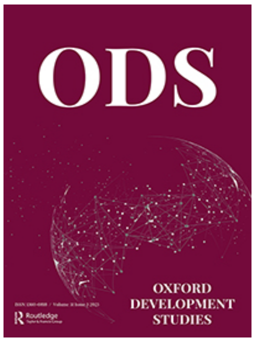

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Political economy and structural transformation: democracy, regulation and public investment

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ABSTRACT
Technological progress is widely recognized as a fundamental driver of economic development and structural transformation. Nevertheless, substantial variations in productivity persist both within and across countries. While the literature on misallocation has made important progress, we still have a limited understanding of the extent to which these misallocations are driven by political factors and the actions (or inactions) of governments. This paper reviews the literature on various political distortions, including state capture, patronage, and firm-political connections, and their impacts on economic outcomes. The review emphasizes empirical research, especially in low- and middle-income countries, highlighting the need for coherent theoretical frameworks and policy interventions to address political distortions. The paper also provides suggestions for future research, aiming to advance our understanding of the complex interplay between political dynamics and structural transformation.

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Introduction

Structural transformation is defined as the reallocation of economic activities across agriculture, manufacturing, and services in the process of development. A large literature in development and economic growth suggests technological change is a key driver of structural transformation. Hence, the process of technological adoption and innovation in different sectors of a given economy is key to understanding structural transformation and, in turn, economic growth (Herrendorf et al., 2015).

Development and growth economists have traditionally studied productivity differences through the lens of cross-country income differences (Mankiw et al., 1992). Development accounting exercises suggest that at least half of cross-country income differences can be accounted by differences in Total Factor Productivity (TFP) (Hsieh & Klenow, 2010). TFP, commonly referred to as productivity, is an aggregate measure that reflects how efficiently inputs are used in the production process. TFP gaps across countries were traditionally conceptualised as poor countries having access to worse technologies. However, in the last decades a number of influential studies have changed the lens through which we look at this evidence. These studies have shown that, even within countries, there are massive differences in productivity across sectors and firms (Banerjee & Duflo, 2005; Hsieh & Klenow, 2009; McMillan et al., 2014; Restuccia & Rogerson, 2008). These differences seem larger in developing countries. While some firms seem to enjoy state-of-the art technologies and managerial practices, other firms exhibit low levels of productivity. The presence of economic activities with very different levels of productivity is hard to reconcile in traditional

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economic growth models. Those models predict that inputs – for instance capital – should flow to their most productive uses, such that the marginal unit of capital used in each economic activity is equally productive. When this does not happen, we say the economy exhibits *misallocation* of inputs.

A vibrant literature has followed in organisational economics, macroeconomics, and development to try to understand the nature of this misallocation of resources and its implications in the economy as a whole. This literature has mainly focused on regulations, property rights, and financial or information frictions as the principal sources of misallocation (Restuccia & Rogerson, 2017).

However, these factors are highly endogenous. In particular, much work now suggests that a political economy framework may be essential for understanding the sources of distortions and frictions that allow unproductive firms, industries, or activities to continue. Thus, an understanding of the full dynamics behind structural transformation may require a political economy approach. We argue in this paper that the process of technological change can be facilitated, blocked or distorted by political elites under different institutional arrangements. While some previous papers have investigated the consequences of these political distortions for structural transformation, there is still a lot that we do not know.

In this paper, we aim to review the literature on the ways in which political distortions can explain the differences in productivity within an economy and the process of structural transformation more generally. We plan to identify the limitations of this literature and suggest avenues for future research. We first review the literature on political distortions and their relation to economic outcomes, including various forms of state capture and firm-political connections. We study the prevalence of each type of political distortion and its observed effects on economic outcomes, such as prices, procurement and, consequently, on unobserved outcomes such as consumer surplus and welfare.

The distortions we describe need to be evaluated using a plausible normative framework. We provide such a framework in the second section of this paper, using the basic results of a Schumpeterian growth model. The need for a framework stems from the necessity to connect theoretical claims with empirical evidence from many different structural and institutional backgrounds, from the US and Eastern Europe to South America and West Africa.

A canonical result of the Schumpeterian model is that democracy has heterogeneous impacts on growth. Aghion et al. (2014) show that when countries are close to the technological frontier, economic growth is higher in democratic countries. However, democratic systems do not appear to deliver faster growth for countries far below the frontier. The inherent tension for the low- and middle-income countries is that they are trapped in an equilibrium with low technology and poor democratic institutions. This does not preclude the possibility of technological change, since two possible institutional paths make technological and structural transformation possible. The first path is characterised by vigorous political competition, political rights, individual freedoms, and free entry of firms into industries (i.e. democracies), and the second path is characterised by settings in which there is virtually no turnover of governments but there exists a strong developmental state (e.g. current China, the Asian Tigers).

While these two paths towards technological change and structural transformation are feasible, we claim that democracies have a comparative advantage in sustaining these processes in the long run. The recent empirical evidence suggests that democracies are better at allocating public resources for human capital and infrastructure projects, which provide the foundations for structural transformation. Furthermore, in democracies, personal liberties, such as freedom of movement and a lack of labour coercion, enable the free allocation of labour from the rural sector to more productive industries, which facilitate structural transformation. Finally, in a Schumpeterian model, democracy guarantees property rights, by inhibiting expropriation and permitting the entry of new firms, therefore facilitating the exit of less productive incumbent firms, also known as creative destruction, and a general process of innovation that fosters economic growth.

Democracies, however, are subject to non-market frictions or political distortions that impact their ability to promote technological change and structural transformation. In the third section of this paper, we argue that one relevant source of political distortions in democracies comes from the electoral process itself. Patronage and clientelism generate unequal access to public goods, such as education and infrastructure, which adversely affects rural development and the overall process of structural transformation (Anderson et al., 2015; Beg, 2021; Colonnelli & Prem, 2022; Wantchekon, 2003; Xu, 2018).

Political distortions, however, should not be understood as being exclusively government driven. In fact, firms might hinder the process of technological change and structural transformation by actively trying to capture state institutions and the political process. In the fourth section, we review the literature on political connections to show how they can significantly impact a range of outcomes. These include government procurement decisions, in political contexts as diverse as Lithuania (Baltrunaite, 2020), Russia (Enikolopov & Mityakov, 2023) and Brazil (Arvate et al., 2018); bureaucratic hiring decisions (Xu, 2018); and firm outcomes (Gutiérrez & Philippon, 2022). In extreme cases, a democracy can become so distorted by electoral incentives and political connections that the state is fully captured by private interests in a regime type labelled 'crony capitalism' (Diwan et al., 2020).

While we discuss some theoretical contributions, the main focus of this inception paper is on an empirical literature that uses micro data to uncover political distortions and their effects. So far, this has been the part of the literature with the most progress and potential, with evidence from multiple empirical strategies and contexts. However, efforts must be made to establish a coherent theoretical framework that can guide policy interventions. Further research is also needed to find convincing approaches to quantify the aggregate implications of these factors for national or regional economies. Finally, in terms of geographic coverage, this paper focuses primarily on the literature relevant for low- and middle-income countries (although necessarily some of the relevant literature examines cases from high-income countries).

The paper reviews these different types of political distortions, including a discussion of policy and institutional reforms that can curb distortionary activities, i.e. second-best policies or institutions due to incomplete information about government activities in section four. We finish with suggestions for future research in the concluding fifth section.

Benchmark: normative theories of the political economy of structural transformation

The political economy of structural transformation requires a theory of technological change and its effect on development. As a theoretical benchmark, we explore a form of Schumpeterian growth model, which emphasises the role of competition, firm dynamics, and cross-firm and cross-sector resource reallocation.

Broadly, a Schumpeterian model is a theoretical framework that formalises the central role of 'creative destruction', the process by which new innovations replace older technologies. In a Schumpeterian firm-environment, firms compete by investing in more productive technologies. New firms drive established firms out of the market by improving on existing technologies. A firm-environment with intense competition and high levels of exit and entry of firms leads to a process of continuous upgrading of technology, which is the key driver of economic growth (Aghion et al., 2014).

Deviations from this framework emerge when established firms try to protect their market share using political connections. For instance, they can lobby to obtain favorable regulations or lower taxes than their competitors. Aghion et al. (2014) show that political competition leading to turnover in government can help protect a Schumpeterian firm-environment by reducing the extent to which established firms can use political connections to protect their market power. It follows that democracies are more likely to sustain a Schumpeterian firm-environment, since the extent to which incumbent firms can obtain favorable treatment from government is lower than in autocratic governments. This framework predicts that democracy would be positively correlated with growth insofar as it 'reduces the scope for expropriating successful innovators or for incumbents to prevent new entry [of firms] by using political pressure or bribes: in other words, democracy facilitates creative destruction and thereby encourages innovation' (Aghion et al., 2014, p. 32).

However, richer versions of these models argue that democracy could have heterogeneous effects on growth depending on the level of development of the economy. In particular, in more advanced sectors or economies, political rights are conducive to growth, but these rights may not matter or may negatively affect growth in less advanced, non-frontier sectors. This is because creative destruction is more relevant at the technological frontier rather than inside the frontier, where countries can rely on imitation or adaptation in order to grow (Aghion et al., 2014).

Of course, democracy (like other political institutions) is endogenous. Developing countries are often characterized by simultaneously having weak democratic institutions and low rates of technological adoption. As pointed out by Acemoglu and Robinson (2000), whenever there is a process of technological change, powerful groups may try to prevent its adoption if they stand to lose as a result of the new technologies. Only groups that have and maintain political power will be able to block the new technology. Furthermore, only if their political power is at risk will they find it beneficial to block the new technology:

> If agents are economic losers but have no political power, they cannot impede technological progress. If they have and maintain political power (i.e. are not political losers), then they have no incentive to block progress. It is therefore agents who have political power and fear losing it who will have incentives to block. (p. 193)

This political economy explanation of technological change can generate non-monotonic relationships between the degree of economic power of elites and the likelihood of adopting new technologies. Elites are unlikely to block new technologies when either a) there exists a high degree of political competition and hence elites are not powerful enough, or b) elites are highly entrenched and have a low probability of losing their political power.

These factors were of first-order importance in multiple historical episodes of structural transformation. Consider the case of landed aristocracies in 19th century Europe. As a consequence of the Industrial Revolution, these groups were unequivocally economic losers. While this aristocracy controlled political power in all states, they only opposed the rise of manufacturing in countries where their political power was threatened, such as Russia and Austria-Hungary, but not in societies where they could maintain their political power, such as in Britain and Germany (Acemoglu et al., 2005, p. 433). Check which reference this citation refers to: there's no reference with only Acemoglu as a single author.

Structural transformation has occurred in the cases of limited democracies or plain autocracies (e.g. in Western Europe between the 15th and 19th centuries, Japan in the second half of the 19th century, the East Asian Tigers in the 1980s and 1990s, or more recently China and Vietnam). This could be because these regimes, like democracies, have a Weberian state with strong bureaucratic norms and legal procedures. They can also rely on a strong coercive state to push for structural transformation rather than on market mechanisms.

However, while these factors could give some advantages to non-democracies in the promotion of structural transformation, sustained growth requires market conditions that enable free entry and exit of firms. These market configurations are more likely to be present in democracies, rather than in autocracies. Hence, in the long run, democracies provide a superior institutional framework for economic growth at the technological frontier (Acemoglu & Robinson, 2005; Aghion et al., 2014).

In this paper, we focus on technological change under democracies. The main factors that provide democracies advantages in the process of transformation are: (1) democracies are often better equipped to provide the fundamentals or preconditions for technological change, such as better infrastructure and human capital; (2) democracies historically facilitate the free movement of labour and better allocate this factor of production across the economy; and (3) democracy 'institutionalises' competition. Political incumbents cannot block the entry of new firms. An electoral democracy promotes innovation not only by levelling the playing field for entrepreneurs, but also by reducing the threat of expropriation of successful innovators and protecting start-ups from being driven out of the market by politically connected firms (Acemoglu & Robinson, 2005).

Political distortions as a barrier of technological change

While our benchmark normative theory contends that democracy has relative advantages over autocracy in setting the stage for structural transformation, there are deviations from this benchmark that may lead to an inefficient allocation of resources, rather than enable structural transformation and improve overall welfare. We call these deviations 'political distortions'.

Political distortions have two different origins. The first comes from pressures within democracies themselves. As incumbents seek to retain power, they might allocate resources in inefficient ways. For instance, they could allocate public investments in infrastructure to co-ethnic communities or reward political loyalties with public sector jobs.

The second origin of distortion is political connections between firms and state officials or politicians. Political connections create an uneven playing field between firms. Connected firms have easier access to credit, favourable regulation, or advantages in getting procurement contracts. In the next two sections we explore the literature on each type of political distortion.

While these are some of the most fundamental types of political distortions that prevent firm entry and technological progress, there are other types of distortions that are beyond this paper's scope. One of them relates to the presence of conflict. When groups in society are highly polarized and conflict emerges, incentives to innovate and produce are severely weakened. See Blattman and Miguel (2010) for a literature review in this area. Another important barrier for the process of structural transformation is the lack of state capacity. See for instance Besley and Persson (2009). When the state has insufficient power to levy taxes, regulate markets, and provide basic public goods, different actors will also have low incentives to develop new economic activities and to innovate. In this paper, we focus on the political frictions that emerge in contexts without intense civil conflict and in which the state has achieved a minimum level of state capacity to levy taxes and pass regulations.

Electoral incentives and misallocation of public investments

Some evidence suggests that public investment in infrastructure (e.g. roads and energy) is an important driver of growth and structural transformation (Perez-Sebastian & Steinbuks, 2017). However, electoral incentives might lead to the misallocation of investment since the type of projects undertaken may be those with the highest potential to deliver political support, rather than those that could generate greater economic benefits. Glaeser and Ponzetto (2018) assess whether politics affect efficiency in transportation projects. They find that infrastructure projects whose costs are hard for voters to identify are underbuilt. Thus, the level of information of voters, and the way such information is acquired and processed, determines the development of projects. For the US, the increasing density of educated voters has led to a decrease in mega-projects and pork-barrel expenditures. Beyond the US, there is substantial evidence that infrastructure investment decisions often respond to clientelist motives in low- and middle-income countries. We refer to clientelism as an extreme form of distributional politics in which policymakers allocate public goods to narrowly targeted groups in exchange for political support. For instance, Burgess et al. (2015) show that road construction in Kenya was significantly higher in the region of origin of the president during autocratic periods. In a cross-country setting, Hodler and Raschky (2014) find that the regions of birth of country leaders exhibit more intense night-lights during their time in office. These two examples suggest that the location of infrastructure investments is likely to be selected to benefit specific groups, most likely in exchange for future political support.

Infrastructure projects also depend on government preferences and political accountability. Governments tend to spend on social development rather than infrastructure, despite the latter ranking highly on voters demands and arguably having a higher priority in terms of fostering development and equalising individuals' incomes. Khemani (2010) finds that in India the vast majority of citizens list water or infrastructure among their top priorities. However, other expenses have more prominence in government budgeting. There are two key reasons behind this tendency: first, there is uncertainty regarding whether infrastructure projects will yield desired electoral returns; second, the gestation and duration of projects is longer and may extend beyond a politician's tenure in office. This seems particularly true in countries with weak state capacity, weak systems of checks and balances, and low political competition (Keefer & Knack, 2007; Saez & Sinha, 2010). In sub-Saharan Africa, for example, political factors are important predictors of the location of roads as well as investments in road maintenance (Blimpo et al., 2013). In short, efficient infrastructure investments can be achieved with more responsive governments, more informed voters, and stronger bureaucratic capacity.

Political clientelism may also inadvertently cause the misallocation of labour and investment. Several papers argue that political patrons offer insurance to clients who are vulnerable and value income protection (Anderson et al., 2015; Beg, 2021; Bobonis et al., 2022). Workers who can migrate to urban areas or non-agricultural sectors, pivotal drivers of structural change, may be deterred from doing so at the expense of losing access to the clientelist network. This access to clientelist rents may also act as a resource curse and impede investment in human capital and persistence of the Dual Economy (Lewis, 1979).

Political connections: an uneven playing field

As argued in the normative theory, a Schumpeterian model of innovation-led growth needs a market in which firms exit through displacement by more productive firms. In a first-best world, these productivity differences across firms (or within specific industries) should be driven exclusively by technological differences.

However, it is unlikely that this frictionless market is a good representation of the reality of low- and middle-income countries. In those countries, inefficient firms survive by different mechanisms, often through political means. Governments artificially create monopolies or protect firms by giving them privileged access to credit, favourable regulation, or advantages in obtaining procurement contracts. This creates an uneven playing field, in which unproductive firms do not exit and innovative firms cannot thrive. These inequities across firms may hinder the process of structural transformation, as both incumbent and entrant firms (and sectors) lack the technological means to compete, grow, and drive the development process.

This privileged access to the state is typically driven by political connections. In this section we review a literature that addresses the political links between firms and politicians. First, we show that political connections are valuable for firms because they increase their returns. Second, we discuss how firms obtain political connections and who benefits from them. Third, we discuss the channels through which politically connected firms are favoured by policymakers. Fourth, we review how households or individuals may also benefit from having political connections.

Finally, we present a discussion on the 'highest stage' of political connections. This is what the literature refers to as 'crony capitalism'. While political connections could distort a single market or industry, crony capitalism is characterised by a systematic capture of the overall state structure by private interests. Although the literature highlights that capture is common in autocracies, we show in this section that democracies can also be affected by cronyism to various degrees.

The value of corporate political connections

Firms seek connections with the government because these connections are valuable. For instance, a public contract could provide steady income for long periods of time. In general, this relationship between firms and government is normal and needed for development (e.g. building infrastructure). The problem arises when the sole value of the firm arises from the political connection itself, and not from comparative advantages relative to other firms.

A challenge that this research has faced is how to isolate how much of the value of the firm is driven by political connections. We may observe that a company receives a public contract, and we suspect that the contract was awarded due to political connections. However, the value of the political connection is not equivalent to the value of the contract; the price of the contract conflates both payment for the service (which in turn is linked to the company's productivity) and the value of the political connections.

Political economists have devised creative strategies to estimate the value of political connections. Pioneering work by Fisman (2001) set the tone for what we could call a 'leader centric' estimation of the value of political connections. The intuition of this empirical strategy consists in locating a political leader with documented ties to private firms, and then identifying an exogenous shock that threatens the political position of such a leader – for instance, a health problem. The difference between the profits or returns of companies that were tied to the political leader, as compared to those that were not, following this shock can approximate the value of the political connection.

An advantage of this design is that it can be (and indeed has been) replicated with various political leaders in different contexts. Fisman (2001) estimates the value of political connections in Indonesia in the late 90s, for firms linked directly to then-President Suharto. He estimates that 23% of their value was due to their political connections. Fisman et al. (2012) evaluated the returns of connections to the US vice-president Dick Cheney, who had links to a number of firms in the oil sector. In contrast with the Indonesia study, Fisman et al. (2012) do not find any abnormal returns for firms connected to Cheney upon the arrival of negative news about his health. However, other studies in the US context do find abnormal returns of connected firms. Acemoglu et al. (2016) estimate the value of connections to Secretary of the Treasury Tim Geithner. Rumours about his upcoming appointment increased the stock value of firms connected to him by 12%, while rumours that his nomination was in trouble decreased the value of those firms. The authors argue that firms' political connections during turbulent times (e.g. at the beginning of a large financial crisis) may have been particularly valuable for firms.

These empirical strategies can be extended to estimate the value of political connections to any politician. Faccio et al. (2006) do this by simultaneously estimating the value of corporate political connections for 47 different countries. They examined over 20,000 publicly traded firms and classified them as politically connected if a board member or large shareholder was a national-level politician. Their results indicate that corporate connections to political power are quite prevalent: 35 out of 47 countries have at least one politically connected firm with 3% of publicly listed firms politically connected, representing 7.72% of the world's stock market capitalisation.

Recent literature has improved these measures of politically connected firm performance. This is important because short-term fluctuations in stock market value of firms may reflect investors' perceptions rather than changes in the structural profitability of firms (Baker & Wurgler, 2013). To address this concern, Akcigit et al. (2023) and Brugués et al. (2022) use firm-level administrative data on returns, profitability and investments to document differing firm performance among connected firms.

However clever these studies are, they are likely just approximations of the value of political connections. It is possible, for instance, that the gains of establishing the connection are higher than the losses when the connection is at risk. Moreover, these approaches rely on the embodiment of the political connection in an actual person. Firms, however, might prefer to translate this connection into an institutional framework to have a greater certainty that in the future the privileges resulting from the political connection remain essentially untouched. One method to institutionalise a connection is through lobbying to get favourable regulation (see Dal Bó, 2006; Bombardini & Trebbi, 2020, for literature reviews). One last key difference is that favourable legislation or regulation tends to benefit a sector or set of firms. In contrast, the literature on political connections has focused on how some specific firms get advantages, often through non-legal means, at the expense of direct competitors.

A more subtle way in which political connections can be valuable for a firm is in strengthening its position relative to other companies within the same industry. For instance, Akcigit et al. (2023) use administrative data on the universe of Italian firms and workers and find that, while only 4.5% of firms seem to have political connections, connected firms tend to be large. In fact, they constitute one-third of total employment. These companies have a higher probability of survival, have higher employment and revenue growth, but are less innovative. The fact that connected firms have lower levels of innovation is consistent with previous research that indicates that firm-level TFP growth is lower in sectors more influenced by political connections (González et al., 2020). Moreover, this is all connected with the stylised facts of the Schumpeterian models. Non-market frictions, like political connections, favour the survival of inefficient firms, therefore causing innovation and growth to lag behind.

Finally, a more recent set of papers has examined the effects of democratisation on the value of firms, in the wake of an episode when a dictator has lost power. These papers have used administrative panel data on firms to trace the evolution of firm performance across regimes (González et al., 2020; Hallward-Driemeier et al., 2020). These studies find that firms previously connected to the dictator seem to experience significant declines in productivity. Guidolin and La Ferrara (2007) suggest that the end of war can also alter the abnormal returns of previously connected firms. They provide evidence from the end of war in Angola by examining the abnormal returns of firms that held mining concessions during the war years.

How do some firms obtain political connections?

Most of the work reviewed so far does not tell us how firms become connected to political power. These studies typically conceptualise the set of individuals serving on the board of the firm or in other leadership positions as given. Whether a firm is connected to political power or not depends on whether the firm's leaders or their acquaintances are politicians or bureaucrats. However, who serves on the boards of firms is an endogenous choice. Hence, whether the firm is connected or not is highly endogenous.

One strand of the literature that attempts to understand the endogeneity of political connections focuses on connections through campaign contributions. Firms that have donated to a particular candidate are classified as politically connected to them once that candidate wins the election (Baltrunaite, 2020; Jayachandran, 2006). This methodology has the additional advantage of enabling the identification of the effects of firms *becoming* politically connected by exploiting close elections. Boas et al. (2014) and Arvate et al. (2018) exploit this approach in the context of legislative elections in Brazil and find that firms that contributed to candidates that narrowly won a seat in the legislature obtain more procurement contracts relative to firms that contributed to candidates that barely lost. This approach isolates the value of the political connections associated with links to a politician in power – helping to disentangle this effect from the other factors that might be associated with firms' campaign-contribution patterns. Ferguson and Voth (2008) follow a similar approach in a study focused on Germany in the 1930s. They classify firms as being connected to the Nazi party if those firms had supported the party or Hitler financially, or through serving on advising committees. The authors find substantial outperformance in stock market returns of firms connected to the Nazis, once the Nazis took power in 1933.

Another approach looks at how firms' ability to obtain contracts changes over time with the extent of their political connections, using an empirical strategy based on whether (and when) firms' leaders obtain positions in the public sector (Barbosa & Straub, 2020; Brugués et al., 2022). The idea here is to see whether the firm's value increases when a member of the firm leadership team takes on a public sector role.

Mechanisms through which connected firms get advantages

Once a political connection is made, the government may start favouring firms in a variety of ways. The literature has provided empirical evidence on three main channels through which politically connected firms are favoured by policymakers: (1) through finance; (2) through favourable regulation; and (3) through the allocation of government contracts. These political distortions may reduce market competition, limit technological innovation and hence hinder structural transformation.

First, numerous papers have documented that politically connected firms obtain advantageous access to finance. For instance, Khwaja and Mian (2005) find that politically connected firms in Pakistan get greater access to credit from public banks. Claessens et al. (2008) also find that firms that give greater campaign contributions obtain greater access to credit from state-controlled banks. Boubakri et al. (2012) exploit time variation on the timing of establishing a political connection and find that firms increase their indebtedness after establishing a political connection. Faccio et al. (2006) find that politically connected firms are more likely to receive corporate bailouts from government.

A second set of papers has documented that connected firms obtain preferential policies from the executive government in the form of lower taxation, greater access to import licensees, easier enforcement of licensing requirements, energy subsidies, and trade protection, among others (Diwan et al., 2020; Mobarak & Purbasari, 2006; Rijkers et al., 2014). We might group these policies together under a concept of 'regulatory capture'.

Stigler (1971) challenged the idea that regulation exists solely to advance the overall public interest and posited instead it may serve the interest of a given industry. He hypothesised that agents in every industry or occupation with sufficient political power will seek to influence the state to control market entry (via tariffs, harsh regulation of competitors, generous treatment of firms producing complementary inputs, and price-fixing). His theory implies that curbing regulatory capture requires stronger electoral or other forms of political pressure on regulators by voters and consumer advocacy groups. This would enable the use of public resources to improve the status and market power of industries and occupations. He proposed a 'demand' scheme for regulation, which captures the way public resources could be used to improve the status and market power of industries and occupations.

This form of regulatory capture has been documented empirically by political economists. For instance, Mobarak and Purbasari (2006) find that firms connected to Suharto in Indonesia were favoured by easing access to import licenses of intermediate inputs, while immediate competitors were given many fewer licenses.

A third set of papers has studied preferential allocation of procurement contracts among politically connected firms. Public procurement represents a large fraction of public spending in most countries. The allocation of large procurement contracts to connected firms may be an important avenue through which some firms are given an advantage. Goldman et al. (2013) exploit the change in control of the United States House of Representatives and Senate in 1994 to show that firms connected to the winning party experienced increases in the quantity of procurement contracts granted, while the opposite happened to firms connected to the losing party.

While this is suggestive of firms obtaining rewards from their campaign contributions, the effects could be confounded by unobserved differences between firms connected to either party. Boas et al. (2014) and Schoenherr (2019) find substantial increases in procurement contracts won by firms that donated to a politician who won a close election. The effects seem stronger for certain parties, suggesting that the treatment effects may be heterogeneous by the type of political connection. Baltrunaite (2020) examines procurement data from Lithuania and finds that firms that have made campaign contributions are more likely to win procurement contracts. Interestingly, the effect disappears after 2012, when a law banning campaign contributions came into effect. Brugués et al. (2022) implement an event study showing that the probability of firms being awarded a contract increases by three percentage points after the owner or his/her siblings obtain a public sector job.

The allocation of government contracts on the basis of political connections has consequences for the equilibrium in the whole industry. Ferraz et al. (2021) show that success in winning procurement contracts has substantial positive effects on firm growth. Granting contracts to politically inefficient connected firms may give those firms a boost to their economic activity, at the expense of opportunities for competitors and other potential entrants. Again, this is all detrimental within a model of innovation-led growth in which market mechanisms should drive out inefficient firms.

Lastly, policies intended to support political accountability may, somewhat perversely, result in the creation of political connections that hinder the efficient allocation of procurement. Overall, the accountability literature suggests that removing term limits and allowing for longer tenures leads to an increase in the competence of politicians (Dal Bó et al., 2017) and an increase in politicians' productivity (Fouirnaies & Hall, 2018). In principle, all of these should lead to more efficient procurement bids. Paradoxically, however, Coviello and Gagliarducci (2017) find that longer tenure for local politicians in Italy leads to an increase in the connections made with local firms. As a result, they show that longer tenure is associated with a reduction in the number of bidders per auctions, higher procurement costs and an increase in the likelihood that the same firm that won an auction wins future bids.

Moreover, distortions seem sticky in practice. We can imagine a setting in which political uncertainty, such as high political competition, might be damaging to firms that are politically connected with the incumbent. Canen et al. (2023) show that in such cases firms substitute towards other forms of capture in order to retain their connections even in the face of high turnover in the political realm. Specifically, firms seem to seek more direct forms of capture in these circumstances, for example, through aiming to capture the agents in charge of policymaking (mostly bureaucrats). These strategies are intended to serve as insurance for the firm, guaranteeing that distortions are kept in place. Importantly, typical policies thought to reduce state capture, such as improved bureaucrat selection, have no effect on citizens' welfare given firms' capacity to substitute to other forms of capture. It is only through improving the selection of politicians through accountability-strengthening reforms (e.g. re-election incentives or grassroot movements) that state capture can be subdued. We will return to this in the fifth section of the paper.

Political connections at the individual or household level

So far in this section, we have focused on the advantages that firms obtain from acquiring connections to political power. However, individuals or households can also get substantial benefits from having political connections. Goldstein and Udry (2008) find that individuals with political connections are more likely to leave their land fallow in rural Ghana. In this context, leaving the land fallow has a positive impact on agricultural productivity, but it comes at the cost of risking someone else using and claiming the land. Political power gives connected individuals greater security to their land ownership. In this way, politically connected farmers can farm more productively than less connected ones. In the Italian context, Gagliarducci and Manacorda (2020) find that family members of politicians improve their job prospects in private sector firms. Their estimates suggest that at least 0.4% of private sector employment in Italy is influenced by political connections.

Just as in the case of clientelism and patronage, favouritism in property rights enforcement may lead to underinvestment and a lower rate of technological adoption by most farmers, and thus to the persistence of subsistence agriculture which ultimately may hinder growth and the process of structural transformation.

The costs of political connections

As we have shown above, political connections distort the path of innovation-led growth that would promote structural transformation by permitting the survival of relatively unproductive firms in the market. All these studies have strived to quantify just how much of a burden this market inefficiency represents in terms of welfare loss.

Returning to the paper by Brugués et al. (2022), the authors develop a model to quantify the welfare costs of poorly allocated public procurement. Their estimates indicate that the welfare loss can be up to 8% of the overall procurement budget. This loss is accounted by two main sources. First, the public sector pays higher prices for their goods; and second, the contracts are awarded to less productive firms. In the same vein, Baltrunaite (2020) estimates that the excess cost due to firm favouritism in Lithuania is on the order of 1% of GDP.

Using an alternative strategy that relies on the monitoring of firms, Colonnelli and Prem (2022) examine the effects on firm activity of a randomised public sector audit programme in Brazil. They find that three years after municipalities have been audited, there is a 1% increase in firm activity. The new businesses created seem to have high quality managers and not political connections. Their estimates are consistent with corruption representing a tax rate on firms' revenue of between 5 and 23%.

While these studies indicate that political influence over economic activity has substantial costs, it is possible that the actual negative effects are much larger. The presence of political connections may generate general equilibrium effects that are typically not captured by micro-economic studies. For instance, the cost of political distortions may be much larger when considering the number and type of firms that do not exist because political entry barriers prevented their creation.

Huneeus and Kim (2021) is one of the few studies that aimed to estimate these general equilibrium effects. They develop a model to estimate the effects of the distortions induced by lobbying on firm size in the USA. They estimate that the aggregate cost of lobbying is 11% of US aggregate productivity. This cost can be decomposed into two sources. The first source corresponds to misallocation of resources across existing firms. The second source corresponds to entry barriers of competitors. This indirect or general equilibrium effect accounts for 35% of the total welfare cost.

Beyond economic costs, political influence in private sector activities can also have a number of additional welfare costs. Fisman and Wang (2015) find that worker fatalities are higher in politically connected firms in China. Cingano and Pinotti (2013) document that political influence in the allocation of procurement contracts reduces public good provision by 20%. Klor et al. (2020) show that labour union members at firms connected to the Argentinian military dictatorship were more likely to experience repression by the regime. Connected firms had a 300% higher number of labour union members that disappeared during the military regime. These are only some of the potential non-pecuniary costs associated with an uneven playing field of firms.

Crony capitalism and elite capture

Arguably, up until this point we have presented the origins and consequences of political connections in certain sectors or industries. The extreme case is where political connections are 'structural', which is typically referred as 'crony capitalism'. This term defines political and economic systems where economic activity is heavily influenced by political power. The type of firms that are active, the type of resources and inputs they use, and the type of investments they undertake heavily depend on the political connections of the firms. In this type of system, there are not only 'a few bad apples', as most firms rely on some sort of connection. Firms with no access to power are limited in number or non-existent.

There is substantial anecdotal evidence that economic activity in many developing countries is heavily intertwined with politics. Some examples are Owen (2004), the World Bank (2009), Heydemann (2014) and Musacchio and Lazzarini (2014). Often, autocratic or hybrid regimes have been characterised as crony systems. For instance, there is evidence suggesting that connectedness to the Mubarak regime was a prerequisite for firms in Egypt to operate (Acemoglu et al., 2018; Kienle, 2004; Sfakianakis, 2004). Similar systems were also in place in Tunisia, Syria, Libya, Yemen, and Algeria (Alley, 2010; Haddad, 2012; Tlemcani, 1999).

An important example of crony capitalism is the case of China. A recent study by Bai et al. (2019) describes how having political connections to local governments is almost a prerequisite for firms to thrive in China. To conduct this study, the authors visited a southern city in China for some weeks in 2013. The city had seven vice-mayors, all of whom spent most of their time promoting a number of private firms (30 firms on average per vice-mayor). This was despite the fact that their official duties had nothing to do with business development: some of them were supposed to be in charge of education or health policies in the local government. Neither local governments, nor firms, typically try to hide the strength of their political connections.

Other observers of the way in which business is conducted in developing countries indicate that business activities are conducted on the basis of 'deals' rather than on the basis of the application of clear rules and regulations. Hallward-Driemeier and Pritchett (2015) compare the Doing Business Dataset, which has data on the regulatory burdens facing firms, with evidence from the World Bank Enterprise Surveys, which is a firm-level survey that captures actual delays experienced by firms. Their results indicate that there is a large variance in the time it takes to complete a given procedure, even within countries.

This evidence suggests that the playing field is highly uneven in most developing countries. Compliance with rules and procedures seems to be massively different across firms. Some firms seem to manage to speed up the process, while others suffer long delays on their activities. The authors argue that most of the economic activity in developing countries is conducted on the basis of 'deals' rather than on 'procedures'.

Despite the large set of suggestive evidence and qualitative reports, we have limited information regarding how widespread crony capitalism is around the world. Faccio (2006) was one of the first studies that aimed at providing a quantitative assessment of the extent of crony capitalism. In her study, she showed that 35 out of 47 countries studied had at least one politically connected firm. However, this is far from providing the full picture since only national political connections are examined (rather than more local); similarly, the study only considered publicly listed firms.

A related configuration of political power that is potentially detrimental to economic activity is 'elite capture'. Societies where a minority of the population has a disproportionate amount of influence over politics have been associated with corruption, inefficient economic policies and inequality. The degree of influence over politics is sometimes exercised directly, for instance, when ruling politicians are part of the elite. In other contexts, influence is less direct. For instance, elites may find ways to exert pressure over non-elite politicians to shape policies that further the interests of the elites.

The literature on elite capture has been to a great extent descriptive or theoretical (Acemoglu & Robinson, 2008). Well-identified empirical studies are still limited in number. One important factor that has hindered the evolution of this literature is the difficulty in defining who belongs to 'the elite'. While in certain settings the identity of elites is well understood and observable – for instance, in the case of large landowners or a particular caste or ethnicity – in many other cases, their identity is more fluid and harder to pin down.

Perhaps for this reason, the early literature focused on the study of settings where there was a consensus on the identity of elites and the presence of elite capture. The initial literature focused on large landowners, who controlled political and economic resources during large portions of the history of Latin America and other parts of the world (Baland & Robinson, 2008; Galor et al., 2009).

A more recent literature has also studied elites whose power emanates from other sources, such as cultural or ethnicity-based elites (Anderson et al., 2015), membership in politically powerful families or dynasties (Dal Bó et al., 2009; Ferraz et al., 2023), access to the state and patronage (Bai & Jia, 2016), links to non-democratic regimes (Martinez-Bravo et al., 2017), and economic elites (Acemoglu & Robinson, 2005; Gilens & Page, 2014).[1]

This more recent set of studies indicates that elites come in different forms and flavours. It is difficult to find characterisations of their identity and sources of power that apply to multiple settings.[2] The relevant definitions of elites tend to be highly case-specific; even in specific settings, definitions are not always clear-cut. Individuals with the same identity and position may be characterised as elite or not depending on the level of undue influence that they exert over the policymaking process. For instance, consider a mayor in a small village in Indonesia. Is that individual part of an elite? If that individual has been elected through free and fair local elections and represents the interest of constituents, she may not be characterised as being part of an elite. However, if she engages in patronage, vote buying, controls a number of corporations and/or shapes policies to benefit a narrow and powerful group in society, we may want to classify her as belonging to an elite.

Finding better definitions of who are 'the elite' and of measuring the *de facto* power of individuals are important challenges that future literature needs to address. We return to these issues when we discuss future paths for research.

Institutional and policy reforms

In this subsection we provide a brief survey of the literature on policy and institutional reforms that could limit political distortions.

A first set of papers have examined electoral incentives to promote programmatic redistribution. A key concern is: how can non-corrupt candidates running on growth-promoting policies win elections? Fujiwara and Wantchekon (2013), and Wantchekon and Guardado (2020) provide evidence suggesting that deliberative campaigns – that is, campaigns which include open discussion and debate of policies – are effective in improving support for programmatic candidates in Benin and Philippines.

In the same vein, Bidwell et al. (2020) find that public debate involving competing candidates can make voters more knowledgeable about policies and induce candidates to provide public goods. Brierley et al. (2020) find that debates make voters less polarised, more policy-oriented and less inclined to vote on the basis of ethnic identities.

On the electoral incentives to vote out corrupt politicians, Ferraz and Finan (2008) show that after providing voters with information on audit reports prior to municipal elections in Brazil, corrupt politicians are at least 7% less likely to be elected.

A second literature has examined institutional reforms designed to limit capture. Banning or regulating corporate campaign donations can reduce political corruption and state capture. Baltrunaite (2020) compares the probabilities of winning a procurement auction between firms in Lithuania, some of which have made political donations in the past. After the passing of a reform banning corporate contributions, the probability of success for donors fell.

As for institutional reforms to control regulatory capture, Laffont and Tirole (1986) provide a framework for the regulation of industries with a few powerful firms. They devised a new theory for oligopolistic markets in situations of asymmetric information and show how well-designed production contracts can help overcome information asymmetries when monopoly costs and the choice of production techniques are not known by the regulators. They also recommended drawing long-term contracts, as these are more effective at revealing the true costs of the firm, while incentivising it to reduce its costs. Finally, Laffont and Tirole also highlighted risks of collusion between the regulator and firms and put forward a number of proposals for anti-trust legislation.

Direction for future research

This paper draws from several literatures on the role of competition, regulation, and efficient redistribution in promoting growth. Establishing a formal model for efficient distribution and optimal institutional design to promote the provision of public goods should be a priority for future research. One objective would be to compare observed distributions of public goods against an optimal, counter-factual distribution. An analogous strategy is increasingly common in the trade and transportation network infrastructure. Developing a model for a socially optimal allocation, or a range of such allocations, to compare against observed allocations could allow for a better understanding of the role of institutions in shaping distributions. Such a model could draw lessons from the market design literature, as well as normative theories of regulation and institutions grounded in economic models.

Other avenues for future research include the impact of transparency-promoting policies and its impacts on growth, innovation, and institutions. Corruption may occur because of a lack of transparency. If so, increasing transparency can increase public mobilisation against corruption and other wasteful expenditures. Political entrepreneurs may represent the public interest in favour of transparency and play a role in designing pro-transparency policies. Other means of increasing transparency, such as by the digitisation of transactions, may also have effects on institutions that are worthy of further research.

The development of rural political institutions and the relationship between these institutions and growth, may also be a fruitful avenue for research in this area. Prior literature has often assumed something of a semi-feudal political system in rural areas. However, with migration and democratisation, these models may no longer match current conditions. Examining how institution building occurs in rural areas may enable a better understanding of how technological, productivity-improving transformations can occur in rural areas. The sources of political leadership at the federal and local levels, such as their background among an urban elite or from rural areas, may impact the types of institutions that form in rural areas.

Another fruitful avenue for future research is the measurement of political connections and crony capitalism and their effects on economic activity. The increasing availability of administrative data on firms, employees, politicians, and bureaucrats enables the development of more comprehensive measures of political influence in the economy. Identifying the ways in which these influences affect firm-level economic activity through profitability, investments, innovation, and the allocation of talent might also a fruitful avenue for future research. The macroeconomic literature that has examined the recent increases in mark-ups can also be linked to a more quantitative evidence on the extent of crony capitalism (De Loecker & Eeckhout, 2021).

One important aspect that needs to be considered much more carefully in the literature is the presence of general equilibrium effects. The productivity wedges across existing firms may be small when compared with the productivity wedges between existing firms and those that do not exist because of entry barriers.

Much more evidence is also needed on broader welfare costs related to the influence of political power on economic activity. The fact that employment, inputs, and other resources are allocated on the basis of connections rather than on the basis of merit or latent productivity can have profound implications for individuals' attitudes, such as their aspirations, levels of trust in the political and economic system, and their political preferences. These attitudes can also feed back and alter the allocation of talent and investments in human capital, which are key for structural transformation.

Another important question is how to differentiate between crony capitalism and healthy industrial policy. As pointed out by Aiginger and Rodrik (2020), the industrial policy of the 21st century is likely to be characterised by sustained collaborations between private sector firms and governments, rather than by preferential access to credit or export quotas. New sectors that are likely to shape economic activity in the future, such as artificial intelligence, are being developed in close collaboration with the public sector (Beraja et al., 2023). Are new forms of public-private partnership a potential vector for an increasingly uneven playing field across firms? Alternatively, we could think that such partnerships are established under some rules and regulations that prevent undue competition with other competitors or with potential entrants.

In order to continue to make progress in the literature on crony capitalism and elite capture, scholars need to find better definitions of elites and ways to measure *de facto* power of key individuals in society. Both aspects – measurement and definition – are closely connected. As the identity of elites is more fluid, without progress in the measurement of *de facto* power, it will be hard to find convincing definitions based on observable traits of potential elite members.

Another area that requires further work is what policies or institutions can mitigate or alter equilibria characterised by elite capture and crony capitalism. For instance, Bai et al. (2019) argue that the competition across local governments in China mitigates the potential negative effects of politicians favouring certain firms. However, well-identified empirical evidence on whether inter-jurisdiction competition could mitigate the negative effects of crony capitalism is still lacking. More generally, we have little evidence on how political or judicial institutions could mediate the effects of these practices on economic activity. Other factors, such as social norms or bureaucratic capacity, could also be important mediating factors.

Regarding policies to mitigate elite capture, the evidence is also slim and must be strengthened. Trying to implement reforms that block powerful elites from economic rents has oftentimes proved to be risky business. A number of historical cases have shown that this type of reform can lead to political instability that may undo the reform. Profound institutional reforms, such as democratisation, may be an alternative way of limiting the power of elites (Acemoglu et al., 2015). However, the details in the implementation of these reforms, such as whether autocratic officials are allowed to remain in power during the transition, are important (See Martinez-Bravo et al., 2017). An alternative approach is to promote competition among elites (see Acemoglu et al., 2014; Ferraz et al., 2023). However, while these strategies may be helpful for mitigating some of the short-run negative effects of elite capture, it is still an open question whether they will facilitate or hinder the reform of the system towards a non-elite capture equilibrium.

Notes

1. In autocratic contexts, some studies identify 'the elites' as those in the inner circle of the dictator and those that have government responsibilities. See for instance Mahdavi and John (2020).
2. This paper was prepared as a Pathfinding Paper for the CEPR-led research programme on Structural Transformation and Economic Growth (STEG), funded by the United Kingdom's Foreign, Comonwealth, and Development Office (FCDO) as part of the UK aid effort. An earlier Working Paper (CEMFI Working Paper No. 2110) is available here: https://www.cemfi.es/ftp/wp/2110.pdf

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References

Acemoglu, D., Hassan, T. A., & Tahoun, A. (2018). The power of the street: Evidence from Egypt's Arab Spring. *The Review of Financial Studies*, *31*(1), 1–42. https://doi.org/10.1093/rfs/hhx086

Acemoglu, D., Johnson, S., Kermani, A., Kwak, J., & Mitton, T. (2016). The value of connections in turbulent times: Evidence from the United States. *Journal of Financial Economics*, *121*(2), 368–391. https://doi.org/10.1016/j.jfineco.2015.10.001

Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. In P. Aghion & S. Durlauf (Eds.), *Handbook of economic growth*. Elsevier. https://doi.org/10.1016/s1574-0684(05)01006-3

Acemoglu, D., Naidu, S., Restrepo, P., & Robinson, J. A. (2015). Democracy, redistribution, and inequality. In A. B. Atkinson & F. Bourguignon (Eds.), *Handbook of income distribution* (pp. 1885–1966). Elsevier. https://doi.org/10.1016/b978-0-444-59429-7.00022-4

Acemoglu, D., Reed, T., & Robinson, J. A. (2014). Chiefs: Economic development and elite control of Civil society in Sierra Leone. *Journal of Political Economy*, *122*(2), 319–368. https://doi.org/10.1086/674988

Acemoglu, D., & Robinson, J. A. (2000). Political losers as a barrier to economic development. *American Economic Review*, *90*(2), 126–130. https://doi.org/10.1257/aer.90.2.126

Acemoglu, D., & Robinson, J. A. (2005). *Economic origins of dictatorship and democracy*. Cambridge University Press. https://doi.org/10.1017/cbo9780511510809

Acemoglu, D., & Robinson, J. A. (2008). Persistence of power, elites, and institutions. *American Economic Review*, *98*(1), 267–293. https://doi.org/10.1257/aer.98.1.267

Aghion, P., Akcigit, U., & Howitt, P. (2014). What do we learn from Schumpeterian growth theory? In P. Aghion & S. Durlauf (Eds.), *Handbook of economic growth* (Vol. 2, pp. 515–563). Elsevier. https://doi.org/10.1016/b978-0-444-53540-5.00001-x

Aiginger, K., & Rodrik, D. (2020). Rebirth of industrial Policy and an Agenda for the twenty-first century. *Journal of Industry Competition and Trade*, *20*(2), 189–207. https://doi.org/10.1007/s10842-019-00322-3

Akcigit, U., Baslandze, S., & Lotti, F. (2023). Connecting to power: Political connections, innovation, and firm Dynamics. *Econometrica*, *91*(2), 529–564. https://doi.org/10.3982/ecta18338

Alley, A. L. (2010). The rules of the game: Unpacking patronage Politics in Yemen. *The Middle East Journal*, *64*(3), 385–409. https://doi.org/10.3751/64.3.13

Anderson, S., Francois, P., & Kotwal, A. (2015). Clientelism in Indian villages. *American Economic Review*, *105*(6), 1780–1816. https://doi.org/10.1257/aer.20130623

Arvate, P., Barbosa, K., & Fuzitani, E. (2018). *Party expertise, campaign donation and government contracts: Evidence from an electoral quasi-experiment* (Working Paper 377). Insper. https://www.insper.edu.br/wp-content/uploads/2018/10/PartyExpertise_March2018_capa-2.pdf

Bai, C.-E., Hsieh, C.-T., & Song, Z. (2019). Special deals with Chinese characteristics. *NBER Macroeconomics Annual 2019*, *34*, 357–424. University of Chicago Press. https://doi.org/10.1086/707189

Bai, Y., & Jia, R. (2016). Elite Recruitment and political stability: The impact of the abolition of China's civil service exam. *Econometrica*, *84*(2), 677–733. https://doi.org/10.3982/ecta13448

Baker, M., & Wurgler, J. (2013). Behavioral corporate Finance: An updated survey. In G. M. C. In, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 2A, pp. 357–424). Elsevier, North-Holland. https://doi.org/10.1016/b978-0-44-453594-8.00005-7

Baland, J.-M., & Robinson, J. A. (2008). Land and Power: Theory and evidence from Chile. *American Economic Review*, *98*(5), 1737–1765. https://doi.org/10.1257/aer.98.5.1737

Baltrunaite, A. (2020). Political contributions and public procurement: Evidence from Lithuania. *Journal of the European Economic Association*, *18*(2), 541–582. https://doi.org/10.1093/jeea/jvz016

Banerjee, A., & Duflo, E. (2005). Growth theory through the lens of development Economics. In P. Aghion & S. Durlauf (Eds.), *Handbook of economic growth* (Vol. 1A, pp. 473–552). Elsevier Science. https://doi.org/10.1016/s1574-0684(05)01007-5

Barbosa, K., & Straub, S. (2020). *The value of revolving doors in public procurement* (TSE Working Papers 17-873). Toulouse School of Economics (TSE), revised May 2020. https://publications.ut-capitole.fr/id/eprint/25790/1/wp_tse_873.pdf

Beg, S. (2021). Tenancy and clientelism. *Journal of Economic Behavior & Organization*, *186*, 201–226. https://doi.org/10.1016/j.jebo.2021.03.006

Beraja, M., Yang, D. Y., & Yuchtman, N. (2023). Data-intensive innovation and the state: Evidence from AI firms in China. *The Review of Economic Studies*, *90*(4), 1701–1723. https://doi.org/10.1093/restud/rdac056

Besley, T., & Persson, T. (2009). The origins of state capacity: Property rights, taxation, and Politics. *American Economic Review*, *99*(4), 1218–1244. https://doi.org/10.1257/aer.99.4.1218

Bidwell, K. K. C., Casey, K., & Glennerster, R. (2020). Debates: Voting and expenditure responses to political communication. *Journal of Political Economy*, *128*(8), 2880–2924. https://doi.org/10.1086/706862

Blattman, C., & Miguel, E. (2010). Civil war. *Journal of Economic Literature*, *48*(1), 3–57. https://doi.org/10.1257/jel.48.1.3
Blimpo, M. P., Harding, R., & Wantchekon, L. (2013). Public investment in rural infrastructure: Some political economy considerations. *Journal of African Economies*, *22*(suppl 2), 57–83. https://doi.org/10.1093/jae/ejt015
Boas, T. C., Hidalgo, F. D., & Richardson, N. P. (2014). The spoils of victory: Campaign donations and government contracts in Brazil. *The Journal of Politics*, *76*(2), 415–429. https://doi.org/10.1017/s002238161300145x
Bobonis, G. J., Gertler, P., Gonzalez-Navarro, M., & Nichter, S. (2022). Vulnerability and Clientelism. *American Economic Review*, *112*(11), 3627–3659. https://doi.org/10.1257/aer.20190565
Bombardini, M., & Trebbi, F. (2020). Empirical models of lobbying. *Annual Review of Economics*, *12*(1), 391–413. https://doi.org/10.1146/annurev-economics-082019-024350
Boubakri, N., Cosset, J.-C., & Saffar, W. (2012). The impact of political connections on firms' operating performance and financing decisions. *Journal of Financial Research*, *35*(3), 397–423. https://doi.org/10.1111/j.1475-6803.2012.01322.x
Brierley, S., Kramon, E., & Ofosu, G. (2020). The moderating effect of debates on political attitudes. *American Journal of Political Science*, *64*(1), 19–37. https://doi.org/10.1111/ajps.12458
Brugués, F., Brugués, J., & Giambra, S. (2022). *Political Connections and Misallocation of Procurement Contracts: Evidence from Ecuador* (Working Paper WP012). STEG. https://shorturl.at/dkFU9
Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., & Padró i Miquel, G. (2015). The value of democracy: Evidence from road building in Kenya. *American Economic Review*, *105*(6), 1817–1851. https://doi.org/10.1257/aer.20131031
Canen, N., Ch, R., & Wantchekon, L. (2023). Political uncertainty and the forms of state capture. *Journal of Development Economics*, *160*, 102972. https://doi.org/10.1016/j.jdeveco.2022.102972
Cingano, F., & Pinotti, P. (2013). Politicians at work: The private returns and social costs of political connections. *Journal of the European Economic Association*, *11*(2), 433–465. https://doi.org/10.1111/jeea.12001
Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to Finance: The role of campaign contributions. *Journal of Financial Economics*, *88*(3), 554–580. https://doi.org/10.1016/j.jfineco.2006.11.003
Colonnelli, E., & Prem, M. (2022). Corruption and firms. *The Review of Economic Studies*, *89*(2), 695–732. https://doi.org/10.1093/restud/rdab040
Coviello, D., & Gagliarducci, S. (2017). Tenure in office and public procurement. *American Economic Journal: Economic Policy*, *9*(3), 59–105. https://doi.org/10.1257/pol.20150426
Dal Bó, E. (2006). Regulatory capture: A Review. *Oxford Review of Economic Policy*, *22*(2), 203–225. https://doi.org/10.1093/oxrep/grj013
Dal Bó, E., Dal Bó, P., & Snyder, J. (2009). Political dynasties. *Review of Economic Studies*, *76*(1), 115–142. https://doi.org/10.1111/j.1467-937x.2008.00519.x
Dal Bó, E., Finan, F., Folke, O., Persson, T., & Rickne, J. (2017). Who becomes a politician? *The Quarterly Journal of Economics*, *132*(4), 1877–1914. https://doi.org/10.1093/qje/qjx016
De Loecker, J., & Eeckhout, J. (2021). *Global Market Power* (NBER Working Paper 24768). National Bureau of Economic Research. https://www.janeeckhout.com/wp-content/uploads/Global.pdf
Diwan, I., Keefer, P., & Schiffbauer, M. (2020). Pyramid capitalism: Cronyism, regulation, and firm productivity in Egypt. *The Review of International Organizations*, *15*(1), 211–246. https://doi.org/10.1007/s11558-018-9327-2
Enikolopov, R., & Mityakov, S. (2023). Who benefits from tax evasion of politically connected firms? *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4346236
Faccio, M. (2006). Politically connected firms. *American Economic Review*, *96*(1), 369–386. https://doi.org/10.1257/000282806776157704
Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailouts. *The Journal of Finance*, *61*(6), 2597–2635. https://doi.org/10.1111/j.1540-6261.2006.01000.x
Ferguson, T., & Voth, H.-J. (2008). Betting on Hitler—the value of political connections in Nazi Germany. *The Quarterly Journal of Economics*, *123*(1), 101–137. https://doi.org/10.1162/qjec.2008.123.1.101
Ferraz, C., & Finan, F. (2008). Exposing corrupt politicians: The effects of Brazil's publicly released audits on electoral outcomes. *The Quarterly Journal of Economics*, *123*(2), 703–745. https://doi.org/10.1162/qjec.2008.123.2.703
Ferraz, C., Finan, F., & Martinez-Bravo, M. (2023). *Political power, elite control and long-run development: Evidence from Brazil* (NBER Working Paper 27456). National Bureau of Economic Research. https://shorturl.at/fhAN4
Ferraz, C., Finan, F., & Szerman, D. (2021). *Procuring firm growth: The effects of government purchases on firm Dynamics*. (NBER Working Paper 21219). National Bureau of Economic Research https://shorturl.at/yBDJ9
Fisman, R. (2001). Estimating the value of political connections. *American Economic Review*, *91*(4), 1095–1102. https://doi.org/10.1257/aer.91.4.1095
Fisman, D., Fisman, R., Galef, J., Khurana, R., & Wang, Y. (2012). Estimating the value of connections to vice-president Cheney. *B E Journal of Economic Analysis & Policy*, *13*(3). https://doi.org/10.1515/1935-1682.3272
Fisman, R., & Wang, Y. (2015). The mortality cost of political connections. *The Review of Economic Studies*, *82*(4), 1346–1382. https://doi.org/10.1093/restud/rdv020

Fouirnaies, A., & Hall, A. B. (2018). How do interest groups seek access to committees? *American Journal of Political Science*, *62*(1), 132–147. https://doi.org/10.1111/ajps.12323

Fujiwara, T., & Wantchekon, L. (2013). Can informed public deliberation overcome clientelism? Experimental evidence from Benin. *American Economic Journal: Applied Economics*, *5*(4), 241–255. https://doi.org/10.1257/app.5.4.241

Gagliarducci, S., & Manacorda, M. (2020). Politics in the family: Nepotism and the Hiring decisions of Italian firms. *American Economic Journal: Applied Economics*, *12*(2), 67–95. https://doi.org/10.1257/app.20170778

Galor, O., Moav, O., & Vollrath, D. (2009). Inequality in Landownership, the emergence of human-capital promoting institutions, and the great divergence. *Review of Economic Studies*, *76*(1), 143–179. https://doi.org/10.1111/j.1467-937x.2008.00506.x

Gilens, M., & Page, B. I. (2014). Testing theories of American Politics: Elites, interest groups, and average citizens. *Perspectives on Politics*, *12*(3), 564–581. https://doi.org/10.1017/s1537592714001595

Glaeser, E. L., & Ponzetto, G. A. M. (2018). The political economy of transportation investment. *Economics of Transportation*, *13*, 4–26. https://doi.org/10.1016/j.ecotra.2017.08.001

Goldman, E., Rocholl, J., & So, J. (2013). Politically connected boards of directors and the allocation of procurement contracts. *Review of Finance*, *17*(5), 1617–1648. https://doi.org/10.1093/rof/rfs039

Goldstein, M., & Udry, C. (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of Political Economy*, *116*(6), 981–1022. https://doi.org/10.1086/595561

González, F., Prem, M., & Urzúa, F. (2020). The privatization origins of political corporations: Evidence from the Pinochet regime. *The Journal of Economic History*, *80*(2), 417–456. https://doi.org/10.1017/s0022050719000780

Guidolin, M., & La Ferrara, E. (2007). Diamonds are forever, wars are not: Is conflict bad for private firms? *American Economic Review*, *97*(5), 1978–1993. https://doi.org/10.1257/aer.97.5.1978

Gutiérrez, G., & Philippon, T. (2022). How European markets became free: A study of institutional drift. *Journal of the European Economic Association*, *21*(1), 251–292. https://doi.org/10.1093/jeea/jvac071

Haddad, B. (2012). *Business Networks in Syria: The political economy of authoritarian resilience*. Stanford University Press. https://doi.org/10.1515/9780804778411

Hallward-Driemeier, M., Kochanova, A., & Rijkers, B. (2020). *Does democratization promote competition? Indonesian manufacturing pre and Post Suharto* (Policy Research Working Paper 9112). World Bank, https://doi.org/10.1596/1813-9450-9112

Hallward-Driemeier, M., & Pritchett, L. (2015). How business is done in the developing World: Deals versus rules. *Journal of Economic Perspectives*, *29*(3), 121–140. https://doi.org/10.1257/jep.29.3.121

Herrendorf, B., Herrington, C., & Valentinyi, A. (2015). Sectoral technology and structural transformation. *American Economic Journal Macroeconomics*, *7*(4), 104–133. https://doi.org/10.1257/mac.20130041

Heydemann, S. (2014). *Networks of privilege: Rethinking the Politics of Economic reform in the middle East*. Palgrave Macmillan. https://doi.org/10.1057/9781403982148

Hodler, R., & Raschky, P. A. (2014). Regional favoritism. *The Quarterly Journal of Economics*, *129*(2), 995–1033. https://doi.org/10.1093/qje/qju004

Hsieh, C.-T., & Klenow, P. J. (2009). Misallocation and manufacturing TFP in China and India. *Quarterly Journal of Economics*, *124*(4), 1403–1448. https://doi.org/10.1162/qjec.2009.124.4.1403

Hsieh, C.-T., & Klenow, P. J. (2010). Development accounting. *American Economic Journal Macroeconomics*, *2*(1), 207–223. https://doi.org/10.1257/mac.2.1.207

Huneeus, F., & Kim, I. S. (2021). *The effects of firms' lobbying on resource misallocation* (Working papers central Bank of Chile 920). Central Bank of Chile. https://shorturl.at/arGUY

Jayachandran, S. (2006). The jeffords effect. *The Journal of Law and Economics*, *49*(2), 397–425. https://doi.org/10.1086/501091

Keefer, P., & Knack, S. (2007). Boondoggles, rent-seeking, and political checks and balances: Public investment under unaccountable governments. *The Review of Economics and Statistics*, *89*(3), 566–572. https://doi.org/10.1162/rest.89.3.566

Khemani, S. (2010). *Political economy of infrastructure spending in India* (Policy Research Working Paper 5423). World Bank. https://doi.org/10.1596/1813-9450-5423

Khwaja, A. I., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging Financial market. *The Quarterly Journal of Economics*, *120*(4), 1371–1411. https://doi.org/10.1162/003355305775097524

Kienle, E. (2004). Reconciling privilege and reform: Fiscal Policy in Egypt, 1991-2000. In S. Heydemann (Ed.), *Networks of privilege: Rethinking the Politics of Economic Reform in the Middle East* (pp. 281–296). Palgrave Macmillan. https://doi.org/10.1057/9781403982148_10

Klor, E. F., Saiegh, S., & Satyanath, S. (2020). Cronyism in state violence: Evidence from labor repression during Argentina's last dictatorship. *Journal of the European Economic Association*, *19*(3), 1439–1487. https://doi.org/10.1093/jeea/jvaa029

Laffont, J.-J., & Tirole, J. (1986). Using cost observation to regulate firms. *Journal of Political Economy*, *94*(3, Part 1), 614–641. https://doi.org/10.1086/261392

Lewis, W. A. (1979). The dual economy revisited. *The Manchester School*, *47*(3), 211–229. https://doi.org/10.1111/j.1467-9957.1979.tb00625.x

Mahdavi, P., & John, I. (2020). Dynamics of the inner elite in dictatorships: Evidence from North Korea. *Comparative Politics*, *52*(2), 221–249. https://doi.org/10.5129/001041520x15652680065751

Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the Empirics of Economic growth. *The Quarterly Journal of Economics*, *107*(2), 407–437. https://doi.org/10.2307/2118477

Martinez-Bravo, M., Mukherjee, P., & Stegmann, A. (2017). The non-democratic roots of elite capture: Evidence from Soeharto mayors in Indonesia. *Econometrica*, *85*(6), 1991–2010. https://doi.org/10.3982/ecta14125

McMillan, M., Rodrik, D., & Verduzco-Gallo, Í. (2014). Globalization, structural change, and productivity growth, with an update on africa. *World Development*, *63*, 11–32. https://doi.org/10.1016/j.worlddev.2013.10.012

Mobarak, A. M., & Purbasari, D. P. (2006). *Corrupt protection for sale to firms: Evidence from Indonesia* (Working Paper). University of Colorado Boulder. https://doi.org/10.2139/ssrn.770949

Musacchio, A., & Lazzarini, S. G. (2014). *Reinventing state capitalism: Leviathan in business, Brazil and beyond*. Harvard University Press. https://doi.org/10.4159/harvard.9780674419582

Owen, R. (2004). *State, power and Politics in the making of the Modern middle East*. Routledge. https://doi.org/10.4324/9780203456125

Perez-Sebastian, F., & Steinbuks, J. (2017). *Public Infrastructure and Structural Transformation* (Policy Research Working Paper, 8285) World Bank, https://doi.org/10.1596/1813-9450-8285

Restuccia, D., & Rogerson, R. (2008). Policy distortions and aggregate productivity with heterogeneous establishments. *Review of Economic Dynamics*, *11*(4), 707–720. https://doi.org/10.1016/j.red.2008.05.002

Restuccia, D., & Rogerson, R. (2017). The causes and costs of misallocation. *Journal of Economic Perspectives*, *31*(3), 151–174. https://doi.org/10.1257/jep.31.3.151

Rijkers, B., Freund, C., & Nucifora, A. (2014). *The perils of industrial Policy: Evidence from Tunisia*. (Technical Report, Mimeo). The World Bank. https://shorturl.at/INOR4

Sáez, L., & Sinha, A. (2010). Political cycles, political institutions and public expenditure in India, 1980-2000. *British Journal of Political Science*, *40*(1), 91–113. https://doi.org/10.1017/s0007123409990226

Schoenherr, D. (2019). Political connections and allocative distortions. *The Journal of Finance*, *74*(2), 543–586. https://doi.org/10.1111/jofi.12751

Sfakianakis, J. (2004). The whales of the nile: Networks, businessmen and bureaucrats during the Era of Privatization in Egypt. In S. Heydemann (Ed.), *Networks of privilege: Rethinking the Politics of Economic Reform in the Middle East*. Palgrave Macmillan. https://doi.org/10.1057/9781403982148_3

Stigler, G. J. (1971). The theory of Economic regulation. *The Bell Journal of Economics and Management Science*, *2*(1), 3–21. https://doi.org/10.2307/3003160

Tlemcani, R. (1999). *Etat, Bazar, et Globalisation: L'Aventure de l'Infitah en Algerie*. Les Editions El Hikma.

Wantchekon, L. (2003). Clientelism and voting behavior: Evidence from a field experiment in Benin. *World Politics*, *55*(3), 399–422. https://doi.org/10.1353/wp.2003.0018

Wantchekon, L., & Guardado, J. (2020). *Deliberation and Ethical Voting Behavior: Evidence from a Campaign Experiment in Benin* (Working Paper). https://shorturl.at/gpDHN

World Bank. (2009). *From privilege to competition: Unlocking private-led growth in the middle East and North Africa*. https://doi.org/10.1596/978-0-8213-7877-9

Xu, G. (2018). The costs of patronage: Evidence from the British empire. *American Economic Review*, *108*(11), 3170–3198. https://doi.org/10.1257/aer.20171339