations from archival sources, newspapers, official publications, and business directories. These sources provide rich information about all corporations and their founders, and allow us to construct firm histories for survival analysis.

[2] The European population had grown to about 150,000 across the country by 1907; Europeans made up 20 percent of Alexandria's population and 10 percent of Cairo. See Egypt, *The Census of Egypt Taken in 1907*.

[3] Indeed, Egypt did not try to stabilize the price of cotton – the main export commodity its economy hinged on – that cotton producers received, as would become common practice in the twentieth-century colonies (Tignor, 2015, p. 232).

[4] The parliament was bicameral during this period except in 1913–23.

[5] The electorate included all the Egyptian male population who are at least 21 years of age.

Our main source for companies are corporate charters, which were published in the official gazette or legal bulletins as part of the authorization process. Before 1907, companies could also incorporate under British law, in which case their charters were deposited in the Companies Registration Office. Using these sources, we obtained all available corporate charters, which provide critical information for each company: the name and title of each founder, initial authorized and paid capital, the number of shares, industry, the date when the founders signed the equity contract and filed for authorization (“date of contract”), and the date when the government granted authorization (“date of decree”). We develop slightly modified industry categories to be consistent with both the literature and the sectoral classification used in the Egyptian records.[6]

We construct variables on security prices and dividend payouts from statistical yearbooks.[7] Dividend payouts are available for a subset of all firms (331 out of 796). Monthly maximum and minimum security prices are available for publicly-traded companies (62 firms) between January 1908 and April 1940.[8] Because we only observe the monthly minimum and maximum, we construct upper and lower bounds of monthly stock market returns. We measure the upper bound by the percent change between the maximum price in the current month and the minimum price the month before, that is, the return from buying the share at its cheapest last month and selling it at the highest price this month. We measure the lower bound by the percent change between the minimum price in the current month and the maximum price the month before.

Finally, we assembled exit dates for each company from liquidation filings (either published in the company registers or one of the administrative periodicals), cross-checking with business directories or statistical yearbooks to rule out missing filings. Our dissolution dates indicate genuine exits; we do not consider a firm to have dissolved if they reorganized or reconstituted, perhaps following a bankruptcy.

2.2. Members of parliament and cabinet

The datasets on political officeholders, which we assembled from primary sources, cover the universe of MPs and MCs.[9] The dataset on MPs is at the MP and electoral cycle level for each house. It includes a wide range of variables such as the start and end dates of parliamentary cycles, type of chamber (upper, lower, or single house), full name of MP including honorific title (if any), whether the MP was elected or appointed, the MP’s date of election or appointment, whether the MP completed his mandate or not, and the exact date of exit from parliament (if mandate not completed).[10] Note that an MP’s entry and exit dates may differ from the parliament’s start and end dates. Some MPs entered the parliament later than the general election date to replace another MP who left office. Importantly, we do not observe party affiliation, which are only published in newspapers on the dates of general elections and are not publicly available.

The data on MCs are at the MC and cabinet level. They include the start and end dates of each cabinet’s tenure, full name of MC, title, ministry held in cabinet, whether the MC completed his term or not, and the MC’s dates of appointment and exit (if different from the general cabinet dates). Throughout our period of study, almost all MCs were also MPs.

We constructed a unique identifier for each MP (MC) by matching their names across chambers and parliamentary cycles (cabinets).[11] We then created a unique dynasty identifier that traces the family name of each MP (MC) across chambers and parliamentary cycles (cabinets).[12]

2.3. Measuring political connections

Matching founders to MPs and MCs. The charter data contain the full names of all founders and the first board directors, transliterated into French. To mitigate potential measurement error stemming from variations in Arabic name transliteration and inconsistent spellings across the MPs and MCs datasets, we conducted manual matching using complete names, which often included honorific titles. Because our approach requires matching full names – typically comprising three or more components such as given name, father’s name, grandfather’s name, and an informal family name – rather than relying solely on first and last names, our measure of political connections is conservative by design.

We define a corporation to be politically connected to an MP or MC in a given period if at least one of its founders served as an MP or MC during that period. We limit the span of the political connection status variable to 20 years following the corporation’s entry, under the presumption that founders are less likely to remain board members more than 20 years after incorporation. After that, these corporations are dropped from the sample (except in the industry-level analysis). Two pieces of evidence justify the 20-year cutoff. The first board, composed of founders, usually served for five years; after that, there was not much turnover even in the boards of publicly-traded corporations.[13] In privately-held companies, which make up most of our data, founders likely served as directors and remained as owners even longer.[14] Furthermore, male life expectancy in Egypt at age 40 was 22.82 during 1917–27, and 23.9 years in 1927–37.[15] Assuming that

[6] Our industry categories, with corresponding NAICS codes in parentheses, are finance/insurance (52), land (531), transport (48), utilities (221), construction (23), food processing (311), cotton ginning (115111), textile manufacturing (313), metals manufacturing (331), chemical manufacturing (325), manufacturing of bricks and concrete products (327), tobacco and cigarette manufacturing (3122), other manufacturing (residual of 31), wholesale/retail of nondurables except petroleum (424, 448), wholesale/retail of durables (423, 441), wholesale/retail of petroleum (4247), information, including publishing and cinemas (511, 512), hotels and tourism (487, 721), mining, quarrying, oil and gas extraction (211, 212). Transport includes canals and warehousing but does not include cruises, which we categorize in hotels and tourism instead. Utilities include irrigation, water, and electricity.

[7] Annuaire de la finance égyptienne and Statistique des sociétés anonymes travaillant principalement en Égypte.

[8] To the best of our knowledge, daily prices are not available for the Cairo Stock Exchange, where five of the six publicly-traded “switchers” are listed.

[9] We use Subhi (1947), who compiled the primary lists of MPs and MCs until 1947. For 1947–50, we complemented this source with primary lists of MPs from the Egyptian Parliamentary Library, and with data on MCs from Rizk (1975).

[10] In some cases, especially in the long-serving 1936–52 Upper House, MPs temporarily left parliament (e.g., for a government post) and were later reappointed or reelected. In this paper, we focus only on the initial and final dates of each MP’s mandate.

[11] We followed certain rules in creating the MP’s identifier. First, an MP cannot be matched to two sessions more than 30 years apart. Second, an MP cannot be matched to another MP with an identical name in the same chamber and cycle. Third, an MP with a missing family name (i.e. having only one name) cannot be matched to any other MP. We followed similar rules for MCs, although most of these matching issues did not arise owing to the smaller number of MCs.

[12] The Egyptian naming system consists of the person’s first name, father’s first name, paternal grandfather’s first name, and so on (X son of Y son of Z). We define the family name as the last name of an MP’s (MC’s) full name excluding title(s), conditional on having at least two names.

[13] These firms disclosed their directors’ names in the Egyptian Directory.

[14] The articles of association for almost all companies – public or private – contained a boiler-plate bylaw that prescribed rotating one-third of the board in the first board election, held after the first five years, and then rotate one board member by seniority each year. These rotating members could be reelected.

[15] These figures are taken from Egypt’s first constructed life tables that are based on comparing the age distributions by sex of the 1917 and 1927 censuses (El-Shanawany, 1936) and the 1927 and 1937 censuses (Kiser, 1944).

founders were 40 years old, on average, at the time of incorporation, founders likely stayed in the firm for 20 years before their heirs took over.

Our political connection measure is time-variant. A corporation can gain or lose connection in a given period, due to the entry (exit) of its founders into (out of) the parliament or cabinet. If established without a connection, one of the corporation's founders can be later elected (or appointed) into one of the chambers of the parliament, or appointed as a minister in the cabinet; in this case, the firm would gain political connection. If a firm is politically connected at foundation, it might lose its connection in any period if its founder(s) exit the parliament or the cabinet. Most changes in political connection occur during periods of general parliamentary elections, but changes can also happen in other periods due to idiosyncratic entries and exits.

Fig. 1 shows the evolution of political connections by plotting the proportion of MP- and MC-connected corporations each month. Before 1913, almost no corporation was connected to an MP. Political connections increased following the 1913 elections that introduced more corporate founders into the 1913–24 unicameral parliament. The share of connected corporations increased steadily after independence. By 1950, about 30 percent of all corporate incumbents were connected to an MP.[16] The proportion of corporations that were connected to an MC was much smaller, and fluctuated more over time due to frequent cabinet reshuffles.

2.4. Summary statistics

Table 1 shows the summary statistics of the main variables in our data. Our analysis relies on the population of corporations established between 1890 and 1950 ($N = 796$), and two samples: The dividends sample, spanning both private and public firms in 1898–1939 ($N = 331$), and the publicly traded sample, which is made up of public firms listed in the Alexandria and Cairo exchanges ($N = 50$).[17] Firms in the dividends sample had similar industrial composition and proportion of politically connected firms, to those in the full sample, suggesting that the sample is nationally representative of the Egyptian corporate sector. The main exceptions are that they were more likely to survive until 1950, were older, and had more foreign founders.

Publicly traded firms were systematically different. Compared to the typical corporation, publicly traded firms were more likely to survive until 1950, were more than three times older, had a higher proportion of foreign founders, and had larger initial capital. In terms of industrial composition, they were more likely to be in land, transportation, and finance, and less likely to be in manufacturing, trade, construction, and mining. Furthermore, publicly traded firms were less likely to be politically connected, and more likely to pay dividends.

Panel (b) shows the industry-level variables, which are based on the full sample of firms. Here, we show the statistics for the whole period, as well as for 1890–1923 and 1924–50 separately. We report important differences between the two periods. The entry rate decreased after independence, whereas the proportions of connected incumbents and entrants increased. Furthermore, the proportion of old firms increased (mechanically, due to lower entry), the proportion of firms with large paid-up capital decreased, as did the proportion of foreign firms and the proportion of publicly traded firms.

[16] Although the Law of 1947 ostensibly severed the political connections of all incumbent corporations, by banning MPs from being board members, Fig. 1(a) suggests that the law was not enforced; the proportion of connected corporations continued to grow after 1947.

[17] There are 837 firms in our database. We excluded 38 stillborn firms, which incorporated but never operated, and three firms that exited before 1890. This leaves us with 796 firms. The original publicly traded sample consists of 125 securities that belong to 62 firms. We dropped 44 securities that belong to 17 firms that have missing political connection status in every month, because the entry date precedes the date of the first SMR observation by more than 20 years (240 months). This leaves us with 81 securities from 50 firms with non-missing political connection status for at least one month.

3. Empirical analysis

We begin by examining the effect of political connections on dividends payments, among both privately held and publicly traded firms. Next, we study the effect on stock market returns among publicly listed firms. Then, we investigate the mechanisms as to why connections depressed dividends and firm value before independence, but raised them after independence. In the colonial era, the negative effect of political connections was due to the potentially negative reputation signal that proximity to (nationalist) Egyptian politicians had sent to foreign investors. After independence, in conjunction with historical evidence, we show that connections helped corporations achieve market power. We also show that connected incumbents reduced entry rates in their industries, firms connected at the contracting stage had shorter delay between filing for incorporation and securing authorization, and that firms that had some connection in their lifecycle had longer expected duration than never-connected firms.

3.1. Dividends

Our main analysis takes advantage of annual dividends, which we observe for 42 percent of all corporations. As Table 1 demonstrates, the dividends sample is nationally representative of the corporate sector, unlike publicly held firms. By law, any corporation that made large enough net earnings relative to their capitalization in an accounting year had to pay dividends. This rule was further stressed in all company charters. But the amount ultimately paid was subject to the discretion of the board. So, a dividend-payment dummy approximates firm profitability relative to the company's capitalization.[18] We do not use dividend amounts as an outcome since boards, especially in privately-held corporations, could assign higher dividends to extract rents from the company instead of reinvesting.

To produce a credible estimate of the causal effect of political connections on dividends, we employ the difference-in-differences (DID) estimator proposed by De Chaisemartin and d'Haultfoeuille (2020, 2024) (henceforth, DCDH estimator). This estimator accommodates non-absorbing treatment, with firms gaining and losing political connections over time[19]:

$$dividend_{cy} = \alpha_c + \delta_{jy} + \sum_{\ell=-K}^{L} \beta_\ell MPMC_{cy}^{(\ell)} + X_c \cdot y \cdot \gamma + \epsilon_{cy} \quad (1)$$

Where $dividend_{cy}$ is a dummy variable that equals 1 if corporation c paid out any dividends in year y, α_c are corporation fixed effects that account for time-invariant heterogeneity in profitability across firms, δ_{jy} are industry (j) by year (y) fixed effects that account for aggregate industry-specific non-parametric time trends, which means we compare switchers and non-switchers within the same aggregate industry,[20] $MPMC_{cy}^{(\ell)}$ indicates that corporation c has been in its

[18] The statutes earmarked 10 percent of net earnings to the company's reserve fund. Then, the company had to pay 5 percent of the stock's book value as dividends to shareholders, unless profits fell short of this threshold. After this dividend was paid, the board had discretion over how the remaining profits were distributed – e.g., pay more dividends or reinvest – subject to potential company-specific restrictions described in by-laws.

[19] We show the results of the two-way fixed effects (TWFE) model in Appendix Table 7. A recent econometrics literature on difference-in-differences demonstrates that with multiple periods and variation in treatment timing across units, the TWFE model may fail to recover the average treatment effect when treatment effects are heterogeneous across groups or over time (Goodman-Bacon, 2021). In such cases, TWFE combines comparisons between units treated at different times and may implicitly use already- or soon-to-be-treated units as controls, generating non-convex or negative weights (see a recent review of this literature in De Chaisemartin and d'Haultfoeuille, 2023 and Roth et al., 2023). In our setting, the non-absorbing treatment further increases reliance on comparisons to previously or not-yet treated units.

[20] Aggregate industries are the one-digit NAICS codes.

Table 1
Summary Statistics.

(a) Firm-level variables

	All			Dividends sample			Publicly traded		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
=1 if alive in 1950	0.56	0.50	796	0.66	0.47	331	0.88	0.33	50
Age at exit (non-survivors)	9.57	9.28	349	14.62	9.77	112	31.17	10.36	6
Age in 1950 (survivors)	16.96	15.73	447	27.33	14.38	219	41.02	10.67	44
Prop. foreign founders	0.46	0.36	796	0.51	0.31	331	0.53	0.31	50
Log(initial capital)	10.71	1.43	791	10.67	1.47	331	11.74	1.47	50
=1 if manufacturing	0.27	0.44	796	0.23	0.42	331	0.24	0.43	50
=1 if trade	0.21	0.41	796	0.20	0.40	331	0.08	0.27	50
=1 if land	0.14	0.35	796	0.18	0.39	331	0.22	0.42	50
=1 if transportation	0.12	0.33	796	0.12	0.33	331	0.20	0.40	50
=1 if construction	0.03	0.18	796	0.04	0.19	331	0.00	0.00	50
=1 if mining	0.08	0.27	796	0.03	0.18	331	0.02	0.14	50
=1 if finance	0.09	0.29	796	0.12	0.33	331	0.16	0.37	50
=1 if other	0.07	0.25	796	0.08	0.27	331	0.08	0.27	50
=1 if ever MP- or MC-founder	0.36	0.48	796	0.35	0.48	331	0.28	0.45	50
=1 if MP- or MC-founder at contract	0.28	0.45	796	0.22	0.41	331	0.10	0.30	50
=1 if paid any dividends				0.70	0.46	331	0.94	0.24	49
Av. Stock market return (LB)							−0.04	0.03	48
Av. Stock market return (UB)							0.06	0.04	48
Log(initial market capitalization)							12.00	1.93	50
Observations	796			331			50		

(b) Industry-Level Variables

	Pooled			1890–1923			1924–1950		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
Entry rate	0.11	0.27	930	0.14	0.35	471	0.08	0.15	459
Prop. connected incumbents	0.14	0.19	930	0.02	0.08	471	0.26	0.19	459
Prop. connected entrants	0.30	0.42	391	0.02	0.14	178	0.54	0.44	213
Prop. old firms	0.40	0.30	940	0.30	0.32	481	0.52	0.24	459
Prop. firms with large paid-up capital	0.46	0.34	609	0.53	0.36	337	0.37	0.29	272
Prop. foreign founders	0.55	0.22	940	0.65	0.20	481	0.45	0.19	459
Prop. publicly traded firms	0.23	0.23	940	0.25	0.25	481	0.21	0.20	459
Observations	943			484			459		

Notes: Average stock market returns (LB and UB) refer to ordinary shares only. The corporation's initial market capitalization is calculated as the minimum quoted price of the firm's ordinary shares during the first month of observed stock market prices times the number of ordinary shares issued by the firm at its inception.

current political connection status for exactly ℓ years in year y. For $\ell < 0$, corporation c will change its connection status in $|\ell|$ years (placebo test). For $\ell = 0$, corporation c changes its connection status in year y, i.e., gains or loses at least one founder serving as MP or MC. For $\ell > 0$, corporation c has been in its current connection state for exactly ℓ years. K is the number of pre-treatment years and L is the maximum number of post-treatment years. The vector X_c includes time-invariant corporation characteristics, the logarithm of initial paid-up capital and the proportion of foreign founders, which we interact with linear time trend (y) as controls. Standard errors are clustered at the corporation level.

The event-study DCDH estimator allows estimating the treatment effect when the timing of the treatment varies across groups, and when the treatment is not absorbing, that is, when groups can switch both in and out of treatment. It also allows past treatment status to affect current outcomes, and permits heterogeneity in treatment effects across groups and periods. The DCDH estimator compares the evolution of dividend payment incidence among firms that changed their political connection status in a given year (switchers) and firms that had the same treatment status as switchers did initially but did not change their treatment status (non-switchers). This formulation is appropriate for our setting, because a corporation can both gain and lose political connections over time, as one of its founders may enter or exit the parliament and/or cabinet. Furthermore, being politically connected in the past may affect the current dividend payment incidence (profitability) of the firm, even if the firm is not currently connected. Out of 331 firms in our dividends dataset, there are 55 "switchers" that changed their connection status at least once, 217 never-connected firms, and 59 always-connected firms. The 55 switchers are distributed as follows. (1) 26 single "joiners", firms that were initially unconnected, gained political connection once, and remained connected thereafter; (2) 9 single "leavers", firms that were initially connected, lost their connection once, and remained unconnected thereafter; and (3) 20 multiple switchers: firms that both gained and lost connection.

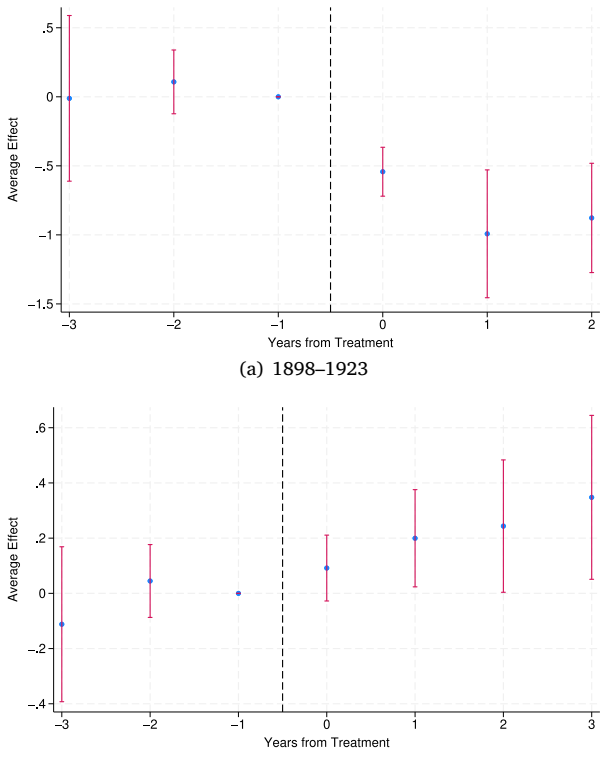
We estimate the DCDH estimator separately for 1898–1923 and 1924–1939. To do so, we restrict switchers during 1898–1923 to firms whose *final* change in political connection status occurred no later than 1923. Similarly, we restrict switchers in 1924–1939 to firms whose *first* switch in political connection status took place in 1924 or later. We estimate the effect of political connections on dividend payments for three (respectively, four) years following the switch in political connection status in 1898–1923 (respectively,1924–1939). The number of switchers that are used in the DCDH estimation in 1898–1923 are 3 firms (for year-0 effect), and 2 firms (for years 1 and 2).[21] The number of switchers that are used in the estimation in 1924–1939 are 28 firms for year 0, 23 firms for year 1, 19 for year 2, and 14 for year 3.[22,23]

[21] We do not estimate the effect for year 3 in 1898–1923, because of the small sample size (19 observations) for which we can estimate the effect in year 3. The three switchers for which year-0 effect can be estimated consist of 2 single joiners (switch in 1911, 1913) and 1 multiple switcher (first switch in 1909). Originally, we observe 15 switchers in 1898–1923; 11 single joiners (in 1911, 1913), 2 single leavers (1899, 1911), and 2 multiple switchers (first switch in 1909). The number of switchers in the DCDH estimation is lower, because the dividends data are missing for 10 switchers from 1912 to 1919, due to the disruption caused by World War I. Furthermore, the two single leavers cannot be used in the estimation, because we do not observe counterfactual firms that were always-connected at the time of switching.

The validity of the DCDH estimator relies on the parallel-trends and no-anticipation assumptions. Under the parallel-trends assumption, switching corporations, had they not switched, would have witnessed the same trend of dividend payment as the counterfactual firms. Under the no-anticipation assumption, the current dividend payment incidence of the corporation should not be influenced by its future political connection status. We test these assumptions by running two placebo tests that compare dividend payments across switchers and non-switchers during the three years before switchers switched, relative to the last pre-switching year.

The results are shown in Fig. 2 (with controls), Appendix Figure 6 (without controls), and Appendix Table 8. Examining the placebo tests reveals that the parallel-trends and no-anticipation assumptions are supported in both 1898–1923 and 1924–1939. In each period, switchers and non-switchers within the same aggregate industry – and conditional on controls – witnessed similar trajectories of dividend payment incidence in the three years before switching. After the change in their status of political connection, switchers experienced significantly different trends of dividend payments, but the sign of the effect varies by period. Connections had a negative effect on the probability of paying dividends in 1898–1923, but the effect became positive in 1924–1939. We interpret these results as a negative effect of political connections on firm profitability in the laissez-faire setup of the colonial period, and a positive effect in the nationalist industrial policy setup after independence.

We conducted a wide range of robustness checks. First, we employed three alternative DID estimators that only allow for staggered absorbing treatment (Callaway and Sant'Anna, 2021; Sun and Abraham, 2021; Borusyak et al., 2024). To do so, we followed two research designs. The first design is confined to switchers that *gained* connection, whereas the second design is confined to switchers that *lost* connection. The first design compares (1) single joiners and multiple switchers whose first switch is gaining connection, up to the last year before they lost connection, to (2) never-connected firms. The second design compares (1) single leavers and multiple switchers whose first switch is losing connection, up to the last year before they gained connection, to (2) always-connected firms. The second design is only feasible in 1924–1939, because we do not observe always-connected firms and leavers together in the colonial period. The results of the first design – switching-in only – are shown in Appendix Figure 7 for 1898–1923 and Appendix Figure 8 for 1924–1939, and are consistent with the DCDH results. Gaining political connection decreased the probability of paying dividends in the colonial period, but raised it after independence. The results of the second design – switching-out only – are shown in Appendix Figure 9 for 1924–1939. Although we find a (slight) decline in the probability of paying dividends after losing connection, the decline is not statistically significant. This could be because politician-founders of initially connected firms who lose connection keep their influence in political circles after they lose connection.



(a) 1898–1923

(b) 1924–1939

Fig. 2. Effect of Political Connections on Dividends: De Chaisemartin and d'Haultfoeuille's Estimator.
Notes: The figure shows the DID event-study estimators, with 95% confidence intervals, introduced by De Chaisemartin and d'Haultfoeuille (2020, 2024), and implemented by the STATA command `did_multiplegt_dyn`. The numbers on the x-axis refer to the number of years since the first year when switchers changed their connection status for the first time, where the last year before switching (i.e., $\ell = -1$) is the reference (omitted) year. In panel (a), we do not estimate the effect for year 3, because of the small sample size (19 observations) for which we can estimate the effect in year 3. In both panels, the model controls for aggregate industry-specific non-parametric time trends, and for linear time trends of the logarithm of initial paid-up capital and the proportion of foreigners. Standard errors are clustered at the corporation level.

The second robustness check is to limit the political connection measure to 10 years following the entry of the firm, instead of the 20-year limit in our baseline measure. We are able to implement this robustness check in 1924–1939, but not in 1898–1923. The colonial period is infeasible, because two out of three switchers that are used in our DCDH estimation in 1898–1923 in Fig. 2 entered more than 10 years before the switch in their political connection status. The findings for 1924–1939 are shown in Appendix Table 9, and are consistent with the main findings.

Third, we use a dynasty-based measure of political connections. We define a corporation as politically connected in a given year if one of its founders is a serving MP or MC, or shares a last name (hence, belongs to the same "dynasty") of a serving MP or MC, in that year. This dynasty-based measure nests the individual-based measure by construction. The results are shown in Appendix Table 10, and are similar in magnitude to the individual-based measure. This suggests that connections raised firm profitability through the presence of politician-founders themselves, not their proxies. So, the MP-founders were likely not mere straw men lending credibility to the board; they were active participants in the legislature and the firm's management.

[22] The 28 switchers for which year-0 effect can be estimated consist of 10 single joiners (switch in 1924, 1929, 1930, 1938, 1939), 4 single leavers (1932, 1937), and 14 multiple switchers (first switch in 1924, 1930, 1931, 1932, 1936, 1937). Originally, we observe 40 switchers in 1924–1939; 15 single joiners (1924, 1929, 1930, 1938, 1939), 7 single leavers (1932, 1935, 1937), and 18 multiple switchers (first switch in 1924, 1925, 1930, 1931, 1932, 1936, 1937). The number of switchers used in the DCDH estimation is lower, because the dividends data are missing for 12 switchers in the year right before they switched.

[23] We cannot use the DCDH estimator to assess whether the effects of political connections on dividends vary by connecting to an MP or an MC, because there are too few switchers whose change in status involved an MC. In fact, all three switchers in the DCDH estimation in 1898–1923 first switched through a connection to an MP. Among 28 switchers in 1924–1939, only two first switched via their connection to an MC. Using a TWFE model, we find that the coefficients on MC are larger in magnitude in both periods, and are statistically significant in 1924–1939 (results available upon request).

Overall, our results show that, before independence, political connections caused corporations to pay shareholders less frequently, because these firms became profitable less often. However, after independence, the effect of connections on dividends (and so, firm profitability) became positive. In the next sub-section, we examine the effect of political connections on stock market returns among publicly traded firms.

3.2. Stock market returns

We now turn to our supplementary analysis on the effect of political connections on stock market returns. While stock market returns capture important aspects of firm value, and are used widely in this literature, its restriction to publicly-held companies by construction excludes most firms from our sample. Only 8 percent (62 firms) of Egyptian corporations were publicly held. More critically, the main patterns of company formation and connections do not provide many switchers for our empirical exercises. Connections were less frequent in the colonial era, when most publicly-traded firms in our dataset were established. Post-independence, connections were predominantly established through privately-held companies. So, while our evidence in this analysis supports the main findings on dividends, this caveat about stock market returns should be kept in mind. In our empirical exercises, we use the DCDH estimator to estimate the causal effect of political connections on stock market returns (SMR)[24]:

$$SMR_{scm} = \alpha_{sc} + \delta_m + \sum_{\ell=-K}^{L} \beta_\ell MPMC_{cm}^{(\ell)} + Z_c \cdot m \cdot \gamma + \epsilon_{scm} \quad (2)$$

where SMR_{scm} denotes the lower or upper bounds on the monthly stock market return on security s of corporation c during month-year m, $MPMC_{cm}^{(\ell)}$ is a dummy variable that equals one if corporation c has been in its current political connection status for exactly ℓ months in month m. We control for a full set of corporation by security fixed effects (α_{sc}) that account for unobserved time-invariant heterogeneity in market value across corporation-securities, and for a full set of month-year fixed effects (δ_m) to account for aggregate monthly shocks to the stock market. We control for the interaction of linear time trend (m) with each of the following time-invariant corporation characteristics in the vector Z_c: the natural logarithm of initial paid-up capital, the proportion of foreign founders, and the natural logarithm of the corporation's initial market capitalization during the first month of observed stock market prices, evaluated at both the minimum and maximum security prices. These controls allow for heterogeneous growth of stock market returns across corporations with different sizes and influence of foreigners. Standard errors are clustered at the corporation level.

Our securities dataset includes 81 securities that belong to 50 firms, with non-missing values of security prices and political connection in at least one month. Out of these, there are 6 switchers (9 securities), who changed their connection status at least once, 36 never-connected firms (60 securities), and 9 always-connected firms (12 securities). The 6 switching firms are distributed as follows: (1) 3 single joiners (5 securities), firms that were initially unconnected, gained political connection once, and remained connected thereafter; (2) 2 single leavers (3 securities), firms that were initially connected, lost their connection once, and remained unconnected thereafter; and (3) 1 multiple switcher (1 security), a firm that both gained and lost connection.

We estimate the DCDH estimator separately for 1908–1923 and 1924–1940. We restrict switchers in 1908–1923 to firms whose *last* switch occurred no later than December 1923. Similarly, we restrict switchers in 1924–1940 to firms whose *first* change in status took place in or after January 1924. We estimate the effect for six months following a switch in political connection status. Two firms (three securities) were used in the DCDH estimation in 1908–1923; these companies gained political connection in the 1913 elections.[25] There were three switchers (four securities) used in the estimation in 1924–1940: One single joiner that won in the 1924 elections, one single leaver that lost in the 1936 elections, and one multiple switcher that first gained connection in the 1924 elections. We test the parallel-trends and no-anticipation assumptions by running three placebo tests that compare SMR lower and upper bounds across switchers and non-switchers during the four months before switchers switched.

The results are shown in Table 2. We show the results graphically in Appendix Figures 10 and 11. Overall, they are consistent with the findings for the dividends sample. In 1908–1923, switchers and counterfactual firms were on parallel trends of the SMR lower and upper bounds during the four months before switching, relative to the last pre-treatment month (−1). Moving to the post-treatment effects, we find that political connections in 1908–1923 had a negative effect on the SMR lower bound during the first month after connection, and the SMR upper bound during the first three months after connection.

In 1924–1940, the pre-treatment placebo effects show statistically significant differences for the lower bound during month 2 before switching, and for the upper bound during months 2 and 4 before switching, relative to the last pre-treatment month (−1). These differences are likely due to the small number of switchers. In the post-treatment period, we find null effects on the SMR lower bound in every month except in month 4 where we detect a negative effect. Yet, we detect positive effects on the SMR upper bound in every post-treatment month. Examining the magnitudes of the effects in months 1 and 4 shows that the positive effects on the SMR upper bound are much larger (in absolute value) than the negative effects on the SMR lower bound, which indicates a positive effect on the mid-range – the midpoint between the LB and UB – of the SMR. We interpret the differential effect of political connections on the stock market returns through the political context. Before independence, given the British grip on political power, connections to Egyptian MPs had a negative implication for stock market returns, because these MPs belonged to the nationalist movement. After independence, the 1919 revolution leaders came to dominate the 1924 parliament. The government launched an industrial policy to promote new, national industries. As the state became more interventionist, investors started to value connections to this rising political class. That said, we acknowledge that the small number of switchers in the SMR analysis makes it more sensitive to outliers and statistical noise.

We conduct three robustness checks. First, we estimated an event study of each of the 1913 and 1924 elections, where we compare the evolution of stock market returns of corporations, which were unconnected before the elections but gained at least one MP after the elections, with corporations that remained unconnected after the elections.[26] The 1913 and 1924 elections marked key breaks in the evolution of politically connected firms (Fig. 1(a)). They were also important from a political perspective. The 1913 election was the

[24] We show the two-way fixed effects results in Appendix Table 11.

[25] In reality, there were three switchers in 1898–1923: 2 single joiners (in July 1913) and 1 single leaver (in January 1910). However, the single leaver cannot be used in the estimation, because we do not observe counterfactual firms that were always connected and have non-missing data on SMR at the time of this firm's switching.

[26] Specifically, we estimate the following difference-in-differences model for each of the 1913 and 1924 elections separately, where we restrict the analysis to 3, 6, 9, and 12 months before and after each election: $SMR_{scm} = \gamma_1 gainconnection_c \times postelection_m + \alpha_{sc} + \beta_m + \epsilon_{scm}$, where $gainconnection_c$ =1 if corporation c gained at least one MP among its founders after the elections, $postelection_m$ =1 for the months that followed the election month. In 1913 (1924), our control group consists of 24 (21) corporations that were unconnected both before and after the elections, whereas our treatment group consists of 2 (2) corporations that were unconnected before the elections but gained MPs after the elections.

Table 2
Effect of Political Connections on Stock Market Returns: De Chaisemartin and d'Haultfoeuille's Estimator.

	1898–1923				1924–1939			
	(1) LB	(2) LB	(3) UB	(4) UB	(5) LB	(6) LB	(7) UB	(8) UB
Month 0	−0.00706	−0.00708	−0.00372	−0.00405	0.00776	0.00597	0.0785***	0.0781***
	(0.00787)	(0.00793)	(0.00498)	(0.00493)	(0.0181)	(0.0180)	(0.0197)	(0.0197)
Month 1	−0.0287***	−0.0288***	−0.0335***	−0.0341***	−0.0228	−0.0264	0.0891***	0.0882***
	(0.00798)	(0.00801)	(0.0128)	(0.0127)	(0.0214)	(0.0213)	(0.0256)	(0.0256)
Month 2	−0.0194	−0.0194	−0.0307***	−0.0317***	0.0261	0.0207	0.137***	0.135***
	(0.0136)	(0.0138)	(0.0102)	(0.0101)	(0.0243)	(0.0240)	(0.0255)	(0.0254)
Month 3	−0.00811	−0.00819	−0.0120**	−0.0133***	0.00884	0.00166	0.145***	0.143***
	(0.0155)	(0.0158)	(0.00507)	(0.00495)	(0.0223)	(0.0220)	(0.0303)	(0.0303)
Month 4	0.00857	0.00848	−0.00605	−0.00770	−0.0400*	−0.0489**	0.156***	0.154***
	(0.0161)	(0.0165)	(0.00688)	(0.00708)	(0.0214)	(0.0211)	(0.0335)	(0.0334)
Month 5	−0.0211	−0.0212	−0.00936	−0.0113	0.0114	0.000673	0.204***	0.202***
	(0.0313)	(0.0317)	(0.00868)	(0.00893)	(0.0282)	(0.0275)	(0.0241)	(0.0241)
Month −2	−0.00280	−0.00278	−0.00739	−0.00706	−0.0868***	−0.0850***	−0.0959***	−0.0955***
	(0.00930)	(0.00928)	(0.00490)	(0.00489)	(0.0210)	(0.0209)	(0.0333)	(0.0333)
Month −3	0.0234	0.0235	−0.00602	−0.00536	0.00111	0.00469	0.0443	0.0451
	(0.0341)	(0.0340)	(0.00380)	(0.00383)	(0.0281)	(0.0283)	(0.0306)	(0.0307)
Month −4	0.00540	0.00546	0.0955	0.0965	0.0201	0.0255	0.0689**	0.0702***
	(0.0149)	(0.0147)	(0.0717)	(0.0719)	(0.0387)	(0.0389)	(0.0269)	(0.0269)
Av. Tot. Effect	−0.0126	−0.0127	−0.0159***	−0.0170***	−0.00144	−0.00772	0.135***	0.133***
	(0.0139)	(0.0141)	(0.00457)	(0.00451)	(0.0220)	(0.0217)	(0.0251)	(0.0251)
Controls	No	Yes	No	Yes	No	Yes	No	Yes

Notes: The dependent variable is the lower or upper bound of monthly stock market returns. The table shows the DID event-study coefficients introduced by De Chaisemartin and d'Haultfoeuille (2020) and De Chaisemartin and d'Haultfoeuille (2024), and implemented by the STATA command `did_multiplegt_dyn`. In columns 2, 4, 6, and 8, the model controls for interactions of month-year entered as a continuous variable with each of the logarithm of initial paid-up capital, the proportion of foreigners, and the logarithm of the corporation's market capitalization in the first month of observed stock market prices, measured at both the minimum and maximum security prices. Standard errors are clustered at the corporation level.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

last one before Egypt's independence and resulted in a unicameral parliament from 1913 to 1923. The 1924 election came at the heels of the 1919 revolution, and Britain's consequent unilateral declaration of Egypt's (nominal) independence in February 1922. Therefore, the 1924 election marked a fundamental change in Egypt's political class, as the leaders of the 1919 revolution came to dominate the 1924 parliament. Appendix Table 12 reports the results. Panel (a) shows that the 1913 election led to a statistically significant drop in stock market returns among treated corporations for the 3, 6, 9, and 12-month windows. The effect is consistent for the lower and upper bounds, indicating a negative impact on the mid-range stock market returns. Panel (b) shows that the 1924 elections increased the lower bound of the stock market returns for the 3-months window, had no effect for the 6- and 9-months windows, and decreased it after 12 months. However, political connections led to an increase in the upper bound for the 3, 6, 9, and 12-month windows, and the positive effect on the upper bound largely exceeds the negative effect on the lower bound, suggesting a positive impact on the mid-range stock market returns.

Second, we employed Callaway and Sant'Anna (2021), Sun and Abraham (2021), and Borusyak et al. (2024)'s estimators in each period, by comparing (1) single joiners and multiple switchers whose first switch was gaining a connection, up to the last month before they lost connection, to (2) never-connected firms. The results are shown in Appendix Figure 12 for 1898–1923 and Appendix Figure 13 for 1924–1939, and are consistent with the DCDH results. Gaining political connection decreased the SMR lower and upper bounds in the colonial period. After independence, political connections had a negative effect on the SMR lower bound, and a positive effect on the upper bound, indicating a positive effect on the mid-range of the SMR.

Third, we use a dynasty-based measure of political connection. We define a corporation as politically connected in a given month-year if one of its founders is a serving MP or MC, or belongs to the dynasty of a serving MP or MC, in that month-year. The results are shown in Appendix Table 13, and are similar to the individual-based measure. This suggests that having an actual policymaker among the founders – rather than belonging to the dynasty of a serving politician – was the key political connection that influenced SMR.[27]

Overall, our results suggest that before independence, among publicly-held firms, political connections caused firm value to go down. After independence, the effect of connections on firm value became positive. In the next sub-section, we examine the mechanisms that may be driving these effects.

3.3. Mechanisms

Political connections produced sharply contrasting results in the colonial and post-colonial era, due to the distinctive institutional configurations of the two periods, highlighting the different mechanisms through which connections could benefit or hurt corporations.

During the colonial period (1882–1923), the British administration was the dominant force. The market structure was quintessentially laissez faire (as had been before the British occupation). Most industries were unregulated. There were no tariffs, and firms faced minimal taxes. The government was prevented from imposing new taxes or tariffs due to the unequal treaties – called Capitulations – with European

[27] We are not able to run a robustness check that limits the political connection measure to 10 years following the entry month of the firm, instead of the 20-years limit in our baseline measure. In 1908–1923, only one switcher (out of two) entered less than 10 years before switching (in 1913). The three switchers in 1924–1940 all entered more than 10 years before the switch in their political connection status (in 1924, 1936).

powers.[28] The authorization system was a formality as the government approved all applications within 15 days. Most corporations of the colonial period were set up by coalitions of foreigners (British, Belgian, French) and locals (usually, non-Muslim minorities). Though most were privately-held, these firms were large-scale, primarily operated in land development or finance (Artunç, 2024). They also had a much higher share of publicly-traded firms than the post-independence period. Egyptian politicians had little to offer firms, which did not need state support to clear barriers to entry, or secure financing. If anything, associations with the Egyptian political elite became increasingly dangerous during the colonial period. The few connections that were established were through a handful of important financiers, who were sympathetic to the nationalist movement, if not outright involved. Early members of Wafd party – the driving force of the nationalist independence movement that led to the 1919 Revolution – accounted for 76 percent of political connections.[29] So, upon the election of these founders as MPs or ministers, investors might have feared backlash from the British administration. For instance, when Bank Misr was founded in 1920 (before independence), foreign firms castigated the bank for its connection to the nationalist movement (Tignor, 1984, p. 68).

With independence, the state gained more discretionary power and connections could now produce conventional benefits such as access to government contracts or state resources. Decolonization was essential for the Egyptians to seize control of these rent flows and distribute them to private entities. The authorization system was central to this redistribution effort. The government could now screen, monitor, and direct prospective corporations by preferentially giving these companies access to – or blocking them from accessing – the corporate form. So, while any company could incorporate in the colonial era, incorporation became significantly difficult and selective after independence. At the very least, connected companies could clear this legal hurdle more easily than other potential entrants; a significant advantage in itself. But, connected incumbents could potentially pull this lever to deny entry to other firms. For instance, Ahmed Abbud succeeded in securing many state concessions and contracts, including his ventures in transportation and shipping, as an MP of the Wafd Party (Vitalis, 1995). But his bid to set up a bus service in Cairo, which threatened the incumbent urban transit monopoly, Cairo Electric Railways and Heliopolis Oases Company, almost failed to proceed when the incumbent took advantage of its connections and recruited ministers to block the approval of Abbud's company. The project was green-lit only after Abbud agreed to pool the bus company's receipts with the tramway. When he was out of office, he lost his bid for a new nitrate exploitation project in Aswan altogether. Indeed, our dataset shows that he founded no new company until after he re-entered political office in 1944, this time as a senator. Soon after, in 1946, he formed a new company to manufacture synthetic fertilizers to make up for the bid he previously lost, along with three other new corporations in banking and bottling. At the same time, he became the largest shareholder of Bank Misr, with the intention of securing controlling shares in other Misr ventures.[30]

After 1930, when the Egyptian government gained discretion over trade policy, connected firms took advantage of their MP-founders – who could make legislation, after all – to push for protective tariffs. The industries in which these firms operated became legal cartels, with various quota or price agreements, facilitated by interlocking directorates of private-state groups (El-Gritly, 1947; Issa, 1970; Vitalis, 1995). Since a preponderance of connected companies were privately held, control could be concentrated and coordination over connected firms made easier. The most significant monopolization occurred in new industries (notably chemicals) but also in construction, finance, sugar processing, transportation, and communications. These also had the highest concentration of politically connected incumbents (see Fig. 3). For example, Société Egyptienne de Ciment Portland Tourah, Le Caire had a "practical monopoly" in the cement industry.[31] Société Financière et Industrielle d'Egypte was the sole domestic producer of phosphate fertilizers and sulfuric acid until the 1940s (Vitalis, 1995, pp. 108–9). This company's connection was Hafiz Afifi, who would secure other mining contracts at the height of the government's push for industrial development. The three firms that drove Egypt's industrial expansion in the 1930s, Filature Nationale d'Égypte, the Misr Spinning and Weaving Company, and the Sugar Company, were all politically connected and enjoyed significant tariff protection (Tignor, 1984, pp. 127–28). The Sugar Company had a near monopoly over sugar production, and negotiated wholesale prices with the government directly (p. 130). So, connections crucially benefited corporations by shielding them from competition and giving them access to monopoly rents. This is why connected firms were consistently more profitable in the post-colonial period.

The historical evidence suggests that businesses benefited from political connections by enjoying lower barriers to entry, securing protections, and even deterring potential competitors, thus linking the emergence of cartels to business-state linkages. We test the implications of these arguments with three econometric exercises. Although we cannot directly verify market power, we find that industries with a high share of connected firms exhibited low business dynamism, signaling weaker competition. To test muted business dynamism, we first demonstrate that industries with a higher share of connected incumbents experienced lower entry rates after independence, but higher entry rates in the colonial period. These industries were also newer sectors and had smaller shares of older, foreign, and publicly traded firms. Second, to test whether connected firms enjoyed lower barriers to entry, we show that politically connected corporations had a shorter delay between contracting and authorization after independence. That is, connections allowed corporations to clear legal hurdles faster. Third, to assess incumbent entrenchment, we estimate survival functions and find that connected firms faced lower exit risk, even after experiencing negative profits. Together, our findings support the notion that connections in the postcolonial period helped corporations shield themselves from competition.

Industry entry dynamics. We first investigate industry entry dynamics by following the specification in Akcigit et al. (2023). We extend their analysis by showing that the relationship may differ across the colonial and independence periods, and that political connections after independence may have been used to push for "national" industries. We estimate the following two-way fixed effects OLS regression at the industry-year level, using the full universe of corporations. We estimate a separate regression for each of the colonial and post-independence periods:

$$outcome_{dy} = \gamma propconnected_{dy} + \alpha_d + \delta_y + \epsilon_{dy}$$

[28] There was no personal or capital income tax for most of our period. The main tax until 1930 was on land.

[29] Joseph Aslan Cattaui (Yusuf Aslan Qattawi) – from the famous Egyptian-Jewish Cattaui family – alone was a founder in 47 percent of the connected firms in the colonial period. He was also a strong supporter of Egyptian independence, a member of the liberal-nationalist Wafd party, and the finance minister in the first Wafd government of 1924. Before 1924, 17 corporations were ever connected. 13 of these corporations were connected through a founder who was an active participant in the independence movement. Joseph Cattaui was in 11 of these firms. Other nationalist MP-founders were Hassan Abdel Razek, Mahmoud Abdel Gaffar, Hussein Wassef, Omar Loutfi, and Talaat Harb. Talaat Harb founded Bank Misr in 1920 to finance new Egyptian-owned firms. Two corporations were connected via pro-British politicians: Hussein Kamel and Moustapha Riad. The British installed Hussein Kamel as the Sultan of Egypt in 1914 when they declared Egypt a British protectorate. Two corporations were connected via Khaled Loutfi and Roustem El Alayly, whose political leanings are not known.

[30] The National Archives (UK), FO 371/53313: Bowker to Benin, 8 October 1946; Vitalis (1995).

[31] Middle East Opinion, Volume 1, p. 24 (1946).

where $outcome_{dy}$ is the outcome of industry d during year y. The main regressor is $propconnected_{dy}$, the proportion of incumbent corporations that are politically connected, i.e. have at least one founder as MP or MC in the preceding year. First, we examine annual entry rates in each industry, that is, the number of new corporations during year y divided by the number of incumbents in that industry in the beginning of that year. Second, we analyze the extent of political connections among entrants; conditional on entry, do more politically connected industries have more politically connected entrants? In this case, the dependent variable is the proportion of politically connected entrants in the industry. Third, we study the proportion of old firms in the industry, where a firm is defined as old if its age in a given year is above the median age in that year. These are also the outcomes investigated in Akcigit et al. (2023). To these, we add three more variables to better capture important aspects of Egyptian sectoral dynamics: the proportion of firms with large yearly paid-up capital (above the median in a given year), the proportion of foreign firms, and the proportion of publicly traded firms within industry.

We control for α_d, a full set of industry fixed effects that account for time-invariant heterogeneity in entry dynamics across industries. We also control for β_y, a full set of year fixed effects that account for aggregate shocks that impacted all industries. Standard errors are clustered at the industry level.

Table 3 reports the results. Column 1 shows that, in the colonial period, an increase in the proportion of connected incumbents was associated with a higher entry rate in that industry. After independence, the relationship was reversed; a 1-percentage point increase in the connected share of incumbents was associated with a 0.17 percentage-point decrease (or 21 percent relative to the mean) in entry rate of that industry. So, after independence, politically-connected incumbents could deter entry, and industries with a high degree of connections showed less business dynamism. Columns (3) and (4) examine the relationship between the proportion of connected incumbents and the proportion of connected entrants (conditional on entry). Before independence (column 3), there is no significant relationship. After independence (column 4), the coefficient turns negative, indicating that industries with more connected incumbents had fewer connected entrants. Combined with the entry-blocking effect shown in column 2, this suggests that connected incumbents may have been selective in their barriers to entry — potentially being more restrictive toward other politically connected firms while being relatively more permissive toward non-connected entrants, who may have posed less of a competitive threat. The various ventures that Abbud tried to establish in the 1930s could be examples of this dynamic: when Abbud attempted to penetrate incumbent and connected monopolies, these incumbents rallied their political connections to block Abbud (Vitalis, 1995). However, because industries with a substantial proportion of incumbents have significantly lower entry rates, the connection status of the few entrants can swing the estimates and we caution against overinterpreting this coefficient.

Columns 5 and 6 demonstrate that the proportion of connected incumbents in an industry is negatively associated with the proportion of old firms after independence, but not before, which shows that connected industries became younger. While this result may appear counter-intuitive, it likely reflects how the state used connections to promote younger Egyptian entrants to counter old, foreign firms from the colonial period, or to set up new market segments. Together with the previous finding that connected industries tended to have lower entry rates but with fewer connected entrants, this is consistent with the historical view that business-state partnerships were deployed to carve out new industries and niches, and not compete with existing monopolies (Tignor, 1989; Vitalis, 1995). To investigate this interpretation, we first note that we fail to detect a statistically significant relationship between the proportion of connected incumbents and the proportion of large firms after independence. But in the colonial period, industries with a higher concentration of connected firms had a smaller concentration of highly capitalized firms (columns 7 and 8). Columns 9 and 10 show that connected industries had a much lower proportion of foreign firms after independence, but not before, suggesting that the post-independence government succeeded somewhat in reducing the foreign influence. Finally, columns 11 and 12 show that connected industries had a higher share of publicly traded firms before independence, but a lower share afterwards.

Fig. 3 provides further evidence by plotting the share of connected incumbents by industry. Old sectors such as land development had a low concentration of connected firms. The high concentration of connected industries were in new market segments: chemicals, metallurgy and machinery, textiles (not ginning or pressing), publishing. Finance was an important exception. Together, our results suggest that the post-independence governments used political connections to promote new industries and mitigate the European influence in the Egyptian economy. This is consistent with the historical literature, which argues that nationalist governments first supported new Egyptian-owned financial institutions, which then could sponsor Egyptian-owned firms in new sectors (Tignor, 2011). As a result, connected industries had depressed entry rates, but connected companies themselves were not as large or old as colonial-era firms.

Our findings support other recent studies. Akcigit et al. (2023) show similar patterns to what we demonstrate in the post-independence period for Italy in 1993–2014, but they find smaller magnitudes. This difference can be due to the difference in connection measures and the type of firms that make up the dataset. In this paper, connection requires a founder to serve as an MP or MC; in Akcigit et al. (2023), a firm is connected if that firm employs a local politician. So, our measure is more restrictive. However, all our firms are corporations, which are more likely to connect to high-level politicians, whereas Akcigit et al. (2023) use a much wider set of firms. Although the new evidence we present here cannot be taken as causal, we show that political connections were associated with a significant reduction in creative destruction. In doing so, we also empirically link the monopolization of Egypt's modern industries demonstrated by the historical literature to the locus of private-state connections.

Delays of authorization and operation. In the post-colonial era, the authorization system emerged as an important tool to regulate the entry of corporations. Fig. 4 shows that this became a time-consuming process after independence, routinely taking up many months, and sometimes more than a year. At the outset, the growing difficulty of acquiring authorization decrees coincided with the rapid increase of connected companies. Our empirical exercises show that the two processes were linked.

We estimate the impact of connections on the delay between formally signing (and filing) the company statutes, and the decree that authorized incorporation, which we observe for all corporations. We also examine the effect of connections on the delay between the decree and the year for which the firm produced its full balance sheet after starting operations, which we observe for only a subset of corporations in the dividends sample. We analyze these questions by estimating the following cross-sectional OLS regression at the corporation level. We estimate a separate regression for the colonial and post-independence periods:

$$delay_{cd} = \gamma connected_{cd} + \alpha_d + X_{cd}\theta + \epsilon_{cd}$$

where $delay_{cd}$ is the duration in months between the contract and the decree, or the duration in years between the decree and the first year of operation, for corporation c in industry d. The main regressor is $connected_{cd}$, which is a dummy variable that equals 1 if corporation c has at least one MP or MC among its founders during the month of contracting, and equals 0 if a corporation does not have any founder-MP or founder-MC throughout its life cycle. We thus exclude corporations that became politically connected only after the contracting month.

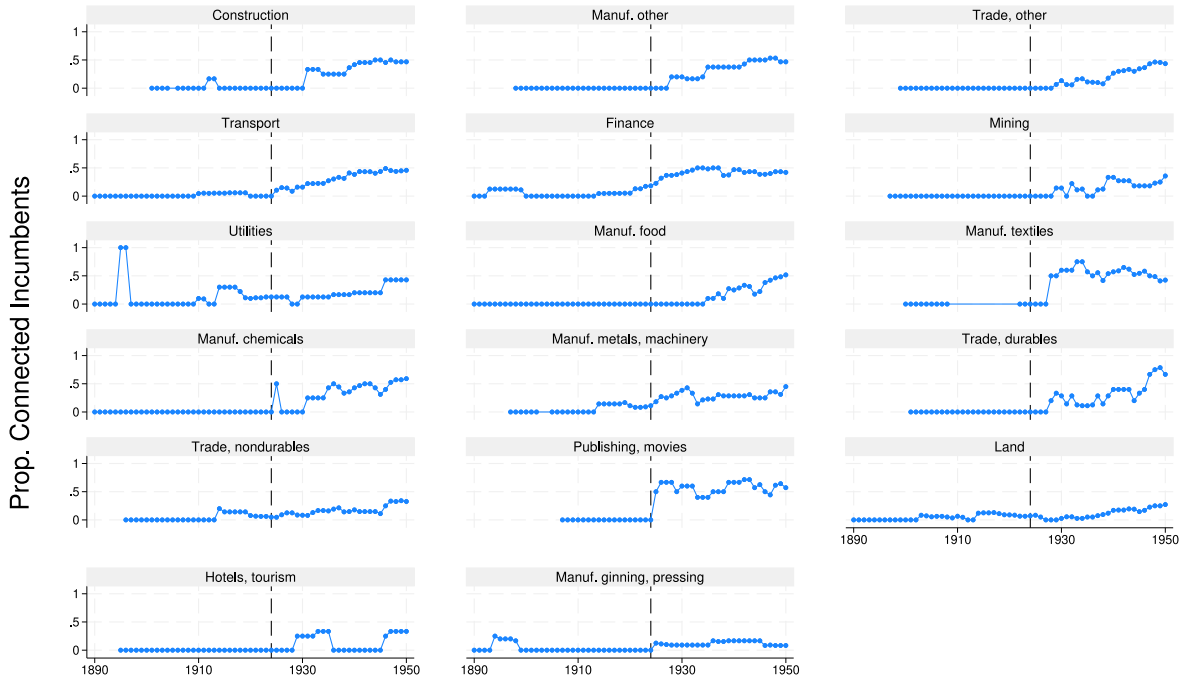


Fig. 3. Political connections by industry.
Notes: The figure shows the proportion of politically connected incumbent firms for each industry, that is the number of firms that are connected to an MP or MC divided by the total number of alive firms at the beginning of the year. We employ a slightly modified NAICS industrial classification that is close to the original sources. See Section 2 for detail.

Table 3
Political Connections of Corporations and Entry.

	Entry rate		Prop. MP conn. entrants		Prop. old corps.		Prop. large paid-up capital		Prop. foreign		Prop. public Traded	
	(1) <1924	(2) ≥1924	(3) <1924	(4) ≥1924	(5) <1924	(6) ≥1924	(7) <1924	(8) ≥1924	(9) <1924	(10) ≥1924	(11) <1924	(12) ≥1924
Prop. Conn. Incumbents	0.28	−0.17	0.04	−0.53	0.26	−0.42	−0.50	0.08	−0.00	−0.35	0.31	−0.12
	(0.14)*	(0.10)*	(0.09)	(0.25)**	(0.23)	(0.11)***	(0.23)**	(0.15)	(0.12)	(0.09)***	(0.10)***	(0.06)*
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs (Industry-Year)	471	459	161	213	468	459	333	272	468	459	468	459
Clusters (Industries)	17	17	16	17	17	17	17	17	17	17	17	17
R^2	0.19	0.21	0.34	0.29	0.57	0.71	0.62	0.81	0.51	0.84	0.60	0.91
Mean dep. var.	0.14	0.08	0.02	0.54	0.30	0.52	0.53	0.37	0.65	0.45	0.25	0.21

Notes: The data are at the industry-year level. Columns 3 and 4 are restricted to years in which there is at least one new corporation. Standard errors are clustered at the industry level.
* $p < 0.10$.
** $p < 0.05$.
*** $p < 0.01$.

We control for a full set of industry fixed effects (α_d). The control vector X_{cd} includes the logarithm of initial capital that accounts for the variation in firm size, and the proportion of foreign founders.

Column 1 of Table 4 shows that the average delay of authorization during the colonial period was 1.3 months. Connected corporations during the month of contract did not enjoy shorter delay than never-connected corporations. In contrast, columns 3 shows that the average delay of authorization increased to 7.3 months after independence. Furthermore, in comparison to never-connected firms, corporations connected at contract enjoyed a significantly shorter delay – by 1.4 months – before they received their authorization decree. This is 22 percent of the average delay. To provide further evidence that this correlation is attributable to a causal effect of having a connection at contract, we control for a dummy variable that equals 1 if a corporation became connected within one year after the decree was issued, but not before (columns 2 and 4).[32] We find in column 4 that the effect of political connections during the contracting month retains its statistical significance, while the coefficient on obtaining a connection within one year after authorization is statistically insignificant.

Columns 5–6 report the estimates for the delay, in years, between the date the firm received its authorization decree and the year the firm produced its full balance sheet after starting operations. On average, corporations started their business within 6 months upon receiving authorization during the colonial period, but this delay doubled after independence. Whereas connections at the time of approval did not

[32] This slightly increases our sample to include corporations that were not connected during the contracting month, but became connected within one year after the decree.

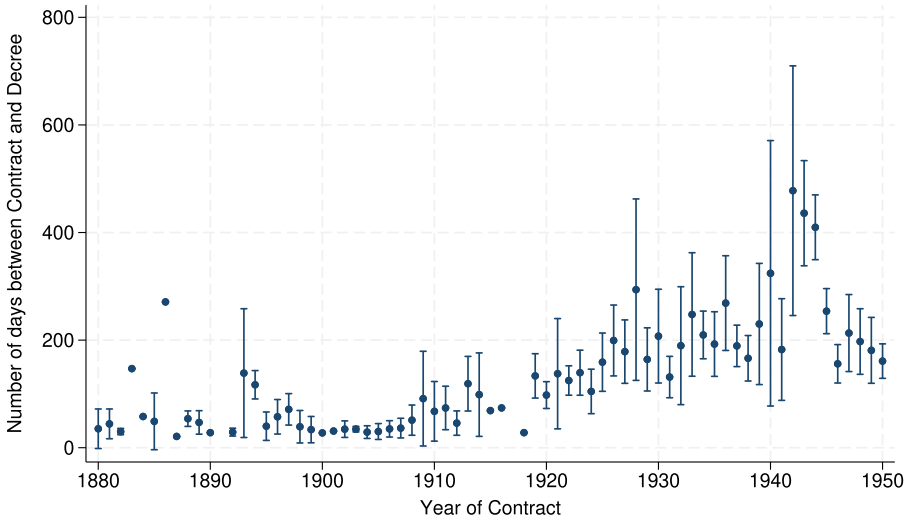


Fig. 4. Contract-authorization delay.
Notes: The graph shows the binned scatter plot (Cattaneo et al., 2024), where the dependent variable is the number of days between the contracting date (that is, the date on which founders signed and filed incorporation statutes for approval) and the date of decree that formally authorized that company's incorporation for each corporation, and the independent variable is the year in which the founders filed for incorporation. No other control variables are included.

Table 4
Political Connections and Delays of Authorization and Operation.

	Delay of authorization				Delay of operation	
	(1) <1924	(2) <1924	(3) ≥1924	(4) ≥1924	(5) <1924	(6) ≥1924
=1 if MP/MC-Founder at Contract	0.10	−0.58	−1.70	−1.36		
	(0.76)	(0.83)	(0.63)***	(0.63)**		
=1 if MP/MC-Founder within 1 Year after Decree		3.07		−1.47		
		(0.92)***		(1.03)		
=1 if MP/MC-Founder at Entry (Decree)					0.23	0.37
					(0.44)	(0.20)*
Log(Initial Capital)	−0.38	−0.35	−0.59	−0.58	0.01	−0.11
	(0.06)***	(0.07)***	(0.24)**	(0.23)**	(0.08)	(0.09)
Prop. Foreign Founders	−0.74	−0.59	−3.09	−2.96	−0.15	−0.79
	(0.29)**	(0.31)*	(1.21)**	(1.19)**	(0.35)	(0.41)*
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs (Corporations)	358	361	369	375	51	141
R^2	0.27	0.25	0.13	0.12	0.20	0.33
Mean Dep. Var.	1.28	1.31	7.29	7.22	0.55	1.12

Notes: The dependent variable is the delay between signing the contract and the issuance of the decree in months in columns 1–4, and the delay between the decree issuance and the year of the first balance sheet in years in column 5–6. In columns 1–4, <1924 (≥1924) means that the sample is restricted to corporations whose contracting date is before (in or after) 1924. In columns 5–6, <1924 (≥1924) means that the sample is restricted to corporations whose entry year is before (in or after) 1924. Columns 1 and 3 are restricted to corporations that have at least one founder-MP or MC during the month of the contract and those that did not have any founder-MP or MC throughout their life cycle. Columns 2 and 4 are restricted to corporations that have at least one founder-MP or MC during the month of contract, those that did not have any founder-MP or MC during the month of contract but gained at least one founder-MP or MC within one year following the issuance of the decree, and firms that did not have any founder-MP or MC throughout their life cycle. Standard errors are in parentheses. Controls are the logarithm of initial capital and the proportion of foreign founders.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

matter for the delay of operation before 1924 (column 5), column 6 shows that firms that were connected at the time of approval began operations about 4.5 months later after 1924. In fact, the delayed start of business offset the early authorization advantage they enjoyed. Our results show that although connections eased legal barriers to entry, these corporations faced operational hurdles that connections could not mitigate. While it is not possible to make stronger inferences about productivity based on this evidence, the fact that connected companies had trouble getting started relative to unconnected firms despite faster authorization is consistent with the view in the historical literature that the corporations of this period were inefficient and owed their success to market power (El-Gritly, 1947, p. 525).

Exit. The third mechanism we examine is firm survival. If political connections are effective in staving off competitive pressure from entrants after independence, we should expect politically connected firms to enjoy lower exit risk.

The survival analysis requires observing the dates of incorporation and dissolution. Three issues arise. First, our data span corporate businesses from January 1, 1890 to December 31, 1950, when all firm histories are censored. While many corporations dissolved after December 31, 1950, we do not know their exit date. Second, businesses in our data also enter at different points in time; they belong to different cohorts. This would make the analysis of survival in the long term driven by a handful of companies founded before 1900. Similarly,

we observe businesses that incorporated only a few years before the censoring date, and are too "young" for meaningful comparisons. Third, while we observe the year of dissolution for every corporation that exited before 1950, we do not observe the month of dissolution for every company.

We address the first and second issues – censoring and cohort effects – by applying a consistent censoring strategy of 10-year and 20-year spans. In the 20 (10) year span, we only consider corporations that can be potentially observed for at least 20 (10) years; we remove all corporation-year observations beyond 20 (10) years of entry, and we remove corporations that were established on January 1, 1931 (1941) or later. We then estimate the difference in survival over 20 (10) years between connected and unconnected firms. Because of this restriction, we are not able to conduct a separate survival analysis for the colonial and post-independence periods. Instead, we study the relationship between political connections and survival over the whole period.[33] We contend with the third problem of unknown exit months by running two sets of analyses: continuous-time survival on a restricted sample that removes corporations that exited before the censoring date but that have unknown exit months, and a discrete-time survival on our entire sample (subject to consistent censoring) where the unit of the time analysis is one year.

Our survival estimations employ a time-invariant definition of connections, where we compare three sets of corporations: (1) corporations that were never connected to an MP or MC, (2) corporations that had at least one MP-founder at any month during their lifetime, but never had an MC-founder, and (3) corporations that had at least one MC-founder at any month. Adopting a time-invariant definition is necessary for estimating the Kaplan–Meier survival functions. Even though in a hazards model like Cox, we can use time-variant connections, this will likely create noise. While parliamentary elections were frequent, occurring almost every two years between 1924 and 1950, corporations, by construction, have long lives. Hence, losing a political connection would not likely raise the exit risk in a way that can push a significant swath of businesses into bankruptcy within two years, after which these companies can regain their political connections. The time-invariant measure also admits more corporations and gives enough statistical power to distinguish connections via MPs and MCs, allowing us to test whether the "intensity" of connection – MCs had significantly more policy influence than MPs, after all – was associated with different levels of exit risk.

We start by estimating the Kaplan–Meier survival functions without making parametric assumptions, and using the information from firm histories alone. At the outset, we find large disparities in survival across the three groups of corporations. Fig. 5 demonstrates this evidence by plotting the Kaplan–Meier survival estimates over the 10-year and 20-year windows. More than 95 percent of corporations ever connected via an MC, and about 75 to 90 percent of firms with an MP-founder but no MC-founder, survived the first 10 or 20 years. In contrast, only 60 percent of unconnected firms lived at least 10 years, more than half of them dissolving before reaching 20 years.

Differences in survival across connected and unconnected firms may be driven by either a causal effect of connections on survival, or by omitted variables that are correlated with both variables. We control for a number of potential confounders by estimating a Cox continuous proportional-hazards model over 10-year and 20-year spans. The main regressors of interest are a dummy variable that indicates whether a corporation was ever connected to an MP (but not to an MC), and a dummy variable that indicates whether a corporation was ever connected to an MC. Our time-invariant controls include the proportion of foreign founders, the initial capital, industry fixed effects, and parliamentary cycle of entry fixed effects.

Table 5 reports the hazard-ratio estimates. If the hazard-ratio estimate is greater than 1, politically connected firms have a greater exit risk, and thus shorter survival than unconnected firms. Our estimates in column 1 show that corporations that were ever connected to an MP, but not to an MC, enjoyed 0.35 times the hazard of exit that unconnected corporations had over the 20-year span; in other words, political connections to MPs were associated with a 65 percent lower exit risk relative to unconnected firms. Corporations connected through an MC were even more resilient with about 96 percent lower failure risk. Adding controls in column 2 reduces this gap, so there might be survival selection based on initial capital, the proportion of foreign founders, and industry choices, but the magnitude remains substantial and statistically significant. Controlling for cycle of entry fixed effects in column 3 further reduces the survival gap, suggesting that cohort of entry may be driving part of the effects, but the effects remain large and statistically significant for MCs. The reduction in hazard risk is smaller for both types of political connections in the 10-year span, indicating that survival benefits are amplified in the long run. The last two rows report the p-values for testing the proportional hazards between our key connection categories and the reference group (not connected). Our tests show that the proportional hazards assumption is not rejected, except in one of our specifications (column 5).

We conduct two robustness checks. First, we re-define our political connections regressor to be measured during the month of contracting the corporation. We compare corporations that had at least one founder who was an MP or MC during the contracting month, to corporations that did not have a political connection during that month.[34] The corresponding Cox proportional-hazards estimates are reported in Appendix Table 14 and are similar to the main findings. Second, we estimate a discrete proportional-hazards (CLOGLOG) model for all corporations, including those with unknown exit months, where the unit of analysis is the year. The results for the 20-year span are shown in Appendix Figure 14 and are similar to the continuous survival results.

While our results on firm survival reveal significant differences between connected and unconnected firms, we can take advantage of firm's financial histories to better understand how connected firms might have exploited their political position to reduce their exit risk. Table 6 reports results from additional estimations of Cox proportional-hazards models, where the outcome variable is the annual hazard since the first year when the company reported a loss, capped at 10 (or 20) years after the year of first loss. We further remove corporations that reported their first loss on January 1, 1941 (or 1931, respectively) or later. We find that corporations that had an MP or MC founder during the first year they had negative profits, enjoyed 64 to 71 percent less annual exit risk in the 10 years after reporting their first loss relative to unconnected firms. Connected firms were thus able to stave off exit risk despite not being profitable. These results show that connected firms faced less attrition, could remain in the market despite not being profitable in a way that unconnected firms could not, because connected firms did not face competitive pressure as seriously.

4. Conclusion

Close relationships between political actors and corporate entitites have important implications for business outcomes. In this paper, we have demonstrated that economic returns to political connections are contingent on institutional context and can reverse across political transitions. By assembling a novel dataset of the universe of Egyptian corporations and political officeholders from 1890 to 1950, we show that connections were a liability under colonial rule but became an asset after independence. This reversal reflects a fundamental shift in the

[33] Although Cox proportional hazards regressions can deal with the "incomplete follow-up", we still need to restrict our survival window to fixed spans since businesses in our data enter at different points in time.

[34] We combine MP and MC connections in this specification, because of the small number of firms that were connected to an MC during the contracting month.

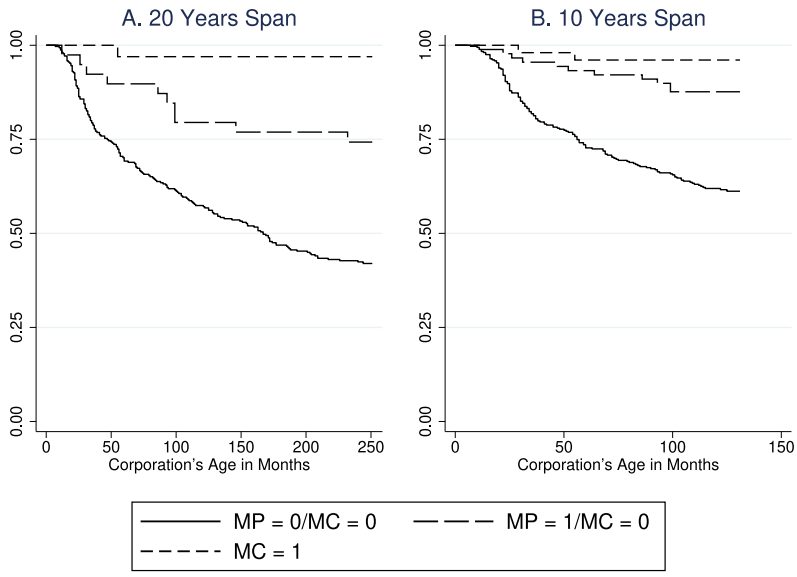


Fig. 5. Political connections of corporations and monthly exit: Kaplan–Meier survival function.
Note: This analysis excludes firms that exited before December 31, 1950 but had unknown exit months.

Table 5
Political Connections of Corporations and Monthly Exit: Cox Proportional-Hazards Model.

	20 years span			10 years span		
	(1) Hazard ratio	(2) Hazard ratio	(3) Hazard ratio	(4) Hazard ratio	(5) Hazard ratio	(6) Hazard ratio
=1 if MP & No MC	0.35	0.46	0.67	0.27	0.42	0.73
	(0.11)***	(0.16)**	(0.27)	(0.08)***	(0.14)***	(0.26)
=1 if MC	0.04	0.05	0.06	0.08	0.13	0.18
	(0.04)***	(0.05)***	(0.06)***	(0.06)***	(0.09)***	(0.14)**
Prop. Foreign Founders		2.02	2.05		2.77	1.72
		(0.58)**	(0.64)**		(0.95)***	(0.63)
Log(Initial Capital)		0.92	0.90		0.94	0.90
		(0.04)*	(0.05)*		(0.05)	(0.06)
Industry FE	No	Yes	Yes	No	Yes	Yes
Entry Cycle FE	No	No	Yes	No	No	Yes
N (Corporation-Month)	62 064	61 837	59 728	50 888	50 758	49 916
N Subjects	387	385	373	503	501	490
N Failures	193	192	191	153	153	153
Pseudo R^2	0.02	0.05	0.06	0.03	0.05	0.09
Log-likelihood	−1064.05	−1034.45	−1002.37	−900.14	−877.31	−837.92
p-value PH (MP & No MC)	0.91	0.56	0.34	0.59	0.09	0.22
p-value PH (MC)	0.52	0.76	0.97	0.61	0.83	0.26

Notes: This analysis excludes firms that exited before December 31, 1950 but had unknown exit months. Table reports the hazard ratios. Columns 1–3 are restricted to a period of 20 years span after the year of entry, whereas columns 4–6 are restricted to a period of 10 years span after the year of entry. White–Huber heteroskedasticity robust standard errors are in parentheses. The *p*-values of the constant proportional hazards tests are reported in the last two rows.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

concentration of political power: from a British-controlled, laissez-faire regime to a new political order that empowered domestic elites. Before independence, associations with nationalist politicians signaled conflict with colonial authorities and deterred investors. After independence, these linkages facilitated easier access to the corporate form, reduced competitive pressures, and allowed connected firms to survive despite experiencing adverse shocks.

Our findings stress the central role of institutional change in the evolution of state-business relations. Decolonization expanded opportunities for industrialization. One should note that connections were justified by the exigencies of late industrialization and the necessity of industrial policy. This was most notable in the formation of Bank Misr, which financed a variety of likewise connected firms in new industrial sectors. But decolonization also reconfigured the channels through which state resources and rents were allocated, creating incentives for firms to cultivate political ties. These promoted structural transformation in Egypt's economy, by fostering Egyptian-owned enterprises, at the cost of entrenching oligopolies and muting business dynamism. The Egyptian experience illustrated a broader tension. Transferring political authority from foreign to domestic elites can allow for realizing national modernization objectives, but it also raises the risk of elite capture. This trade-off is critical for better understanding the economic consequences of decolonization and for evaluating the persistence of similar dynamics today when domestic policymaking is bounded by international constraints. These lessons remain relevant to developing countries today, who might operate under hybrid regimes of sovereignty, where international organizations can constrain domestic policies. When these constraints become slacker, conditions analogous

Table 6
Political Connections of Corporations and Post-Loss (Yearly) Exit: Cox Proportional-Hazards Model.

	20 years span		10 years span	
	(1) Hazard ratio	(2) Hazard ratio	(3) Hazard ratio	(4) Hazard ratio
=1 if MP/MC-Founder at First Loss	0.54	0.09	0.36	0.19
	(0.38)	(0.16)	(0.22)*	(0.16)**
Prop. Foreign Founders		1.46		1.00
		(1.85)		(0.86)
Log(Initial Capital)		0.52		0.71
		(0.13)***		(0.10)**
Industry FE	No	Yes	No	Yes
N (Corporation-Year)	798	491	1044	810
N Subjects	54	42	122	102
N Failures	22	17	28	24
Pseudo R^2	0.00	0.20	0.01	0.18
Log-likelihood	−81.81	−47.21	−129.87	−88.43
p-value PH (MP/MC)	0.78	0.02	0.60	0.13

Notes: The regressions are at the corporation and year level. Table reports the hazard ratios. Columns 1–2 are restricted to a period of 20 years span after the year of first loss, whereas columns 3–4 are restricted to a period of 10 years span after the year of first loss. White–Huber heteroskedasticity robust standard errors are in parentheses.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

to Egypt's post-colonial transition can emerge. When policymaking discretion shifts, political connections can once again become decisive in affecting firm performance and industrial organization.

The social costs of political connections that emerged as a result of political transitions are not obvious. In the post-colonial period, connections distorted the competitive forces of creative destruction and led to uncompetitive industries. Some of the earliest economic history literature on Egypt is about the inefficient cartelization of these industries (El-Gritly, 1947). This put unconnected, Egyptian, enterprises at a clear disadvantage. However, close state-business relations promoted the formation of new industries, helped diversify Egyptian economy, and thus facilitated Egyptian industrialization; this was the point of these policies, after all. These industries might not have existed otherwise, or might have been populated by small, unincorporated firms instead, especially at a time when foreign capital became scarce. Future work on the political connections of businesses in historical development will need to take into account these effects to evaluate the full impact on welfare.

CRediT authorship contribution statement

Cihan Artunç: Writing – original draft. **Mohamed Saleh:** Writing – original draft.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgment

This paper is supported by the National Science Foundation, United States under the grant NSF SES 1559273.

Appendix A. Supplementary data

Supplementary material related to this article can be found online at https://doi.org/10.1016/j.jdeveco.2025.103697.

Data availability

Data will be made available on request.

References

Acemoglu, Daron, Hassan, Tarek A., Tahoun, Ahmed, 2018. The power of the street: Evidence from Egypt's arab spring. Rev. Financ. Stud. 31 (1), 1–42.
Acemoglu, Daron, Johnson, Simon, Kermani, Amir, Kwak, James, Mitton, Todd, 2016. The value of connections in turbulent times: Evidence from the United States. J. Financ. Econ. 121 (2), 368–391.
Akcigit, Ufuk, Baslandze, Salomé, Lotti, Francesca, 2023. Connecting to power: political connections. Innov. Firm Dyn. Econ. 92, 529–564.
Akey, Pat, 2015. Valuing changes in political networks: Evidence from campaign contributions to close congressional elections. Rev. Financ. Stud. 28 (11), 3188–3223.
Alonso, Marta, Palma, Nuno, Simon-Yarza, Beatriz, 2022. The value of political connections: evidence from China's anti-corruption campaign. J. Institutional Econ. 18 (5), 785–805.
Amsden, Alice Hoffenberg, 1989. Asia's Next Giant: South Korea and Late Industrialization. Oxford University Press, USA.
Artunç, Cihan, Guinnane, Timothy W., 2019. Partnership as experimentation. J. Law Econ. Organ. 35 (3), 455–488.
Artunç, Cihan, 2024. Legal origins of corporate governance: Choice of law in Egypt, 1887–1913. Econ. Hist. Rev. 77, 3–40.
Ağır, S., Artunç, C., 2021. Set and forget? The evolution of business law in the ottoman empire and Turkey. Bus. Hist. Rev.
Baltrunaite, Audinga, Giorgiantonio, Cristina, Mocetti, Sauro, Orlando, Tommaso, 2021. Discretion and supplier selection in public procurement. J. Law Econ. Organ. 37 (1), 134–166.
Baranek, Bruno, Titl, Vítězslav, 2024. The cost of favoritism in public procurement. J. Law Econ. 67 (2), 445–477.
Bartelme, Dominick, Costinot, Arnaud, Donaldson, Dave, Rodriguez-Clare, Andres, 2025. The textbook case for industrial policy: Theory meets data. J. Politi. Econ. 133 (5).
Borusyak, Kirill, Jaravel, Xavier, Spiess, Jann, 2024. Revisiting event-study designs: Robust and efficient estimation. Rev. Econ. Stud. rdae007.
Brugués, Felipe, Brugués, Javier, Giambra, Samuele, 2024. Political connections and misallocation of procurement contracts: evidence from ecuador. J. Dev. Econ. 170, 103296.
Bugra, Ayse, 1994. State and Business in Modern Turkey: A Comparative Study. State University of New York Press.
Calì, Massimiliano, Sen, Kunal, 2011. Do effective state business relations matter for economic growth? Evidence from Indian states. World Dev. 39 (9), 1542–1557.
Callaway, Brantly, Sant'Anna, Pedro H.C., 2021. Difference-in-differences with multiple time periods. J. Econometrics 225 (2), 200–230.
Cattaneo, Matias D., Crump, Richard K., Farrell, Max H., Feng, Yingjie, 2024. On binscatter. Am. Econ. Rev. 114 (5), 1488–1514.

De Chaisemartin, Clément, d'Haultfoeuille, Xavier, 2020. Two-way fixed effects estimators with heterogeneous treatment effects. Am. Econ. Rev. 110 (9), 2964–2996.
De Chaisemartin, Clément, d'Haultfoeuille, Xavier, 2023. Two-way fixed effects and differences-in-differences with heterogeneous treatment effects: A survey. Econom. J. 26 (3), C1–C30.
De Chaisemartin, Clément, d'Haultfoeuille, Xavier, 2024. Difference-in-differences estimators of intertemporal treatment effects. Rev. Econ. Stat. 1–45.
El-Gritly, Aly Ahmed I., 1947. The structure of modern industry in Egypt. L'Egypte Contemp. 24, 1–242.
El-Shanawany, M.R., 1936. The first national life tables for Egypt. L'Egypte Contemp. (162), 209–269.
Evans, Peter, 1995. Embedded Autonomy, States and Industrial Transformation. Princeton University Press, Princeton, NJ.
Faccio, Mara, 2006. Politically connected firms. Am. Econ. Rev. 96 (1), 369–386.
Fisman, Raymond, 2001. Estimating the value of political connections. Am. Econ. Rev. 91 (4), 1095–1102.
Fisman, Raymond, Wang, Yongxiang, 2015. The mortality cost of political connections. Rev. Econ. Stud. 82 (4), 1346–1382.
Gerschenkron, Alexander, 1962. Economic Backwardness in Historical Perspective. Belknap Press, Cambridge, MA.
Goldman, Eitan, Rocholl, Jörg, So, Jongil, 2009. Do politically connected boards affect firm value? Rev. Financ. Stud. 22 (6), 2331–2360.
Goldman, Eitan, Rocholl, Jörg, So, Jongil, 2013. Politically connected boards of directors and the allocation of procurement contracts. Rev. Financ. 17 (5), 1617–1648.
Goodman-Bacon, Andrew, 2021. Difference-in-differences with variation in treatment timing. J. Econometrics 225 (2), 254–277.
Grossman, Gene M., Helpman, Elhanan, 1994. Protection for sale. Am. Econ. Rev. 84 (4), 833.
Grossman, Richard S., Imai, Masami, 2016. Taking the lord's name in vain: The impact of connected directors on 19th century british banks. Explor. Econ. Hist. 59, 75–93.
Hirschman, Albert O., 1970. Exit, Voice, and Loyalty: Responses To Decline in Firms, Organizations, and States. Harvard University Press, Cambridge, MA.
Issa, Hossam M., 1970. Capitalisme et sociétés anonymes en Égypte; essai sur le rapport entre structure sociale et droit. Librairie générale de droit et de jurisprudence, Paris.
Johnson, Simon, Mitton, Todd, 2003. Cronyism and capital controls: Evidence from Malaysia. J. Financ. Econ. 67 (2), 351–382.
Juhász, Réka, Lane, Nathan, Rodrik, Dani, 2024. The new economics of industrial policy. Annu. Rev. Econ.
Khwaja, Asim Ijaz, Mian, Atif, 2005. Do lenders favor politically connected firms? Rent provision in an emerging financial market. Q. J. Econ. 120 (4), 1371–1411.
Kiser, Clyde V., 1944. The demographic position of Egypt. Milbank Meml. Fund Q. 22 (4), 383–408.
Kroszner, Randall S., Stratmann, Thomas, 1998. Interest-group competition and the organization of congress: theory and evidence from financial services' political action committees. Am. Econ. Rev. 1163–1187.
Kruse, Hendrik W., Martínez-Zarzoso, Inma, Baghdadi, Leila, 2021. Standards and political connections: Evidence from Tunisia. J. Dev. Econ. 153, 102731.
Lehmann-Hasemeyer, Sibylle, Opitz, Alexander, 2019. The value of active politicians on supervisory boards: Evidence from the berlin stock exchange and the parliament in interwar Germany. Scand. Econ. Hist. Rev. 67 (1), 71–89.
Okazaki, Tetsuji, Sawada, Michiru, 2017. Measuring the extent and implications of corporate political connections in prewar Japan. Explor. Econ. Hist. 65, 17–35.
Owen, Roger, 1981. The Middle East in the World Economy. I.B. Tauris, London.
Rizk, Yunan Labib, 1975. History of Egyptian Cabinets, 1878–1953. al-Ahram Center for Political and Strategic Studies, Cairo.
Roth, Jonathan, Sant'Anna, Pedro H.C., Bilinski, Alyssa, Poe, John, 2023. What's trending in difference-in-differences? A synthesis of the recent econometrics literature. J. Econometrics 235 (2), 2218–2244.
Schoenherr, David, 2019. Political connections and allocative distortions. J. Financ. 74 (2), 543–586.
Sen, Kunal, Velde, Dirk Willem Te, 2009. State business relations and economic growth in Sub-Saharan Africa. J. Dev. Stud. 45 (8), 1267–1283.
Subhi, Muhammad Khalil, 1947. History of Parliamentary Life in Egypt since the Era of Muhammad Ali Pasha, Vol. 6 and Addendum. Dar al-Kutub, Cairo.
Sun, Liyang, Abraham, Sarah, 2021. Estimating dynamic treatment effects in event studies with heterogeneous treatment effects. J. Econometrics 225 (2), 175–199.
Tignor, Robert L., 1984. State, Private Enterprise and Economic Change in Egypt, 1918-1952. Princeton University Press, Princeton.
Tignor, Robert L., 1989. Egyptian Textiles and British Capital, 1930-1956. Amer Univ in Cairo Press.
Tignor, Robert L., 2011. Egypt: A Short History. Princeton University Press, Princeton.
Tignor, Robert L., 2015. Modernization and British Colonial Rule in Egypt, 1882-1914. Princeton University Press.
Vitalis, Robert, 1995. When Capitalists Collide: Business Conflict and the End of Empire in Egypt. University of California Press, Berkeley.
Wade, Robert, 1990. Governing the Market, Economic Theory and the Role of Government in East Asian Industrialization. Princeton University Press, Princeton, NJ.
Xiao, Gang, Shen, Sichen, 2022. To pollute or not to pollute: Political connections and corporate environmental performance. J. Corp. Financ. 74, 102214.