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Statism inside and outside of government: Situating the global bifurcation in state-market relations

Nathan Sperber
Fudan University, Shanghai, & EHESS, Paris

Abstract

Ongoing institutional research on comparative capitalism has cast light on varying degrees of statism – in the sense of state control and influence over the economic process – across national political economies. This paper suggests, however, that the essential bifurcation in state-market relations in the global political economy might not be between less statist *versus* more statist configurations, or between free-market capitalism *versus* state capitalism, but between two distinct ways of channeling the operations of statism through the institutional landscape of the state. On the one hand, governmental statism is actuated through government organs – such as ministries, commissions, or agencies – and relies on budgeted government resources that are typically fiscal in origin. On the other hand, extra-governmental statism is operated at arm’s length by political decision-makers, and actuated through state-controlled corporate entities – such as state-owned enterprises (SOEs) and state-owned financial institutions (SOFIs) – that are located outside of government and formally constituted as market actors. Whereas statism inside of government tends to exist under a hard budget constraint conditioned by fiscal capacity, statism outside of government relies on market transactions for generating and allocating investible capital. This institutional bifurcation is mapped out on the basis of a sample of over thirty medium and large economies of both advanced and emerging status, applying descriptive statistical techniques. It emerges that governmental and extra-governmental patterns of statism appear to substitute mostly for one another rather than being mutually reinforcing. Wealthier nations lean heavily towards governmental channels of statism. Developing countries, on their part, diverge markedly among themselves in their propensity to rely on governmental *versus* extra-governmental institutions.

Introduction

According to data compiled in the OECD's Government at a Glance database, government investment in the United States in 2014 as a share of total investment stood at 16.2 per cent. For China that same year, the figure was 8.6 per cent¹. That government contributions to overall investment in the United States would be roughly the double of that in China might appear deeply puzzling, if not simply an instance of faulty data. The American political economy is usually assumed to be located on the less interventionist side of the spectrum across advanced capitalist nations, let alone across the world. China's political economy, on the other hand, is typically understood to be under heavy state influence, to the point of being increasingly described in the social science literature as an exemplar of "state capitalism".

The apparent paradox suggested by these figures melts away as soon as one recalls that the "state", organisationally speaking, is something more than the "government". China's largest industrial enterprises – such as State Grid or Sinopec – and China's largest financial institutions – such as Industrial and Commercial Bank of China or China Life Insurance – are within the remit of the state, in so far as their controlling shareholders are public institutions, yet they are not component parts of the Chinese government. Although organically linked to government bodies via ownership relations, they belong to the corporate sector and not to the government sector of the economy. There are degrees of separation between their balance sheets on one side and the budgets of China's ministries and administrative commissions on the other. Strictly speaking, the development of an oilfield by Sinopec is not a government investment, no more than a loan extended by the Industrial and Commercial Bank of China is government credit. The resource flows that embody such transactions occur outside of the governmental circuit.

Although the significance of state-controlled corporate actors in a number of major economies is well-known, comparative capitalism research has so far largely failed to grasp their wider implications for the political economy of the state. In effect, state-owned enterprises (SOEs) and state-owned financial institutions (SOFIs) – the latter comprising, *inter*

¹ OECD, Government at a Glance, 2017 edition. Retrieved from <http://stats.oecd.org/Index.aspx?QueryId=66882> in June 2018.

alia, state-owned banks (SOBs) and sovereign wealth funds (SWFs) – constitute in any political economy an array of institutions operating from within the state but outside of the government. Their overall size relative to the non-state sector varies considerably from one political economy to the next, and so does their distribution across different levels of public authority – e.g., central *versus* local echelons. Collectively, they may represent a formidable channel through which state interventions in the economy are actuated, through which economic policy is implemented, and through which, more broadly, the configuration of the wider political economy is shaped.

This demarcation within the landscape of the state, between governmental and extra-governmental institutions, points to a contrast between two alternative ways of instantiating the state's economic activities: through the governmental machinery *versus* through the extra-governmental state sector. If "statism" is understood to denote the prevalence of state control and influence over market activity, then it also follows that statism, whatever its overall intensity, can be disaggregated between its governmental and extra-governmental incarnations. This distinction is not merely formal, since the concrete workings of governmental organs on the one hand, and of SOEs and SOFIs on the other, diverge markedly. Most significantly, government ministries, commissions and agencies depend on budgeted resources that are typically fiscal in origin, whereas state corporate entities rely primarily on market transactions for generating and allocating investible capital.

This article throws light on the bifurcation between governmental and extra-governmental channels of statism by carrying out an exploratory mapping of over thirty significant middle-income and high-income economies. In so far as the available data permits, it seeks to identify and to contrast, within and across these economies, the size of resource stocks and flows passing through the government on one side, and SOEs and SOFIs on the other. It emerges from the analyses that governmental and extra-governmental patterns of statism appear to substitute mostly for one another, rather than being mutually reinforcing. Advanced capitalist nations lean heavily towards governmental channels, whereas developing countries diverge among themselves in their propensity to rely on state corporate entities as opposed to governmental organs.

The article's next section points to blind spots in present-day political economy research on the state, which have so far stood in the way of giving due attention to the institutional bifurcation foregrounded in this research. The following section sets out the basic conceptual premises of the study. It elaborates on the divide between governmental and extra-

governmental institutions within the state, and makes the case for using resource stocks and flows as a gauge for appraising empirically the salience of these two alternative pathways of statism. The article's fourth section introduces the country sample and the indicators retained, as well as the analysis and visualisation techniques chosen to carry out the exploratory mapping. The next section features the mapping itself. This starts with a basic exploration of individual indicators, then moves on to examine variable correlations and clusters, before carrying out dimension reduction via factor analysis and principal component analysis. The final section discusses the findings, spells out implications for comparative capitalism research, and proposes avenues for further enriching the political economy of the state by taking more fully into account its organisational underpinnings.

Blind spots in the political economy of the state

The engagement of comparative capitalism scholarship – in particular in the shape of the “varieties of capitalism” research agenda – with the organisational dimension of statism highlighted in this study has been largely lacking so far. Conversely, the resurgence of interest in “state capitalism” across social science disciplines in recent years has mostly centred on single-country case-studies of middle-income economies, primarily China, contributing only marginally to broader research in comparative political economy.

Comparative capitalism

Pioneering mid-twentieth century works on comparative capitalism, in particular Alexander Gerschenkron's *Economic backwardness in historical perspective* (1962) and Andrew Shonfield's *Modern capitalism* (1965), gave pride of place to the political economy of the state, emphasising the role of state-owned banking and public enterprises in shaping development trajectories. Yet as the research agenda on comparative capitalism was revitalised at the turn of the twentieth-first century, primarily in the form of the “varieties of capitalism” (VoC) approach, this emphasis of state economic prerogatives receded from view in favour of a more firm-centric outlook.

Peter Hall and David Soskice's (2001) initial formulation of the VoC framework eschewed the issue of statism by focusing on market *versus* non-market forms of inter-firm coordination.

This approach was thereafter critiqued, amended and expanded by scholars – such as Vivienne Schmidt (2002) and Bruno Amable (2003) – keen to make more conceptual room to reflect variations in the role of the state across political economies. Yet these revised formulations of the VoC framework, integrating the political economy of the state, still mostly focused on its contributions to inter-actor coordination, or lack thereof, as opposed to examining its pattern of resource extraction, spending and accumulation in its own right. Nor has due attention been given to the state as an institutional landscape bifurcated between governmental and non-governmental sectors. While comparative political economy scholars have rightly pointed to the significance of SOEs in certain types of political economies, they have not sought to embed this insight in a wider understanding of alternative channels of state economic activity.

The neglect of these institutional pathways of statism in present-day comparative capitalism research may be related to the literature’s tendency to accord disproportionate attention to high-income political economies. Few of the most cited works in the VoC approach embrace developing countries, and fewer still seek to integrate both advanced and developing economies in a single research framework². Yet it is precisely in some of the major emerging economies – such as China and India – that the most powerful public sectors in the world can be found today, and it is only by bridging income levels and world regions that the most significant contrasts in terms of the state’s reliance on governmental *versus* extra-governmental channels can come to light.

“State capitalism”

Whereas the field of comparative political economy has devoted only limited attention to statism as such, especially in the developing world, one registers, since the global financial crisis of 2008, a growing body of political commentary and social science scholarship purporting to address “state capitalism” in present-day emerging economies. The resurgence of interest in state capitalism – a Marxist concept for much of the twentieth century – over the past decade appears to have closely followed the publication of Ian Bremmer’s best-selling book *The end of the free market: Who wins the war between states and corporations?* (2010), which identified in “state capitalism”, as implemented in China, Russia, Saudi Arabia and a handful of other developing nations, a potent alternative to the “free-market capitalism” of the West. In subsequent years, dozens of academic studies foregrounding the notion have been

² Richard Carney’s (2016) study of hierarchical capitalism in East Asia is a notable exception to this last observation. The study’s sample, however, is limited to nine economies and does not include China.

contributed by political scientists (e.g., Naughton and Tsai 2015; Hsueh 2016, Lanoszka 2016), sociologists (e.g., Lin 2011; Chua 2016), economists (e.g., Schweinberger 2014; Megginson 2017; Spechler et al. 2017), business scholars (e.g., Musacchio and Lazzarini 2014; Carney 2015) and legal scholars (e.g., Liebman and Milhaupt 2016).

While these studies have provided new insights into the workings of statism in a number of countries, illuminating the roles of SOEs and SOFIs and spotlighting state institutions' accumulation of resources, this nascent literature, taken as a whole, has so far contributed little to the agenda of comparative political economy, while embracing at the same time a rigid conceptual framing of state capitalism. In effect, the vast majority of recent writings on state capitalism have focused on single case-studies, above all China. The few works on the topic that are comparative in scope either lean heavily towards political commentary (Bremmer 2010; Kurlantzick 2016) or do not attempt to investigate the state as an institutional landscape (Musacchio and Lazzarini 2014; Carney 2015). More damaging perhaps, most of the recent scholarship on state capitalism appears to take as its premise a global dichotomy between state-capitalist and market-capitalist nations in the manner of Bremmer. This outlook tends to reify the uneven salience of statist features and practices within and across political economies into two overarching "mega-varieties" of capitalism. Rather than seeking to pigeon-hole national configurations into such a binary proposition, this study suggests instead that the essential bifurcation might not be between free-market-capitalist *versus* state-capitalist regimes, but between alternative pathways for actuating the state's economic activities.

Conceptual framework

This study proposes to map empirically the relative distribution of resources across alternative institutional sites of the state. This section sets out the basic conceptual guideposts for this exercise in mapping. It elaborates on the bifurcation between governmental and extra-governmental organisations within the state and argues for the centrality of this distinction in the topology of statism. It then argues for using stocks and flows of resources transiting through, and located in, governmental organs *versus* state corporate entities as a means to gauge the relative standing of these two alternative pathways of state activity within and across political economies.

Contours of the state

From the standpoint of political economy, the state should not be construed as merely coextensive with the government, still less with the central or national government. Rather, it can be said to encompass all publicly-held and publicly-controlled organisations at all echelons, be they formally governmental organs or be they juridically constituted as separate from the governmental machinery³. While it should be acknowledged that legal and scholarly definitions of the state vary widely, it is this broad, *sensu lato* understanding that is best suited for putting into relief the full range of the state’s participation in economic life. Put differently, the state may be construed as a vast institutional network bridging different sectors: the government sector, including national-level ministries, commissions and agencies as well as sub-national authorities; the corporate sector, including state-controlled enterprises and financial institutions; and the non-profit sector, including public universities, public hospitals, and so on.

The organisational diversity of the state is crucial to its political economy, and there are several possible lenses through which to examine it. On such lens is the distinction between central and local echelons of power, and the corresponding examination of sub-national political-economic configurations *versus* national ones. This study suggests that another, typically overlooked dimension of the state’s institutional landscape is the divide between governmental organs *versus* extra-governmental corporate entities. These entities mostly consist of state-owned enterprises (SOEs) and state-owned financial institutions (SOFIs), which in turn comprise state-owned banks (SOBs) and, occasionally, sovereign wealth funds (SWFs). They may also include state-owned holding companies (SOHCs) – such as Singapore’s Temasek – tasked with supervising broad swathes of corporate state-owned capital. The state-controlled corporate sector may also feature more idiosyncratic or country-specific institutions, such as the so-called “local government financing vehicles” (LGFVs) that proliferated in China in the wake of the 2008 global financial crisis in order to raise and allocate funds for stimulus infrastructure and real estate investment.

As already suggested, the organisational divide between governmental organs and state corporate entities carries major implications for the channelling of the state’s economic activities. Far from always shadowing or magnifying governmental actions, the extra-

³ This understanding of the state accords with the nomenclatures commonly used by international financial institutions (IFIs) such as the World Bank and the IMF. In their statistical databases, IFIs usually distinguish between the “general government” category – which includes, in turn, government authorities at national and sub-national levels – and the wider public sector, which includes SOEs.

governmental state sector has the potential to entertain with the government relations of complementarity or substitution. For example, the takeover of a private firm by a SOFI can amount to a *de facto* nationalisation without involving the legislative hurdles and executive procedures – let alone the budgetary costs – that a government-enacted nationalisation entails. Similarly, a policy-driven investment on the part of an SOE may act as an alternative to a similar type of investment carried out and funded by the government. The investment statistics for the United States and China highlighted in this article’s introduction may be recalled: the fact that the government’s share of overall investment in the United States was recorded in 2014 as almost twice that in China by no means suggests that the Chinese state’s investments are comparatively small. The figures do imply, however, that these investments are mostly channelled outside of the governmental circuit, through SOEs. Tasking state-owned firms with investing in areas prioritised by the state may thus serve to reallocate investment items away from the government budget onto SOE balance sheets. This is not so much an accounting sleight of hand as a fundamentally different way to assign economic roles across the vast institutional landscape that is the state.

Channels of statism: A resource view

The mapping of political-economic configurations carried out in this study is premised on a “resource view” of the state’s organisational landscape, in the sense that it focuses on the existence of different kinds of resources transiting through, and located in, governmental organs and state corporate entities. The relative distribution of these resources across these different institutional sites, in turn, offers a way to assess the significance of governmental *versus* extra-governmental channels of statism in any political economy.

The resources embedded and circulating in the state take on a variety of shapes. A basic distinction should be drawn at the outset between flows and stocks. On the governmental side, aggregate flows are best gauged by measures of government revenue and spending. Government revenue, in turn, is predominantly generated by fiscal means in most countries, though there are notable exceptions – e.g., resource-rich nations whose governmental institutions are mostly funded by export proceeds. Government spending is typically devoted to a wide array of objectives – from welfare transfers to civil service salaries to infrastructure investments – some of which might be conceivably passed on to SOEs’ balance sheets. Governmental stocks can be divided into financial assets – such foreign exchange reserves,

state pension funds, loans, bonds and equity – and non-financial assets – such as natural resources and government-owned land, dwellings and infrastructure. It should be noted that government-held equity in SOEs and SOFIs as a sub-category of financial assets serves a special function as bridging the governmental and extra-governmental institutions of the state. Thus the market value of government shares in an industrial firm are included in the government's financial assets, whereas the book value of the physical assets held by the same firm feature in its own balance sheet and not the government's. It also follows that a portion of the government's financial assets is in fact a reflection of state resources that are held extra-governmentally.

On the extra-governmental side of the divide, the resource stocks most relevant to the state's involvement in market activity are the assets of SOEs and SOFIs. These include the physical assets of industrial SOEs – e.g., China's State Grid or Sinopec – as well as the financial assets of SOFIs – which, in the case of the largest Chinese commercial banks, run into the trillions of US dollars. Resource flows of corporate state entities consist in the revenues of SOEs and SOFIs on the one hand, and in their expenditures on the other. As pointed out in the next section, comparative aggregate data on state-controlled corporations being in very limited supply, the analyses carried out in this study rely on a small number of mostly stock-related indicators for SOEs and SOFIs.

By mapping the relative share of resource stocks and flows across the divide between governmental organs and state corporate entities, this research aims to gauge the relative importance of these two institutional channels in shaping state control and influence over the economic process. Further, it seeks to explore the relations that these two pathways of statism entertain with each other. This entails examining whether they appear empirically to be mutually reinforcing or to substitute for one another.

Data and methods

Country sample

This study aims to provide an exploratory mapping of the bifurcation between governmental and extra-governmental channels of statism across some of the world's most significant economies. It does not feature explanatory modelling, and as such it does not aim to

bolster statistical power by maximising sample size. Thirty-two countries of medium or large population were selected as potential candidates for the mapping, subject to data availability. About a third of these economies are high-income and the others are middle-income. This overall sample includes eight Western economies with a population of over twenty million (Australia, Canada, France, Germany, Italy, Spain, the United Kingdom, the United States), three formerly socialist European economies (Poland, Russia, Ukraine), four east Asian economies (People’s Republic of China, Taiwan, Japan, South Korea), six south and south-east Asian economies (India, Indonesia, Malaysia, the Philippines, Thailand, Vietnam), four Middle-Eastern economies (Egypt, Iran, Saudi Arabia, Turkey), one sub-Saharan African economy (South Africa), and six Latin American economies (Argentina, Brazil, Colombia, Mexico, Peru, Venezuela).

Since the ongoing academic discussion on statism and the common contrasting of “state capitalism” with “free-market capitalism” concerns above all middle- and high-income economies, it was decided to leave out of the sample some large low-income economies such as Pakistan, Bangladesh, Nigeria and Ethiopia. An exception was made for India given its outsize significance as one of the world’s very largest economies. Furthermore, it should be noted that each of the descriptive analyses and visualisations provided below only include as many countries as for which there are no missing data points on the specific indicators used. This entails that, in practice, most steps of the mapping address country sub-samples whose size may be well below thirty-two.

Indicators

A total of ten secondary indicators were selected from varied data sources to capture resource stocks and flows of governmental organs and of SOEs and SOFIs. In addition, in order to remedy the dearth of existing data on corporate state capital, an *ad hoc* index reflecting the prominence of state-controlled corporate assets was built for a sub-set of fifteen economies. When possible, the indicators were compiled or constructed for the years 2013 or 2014. They are introduced below under the labels by which they are referred to in the mapping.

Two indicators were selected to reflect inflows (revenues) into governmental organs, three to reflect outflows (spending), and three more to capture different types of governmental assets:

- “Revenue”: general government revenue as a share of GDP (IMF, World Economic

Outlook, 2013)

- “Corp. Tax”: amount of taxes and mandatory contributions payable by a business in the second year of operation expressed as a share of commercial profits (World Bank, World Development Indicators, 2013)
- “Spending”: general government expenditure as a share of GDP (IMF, World Economic Outlook, 2013)
- “Gov. Cons”: general government final consumption expenditure as a share of GDP (World Bank, World Development Indicators, 2013)
- “Gov. Cap.”: general government consumption of fixed capital as a share of GDP (IMF, Government Finance Statistics, summed over five years 2011–15)
- “Reserves”: total government reserves including gold as a share of GDP (World Bank, World Development Indicators, 2014)
- “Nonfin. Assets”: government non-financial assets as a share of GDP (World Inequality Database, 2013). Missing data points for five countries in the World Inequality Database were supplemented by inputting available 2013 figures from the IMF’s Government Finance Statistics.
- “Fin. Assets”: government financial assets as a share of GDP (World Inequality Database, 2013). Missing data points for eight countries in the World Inequality Database were supplemented by inputting available 2013 figures from the IMF’s Government Finance Statistics. As pointed out in the previous section, this indicator is by nature ambiguous, since it includes the market value of government-held shares in corporations – in effect reflecting the magnitude of assets operated extra-governmentally.

Only two secondary indicators were drawn upon to reflect the size of SOE and SOFI resources. This is due to the striking paucity of readily available and up-to-date data in comparative format on state-owned and state-controlled corporations’ aggregate revenues, expenditures and assets. It is a remarkable observation that none of the major databases maintained by the World Bank, the IMF, the UN or the OECD contain any mention of aggregate SOE stocks and flows. The World Bank’s Bureaucrats in Business database, which did, is long discontinued (see Haggarty and Shirley 1997). A recent one-off data collection effort on the part of the OECD, in the shape of a “Dataset on the Size and Sectoral Composition of National State-Owned Enterprise Sectors”, is limited to the year 2012 and to the organisation’s member-states. The two secondary indicators that were retained to capture the prominence of the state-controlled corporate sector are the following:

- “SOE Scope”: a score on a 0–6 scale reflecting the share of thirty business sectors in which the state controls at least one firm (OECD, Product Market Regulation Survey, 2013).
- “Bank Assets”: the percentage of the banking system’s assets in state-controlled banks (World Bank, Bank Regulation and Supervision Survey, 2010). The BRSS is a multi-round survey on financial regulation and supervision whose latest round was conducted in 2011–12. The 2010 figure for China, which is missing from the BRSS, was calculated after consulting the *China Financial Yearbook* 中国金融年鉴, a publication of the People’s Bank of China.

To complement these two indicators of extra-governmental state resources, an *ad hoc* index – thereafter the “SOE Index” – was constructed for a sub-set of fifteen economies. This was done by identifying, for the year 2014, how many of the ten largest extra-governmental for-profit entities by assets – both listed and non-listed – were state-held. Full points and half-points were added to reflect majority and minority state ownership respectively, so that the “SOE Index” takes the form of a 0–10 scale. Additional information on the sources used for building the index and summary data by country are provided in Appendix 1, while full lists of the top ten asset-holders in each country are found in Appendix 2.

Finally, in order to benchmark the variables capturing governmental and state-controlled corporate resources during the mapping, the following secondary indicators were also used:

- GDP per capita in current US dollars (World Bank, World Development Indicators, 2014)
- “Wang-Jahan Index”: a measure of the extensiveness of overall capital controls in 2013, as devised by Sarwat Jahan and Daili Wang (2016).
- “Trade and Inv. Barriers”: a score on a 0–6 scale reflecting tariff and non-tariff trade barriers as well as constraints on FDI and on foreign suppliers (OECD, Product Market Regulation Survey, 2013).

Methods for analysis and visualisation

The mapping carried out in this research includes a factor analysis with orthogonal rotation as well as a principal component analysis (PCA). The visualisations provided consist in a series of scatterplots, one correlation diagram or “corrgram”, and a PCA biplot.

It bears repeating that the analyses featured in the mapping are essentially descriptive and exploratory in character and that they do not seek to make claims on causation. While a

number of figures plot individual variables against GDP per capita, the aim is to map patterns of governmental and extra-governmental statism along levels of development and income, not to suggest that the latter explain the former. Regression lines are added to the scatterplots as visualisation aids, underlining the observed correlations between variables, but similarly they should not be read as markers of causality.

Mapping

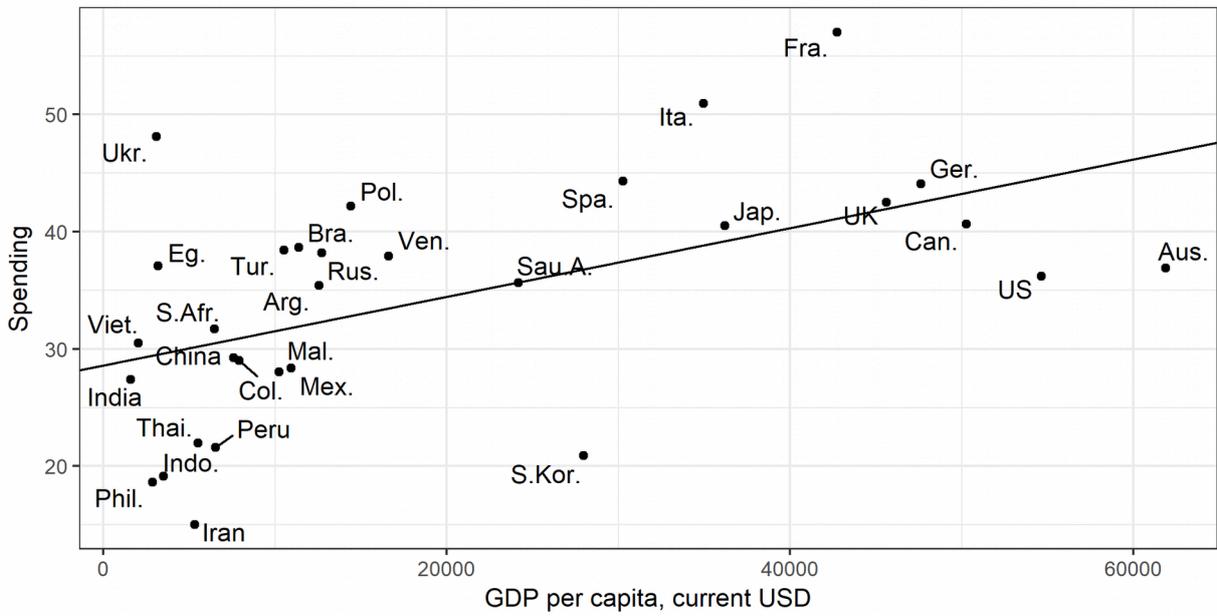
The first step of the exploratory mapping consists in highlighting the distribution of key individual indicators across the country sample. An examination of variable correlations and clusters follows. Finally, factor analysis and principal analysis are brought in as a means to achieve dimension reduction. Two factors, capturing governmental and extra-governmental statism respectively, are generated and mapped against additional variables. Overall, the mapping suggests that the two pathways of state economic activity identified in this research are liable to substitute for one another.

Individual indicators

Figures 1 to 3 plot three key indicators of the extent of government involvement in economic life – “Spending”, “Gov. Cap.” and “Nonfin. Assets” – against GDP per capita. As shown in Figure 1, overall government spending as a share of GDP has a positive correlation with development levels, with no advanced political economy save South Korea under the 30 per cent bar. By contrast, China and India, two countries frequently singled out as “state-capitalist”, stand at 29 and 27 per cent respectively.

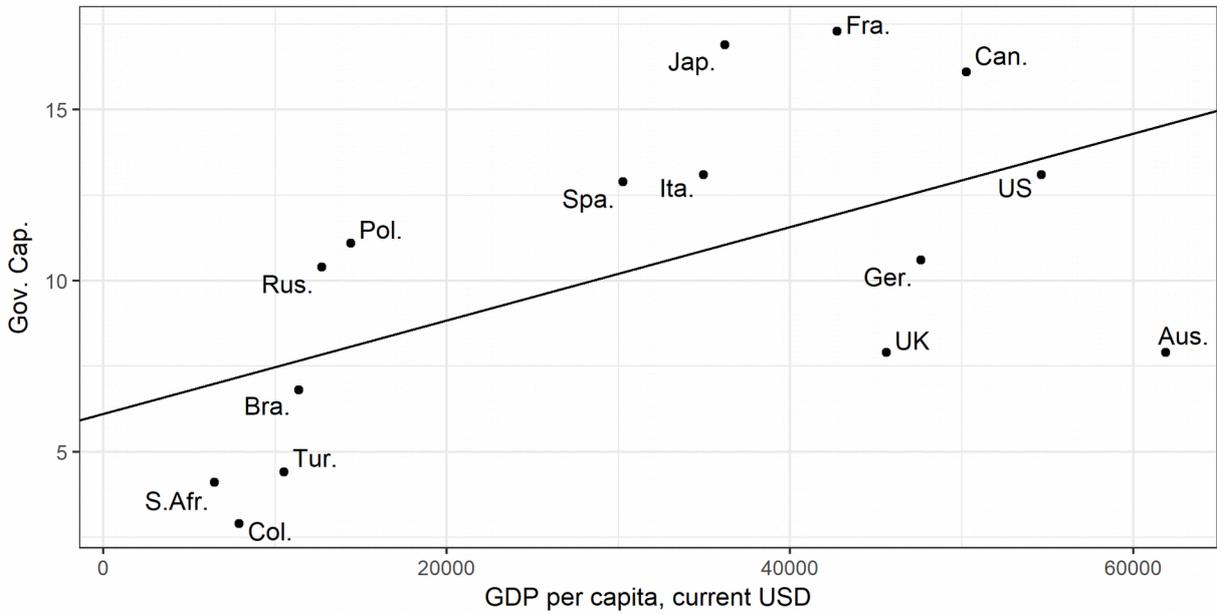
A positive correlation, of a similar magnitude, is observed in Figure 2, between GDP per capita and government spending on fixed capital over 2011–15. China, India and a handful of other countries do not feature in the sub-sample because of missing data, but most of the middle-income countries that do – including Brazil, Turkey, Colombia and South Africa, though not Russia – display lower levels of government contributions to investment than in the nine advanced capitalist economies represented in the scatterplot. This may suggest not so much the limitations of state economic activity in these middle-income economies, as the fact that this activity is largely channelled through the extra-governmental circuit.

Figure 1. Scatterplot of "Spending" and GDP per capita



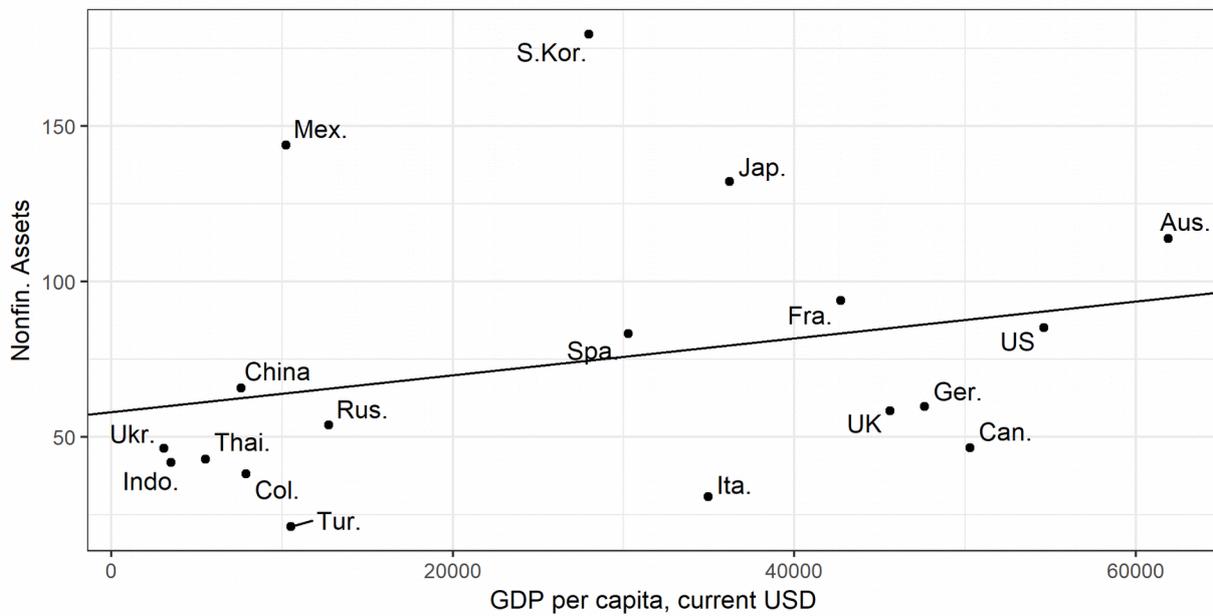
N = 31. Pearson coeff. = 0.53. A regression line is added.

Figure 2. Scatterplot of "Gov. Cap." and GDP per capita



N = 15. Pearson coeff. = 0.56. A regression line is added.

Figure 3. Scatterplot of "Nonfin. Assets" and GDP per capita



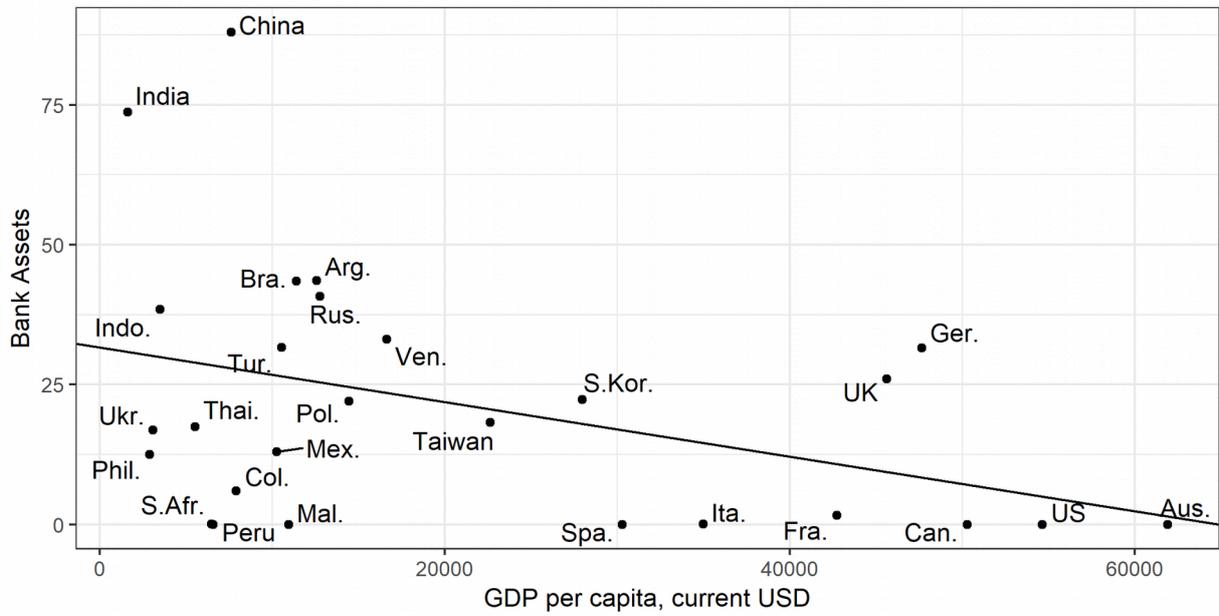
N = 18. Pearson coeff. = 0.27. A regression line is added.

The pattern in Figure 3, which plots governmental non-financial assets, is less clear-cut, since data points for countries with similar income levels are highly spread out (e.g., 180 per cent of GDP in South Korea compared with 31 per cent in Italy). Interestingly, China ranks relatively low on this indicator, suggesting that the wider portion of the Chinese state’s vast non-financial wealth might not be parked in governmental organisations.

Figures 4 and 5 plot “Bank Assets” and “SOE Index”, both of which capture the magnitude of the state’s extra-governmental resources. It emerges from Figure 4 that developing countries diverge markedly from one another in the extent to which their banking sectors are state-controlled. China and India rank the highest, by far, with respectively 88 and 74 per cent of all banking assets held in state banks, while Malaysia, the Philippines, South Africa, Peru and Columbia all score under 10 per cent. Western economies in the sub-sample hover at or just above the zero per cent line, with the two exceptions of Germany – due to its regionally-held *Landesbanken* – and the United Kingdom – an artefact of the circumstantial rescue by the state of the Royal Bank of Scotland in 2008.

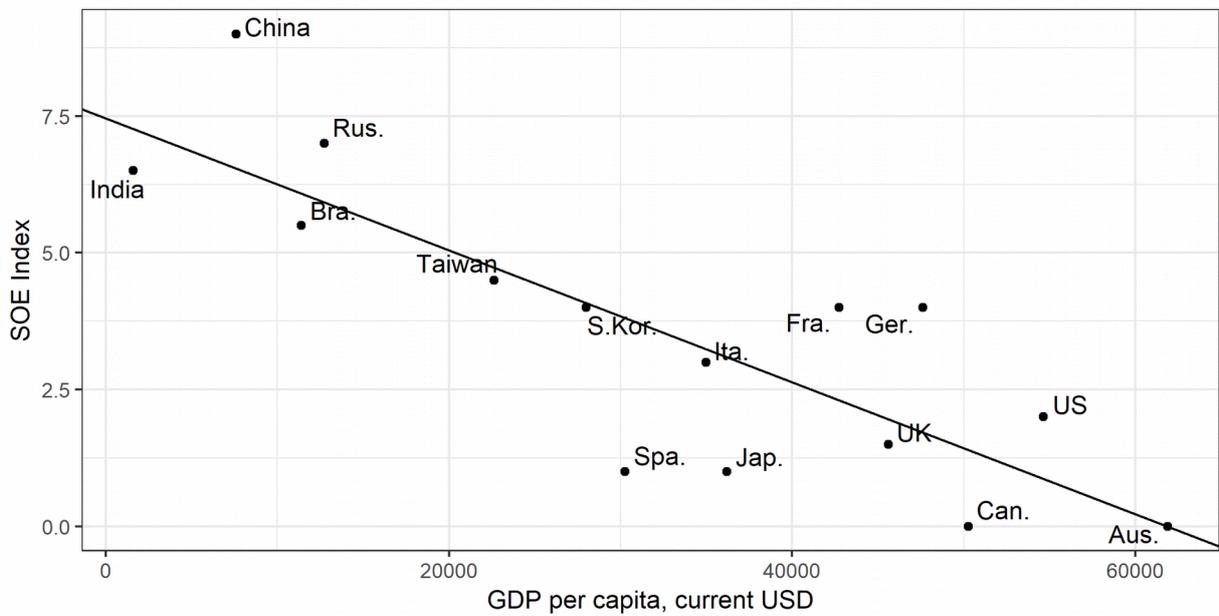
The “SOE Index”, as featured in Figure 5, displays a strong negative correlation with GDP per capita among the fifteen economies for which it was built. The four emerging countries represented in the scatterplot – Brazil, China, India and Russia – each score higher than the

Figure 4. Scatterplot of "Bank Assets" and GDP per capita



N = 27. Pearson coeff. = -0.39. A regression line is added.

Figure 5. Scatterplot of "SOE Index" and GDP per capita



N = 15. Pearson coeff. = -0.83. A regression line is added.

advanced capitalist countries. China, unsurprisingly, ranks the highest, since out of the ten largest Chinese corporations by assets, eight happen to be majority-state-owned and two minority-state-owned. At the other end of the spectrum, the Australian and Canadian economies do not feature a single minority- or majority-state-owned top asset-holder.

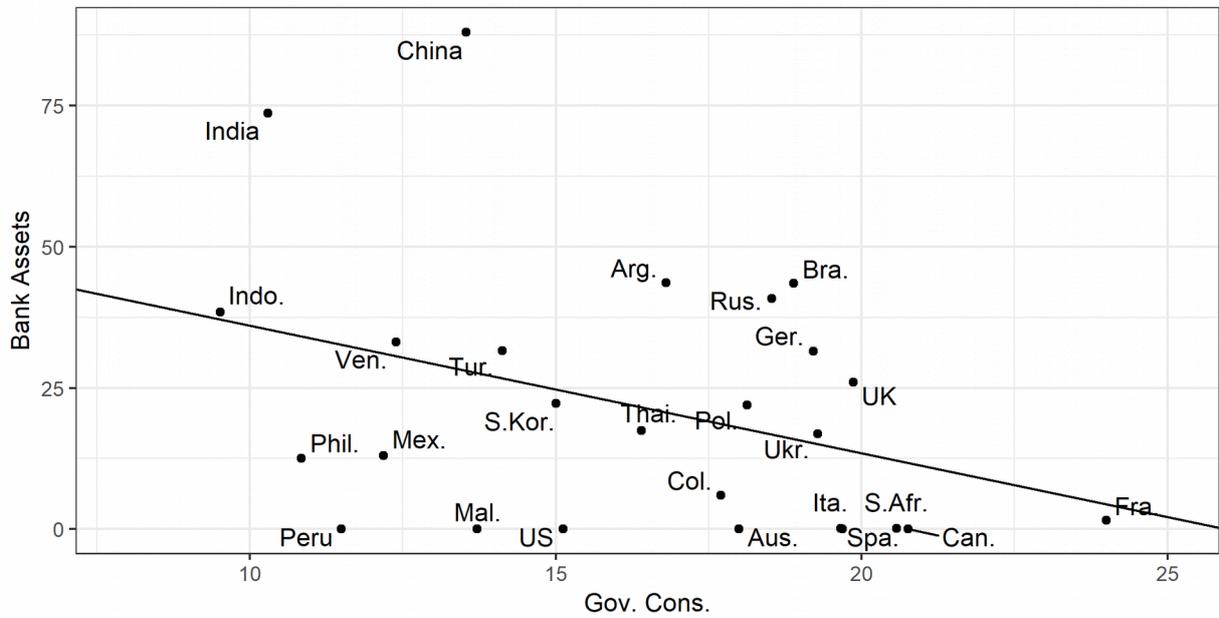
Indicator correlations and clusters

Figures 6 and 7 explore further relations between statism inside *versus* outside of government by plotting respectively “Bank Assets” and “SOE Index” against “Gov. Cons.”. In both cases, the correlations come out as negative. Across Figure 6’s sub-sample, political economies that feature higher levels of government final consumption tend to display less state-controlled banking. This accords with the observation made previously, that extra-governmental channels – in this case, originating in state banks’ lending activity – may act as substitutes for governmental spending items. One may also note that middle-income countries are more spread out on the scatterplot than high-income ones. The latter are found to cluster in the bottom-right section of the figure, reflecting larger government consumption and fewer state-controlled banking assets.

This pattern is confirmed in Figure 7, where China and India happen simultaneously to score the lowest on “Gov. Cons.” and the highest on “SOE Index”. In the opposite corner of the figure, Canada ranks the lowest in terms of SOEs’ prominence in the economy, while the Canadian government’s final consumption as a share of GDP is over twice that of India. Again, this distribution appears to suggest a pattern of substitution, whereby state investment items – e.g., on infrastructure – may alternatively feature on SOEs’ balance sheets or on the government’s.

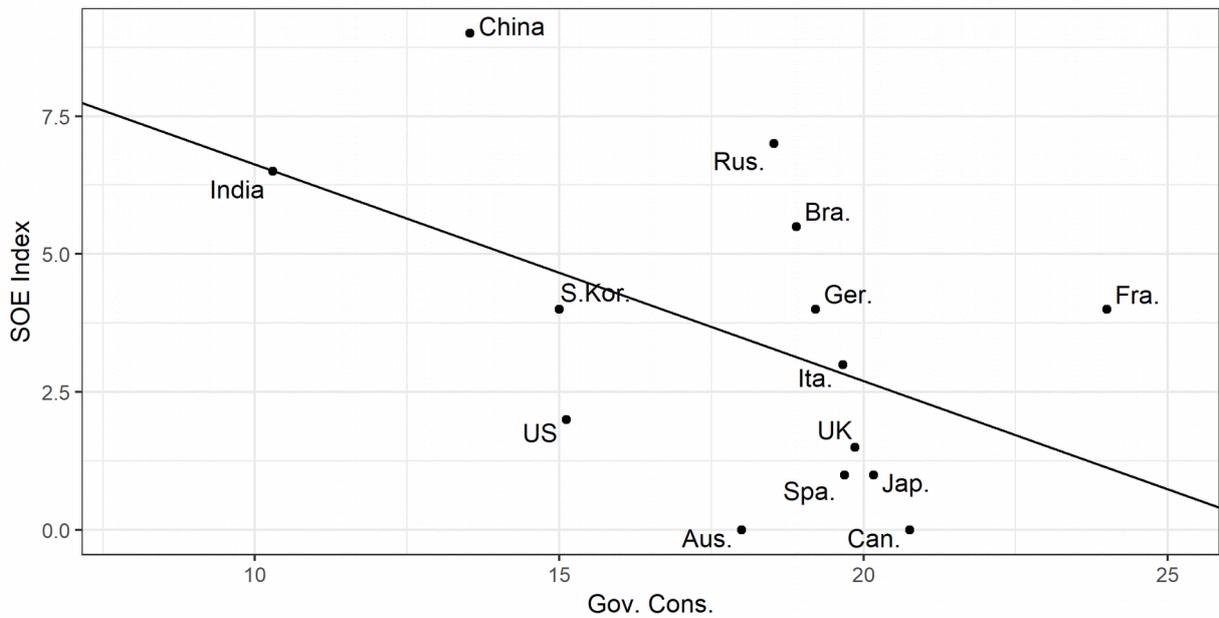
Figure 8 plots “SOE Index” against “Nonfin. Assets”. The wide cross-country variations in shares of governmental non-financial wealth do not correlate markedly with the size of SOE assets. Yet it is noteworthy that two nations – namely China and Russia – stand out on the scatterplot by displaying comparatively powerful SOEs and comparatively limited governmental non-financial assets. In light of the fact that both countries also harbour among the largest industrial state-controlled firms in the world, it can be surmised that state-held non-financial wealth in these two political economies is largely, if not predominantly, parked in extra-governmental corporate entities as opposed to the government. Figure 9 equally tends to support the proposition that industrial SOEs are liable to hold physical assets that, in their

Figure 6. Scatterplot of "Bank Assets" against "Gov. Cons."



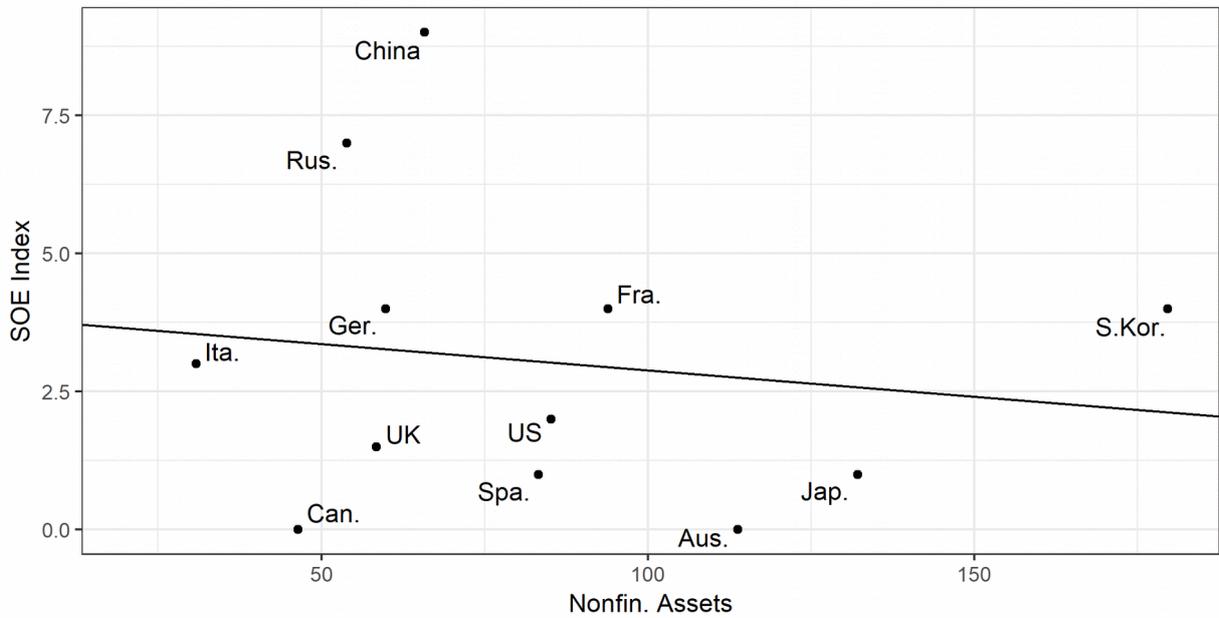
N = 26. Pearson coeff. = -0.37. A regression line is added.

Figure 7. Scatterplot of "SOE Index" against "Gov. Cons."



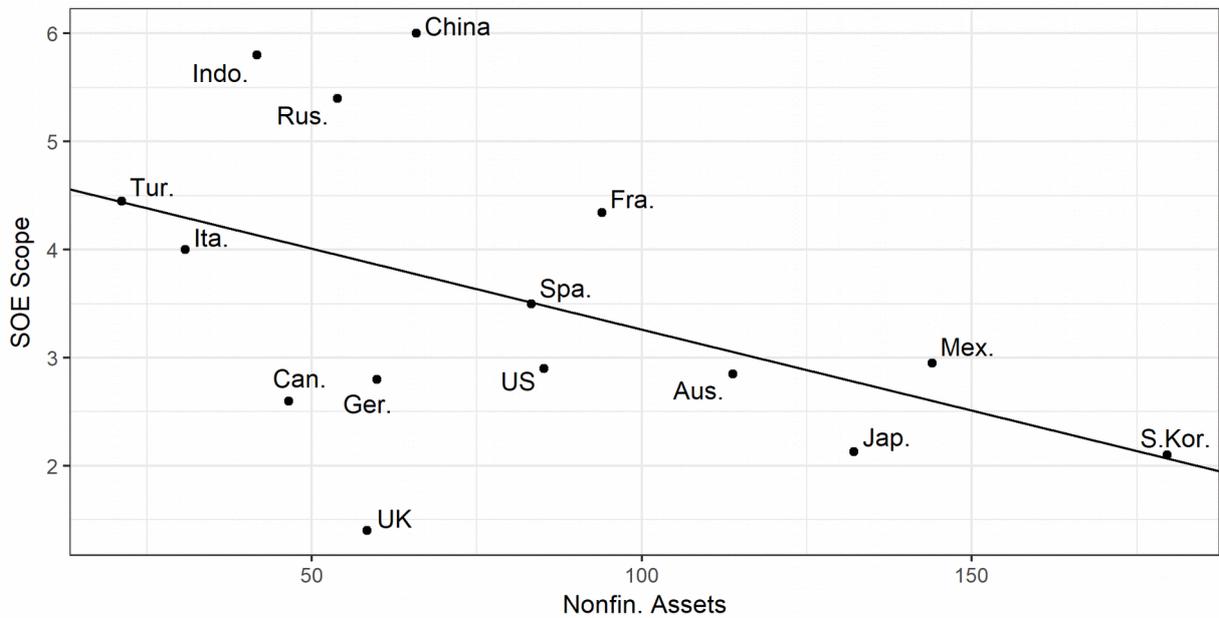
N = 14. Pearson coeff. = -0.49. A regression line is added.

Figure 8. Scatterplot of "SOE Index" against "Nonfin. Assets"



N = 12. Pearson coeff. = -0.14. A regression line is added.

Figure 9. Scatterplot of "SOE Scope" against "Nonfin. Assets"

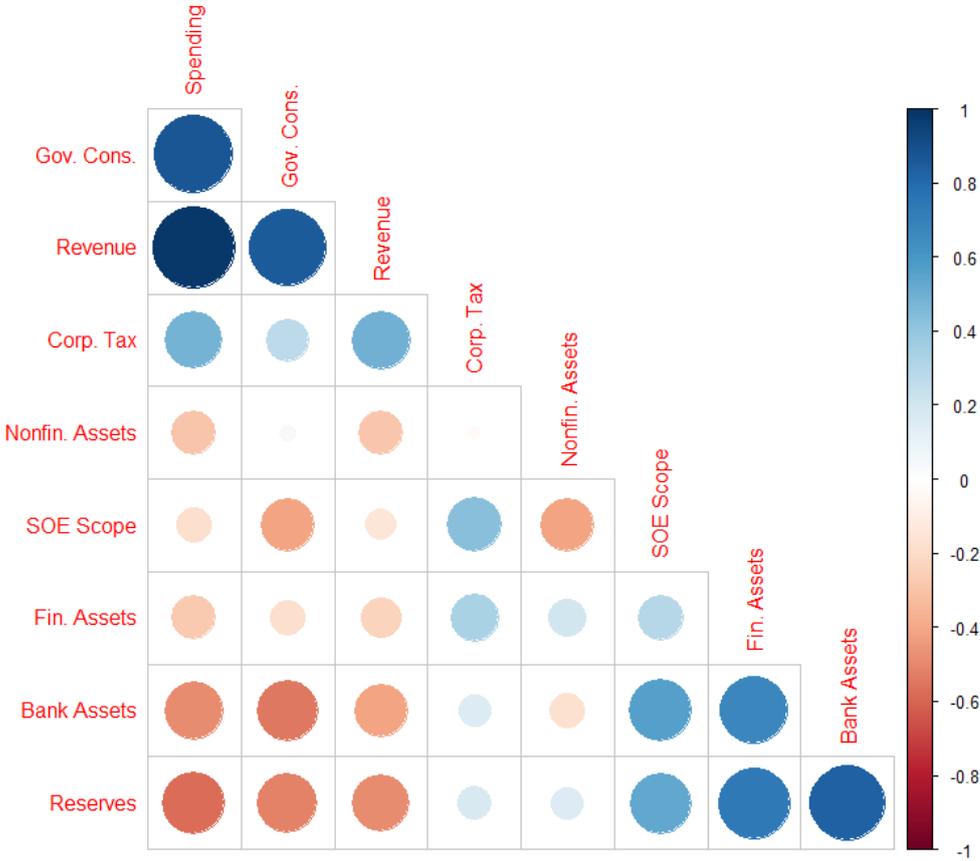


N = 15. Pearson coeff. = -0.48. A regression line is added.

absence, would be held in governmental organs. It reveals an overall negative correlation in the sub-sample between the magnitude of governmental non-financial assets and the incidence of state-controlled firms across thirty business sectors.

In order to provide a more synthetic picture of inter-indicator correlations and clusters, a nine-variable corrgram is generated in Figure 10 on the basis of a sub-sample of thirteen countries. Out of the eleven indicators chosen to reflect governmental and extra-governmental resources in this study, two – “Gov. Cap.” and “SOE Index” – are omitted in the corrgram because their inclusion would have further reduced the sub-sample size due to missing data points.

Figure 10. Corrgram for a subset of nine variables



N = 13. The country sub-sample is the following: Australia, Canada, China, France, Germany, Indonesia, Italy, S. Korea, Russia, Spain, Turkey, United Kingdom, United States..

The corrgram reveals the existence of two indicator clusters whose constituent variables move in opposite directions. At the bottom of the corrgram, four indicators – “SOE Scope”, “Bank Assets”, “Fin. Assets” and “Reserves” – display positive correlations with each other. The first two of these indicators straightforwardly capture the size of the extra-governmental state sector. The third, “Fin. Assets”, is by definition ambivalent, since it measures simultaneously governmental resources in the shape of overall financial assets, and extra-governmental resources in the shape of government-held equity in SOEs and SOFIs. In view of the corrgram results, it is the latter interpretation of “Fin. Assets” that appears to be the most relevant. “Reserves” measures a sub-type of government-held wealth, and therefore its clustering with the other three indicators might seem incongruous. Yet it should be borne in mind that the magnitude of reserves is typically the consequence of factors – such as natural resource endowments or an undervalued currency – that might also be conducive to the accumulation of extra-governmental state wealth. At the top of the corrgram, “Revenue”, “Spending” and “Gov. Cons”, all of which capture the significance of governmental statism, unsurprisingly cluster together, while each being negatively correlated with the four variables in the first cluster. Two indicators – “Nonfin. Assets” and “Corp. Tax” – stand out as weakly correlated with most of the other variables.

Overall, the corrgram visualisation suggests that sizeable governmental flows on the one hand, and a large extra-governmental state sector on the other, constitute political-economic alternatives. Across the thirteen major economies covered by the corrgram, one registers a *de facto* bifurcation between two distinct pathways of statism.

Further analyses

Table 1 provides the results of a factor analysis carried out on six indicators: “Revenue”, “Spending”, “Gov. Cons.”, “Corp. Tax”, “Bank Assets” and “SOE Scope”. Out of the nine variables featured in the corrgram, removing “Fin. Assets”, “Nonfin. Assets” and “Reserves” allows to increase the size of the sub-sample from thirteen to eighteen countries. Two factors are generated, accounting for a cumulative variance of 72 per cent. Factor 1 loads primarily on “Spending”, “Revenue” and “Gov. Cons.”, which comes as no surprise given the prior clustering of these three variables in the corrgram. To a lesser extent, it loads positively on “Corp. Tax” and negatively on “Bank Assets” and “SOE Scope”. Factor 2, by contrast, loads primarily on “Bank Assets”, followed by “SOE Scope” and “Corp. Tax”, together with a more

limited negative loading on “Gov. Cons”. In view of these figures, Factor 1 and Factor 2 appear to capture, respectively, governmental and extra-governmental statism. Factor 1 reflects the state’s reliance on the governmental circuit to channel its economic activities, whereas Factor 2 reflects the state’s opposite tendency to rely on SOEs and SOFIs to actuate its involvement in the wider economy.

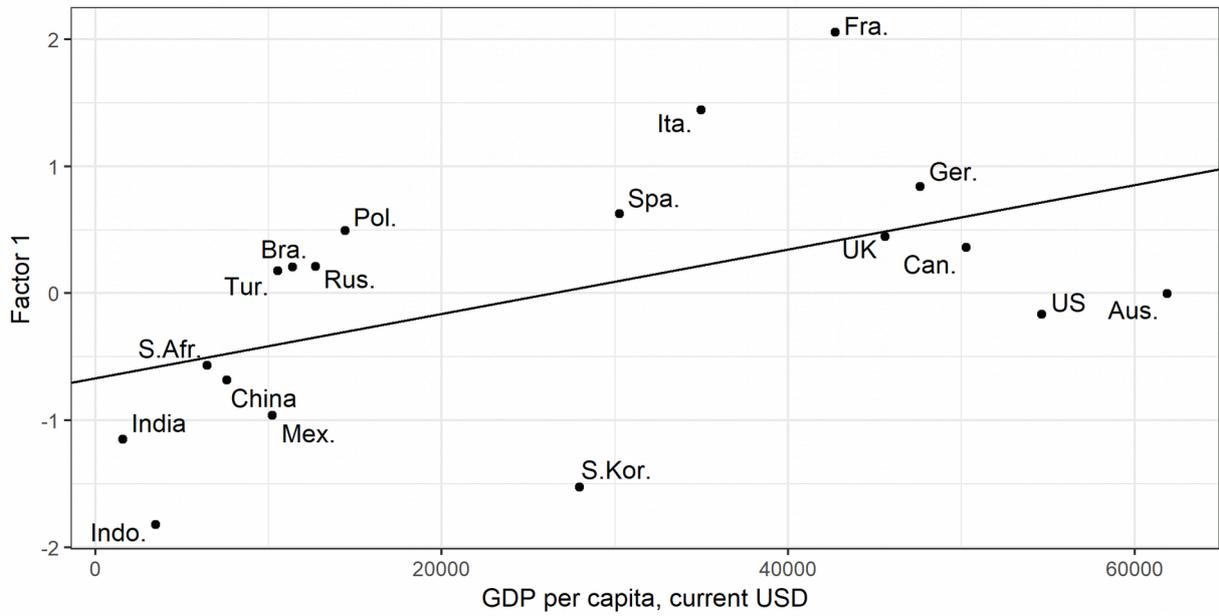
Table 1. Factor loadings and variance for a two-factor orthogonal factor analysis (in percentage)

	Factor 1	Factor 2
Revenue	98	
Corp. Tax	38	61
Spending	99	
Gov. Cons.	82	-35
SOE Scope	-14	63
Bank Assets	-42	71
<i>Factor variance</i>	<i>49</i>	<i>23</i>
<i>Cumulative variance</i>	<i>49</i>	<i>72</i>

Factors 1 and 2 are plotted against GDP per capita in Figures 11 and 12. Governmental statism, as captured by Factor 1, tends to increase along with income levels across the eighteen political economies represented in Figure 11. Among developing nations, Indonesia, India, China, Mexico and South Africa all score relatively low on Factor 1. Among high-income economies, France and Italy display the highest degree of governmental statism, the four Anglo-Saxon economies (Australia, Canada, United Kingdom, United States) and South Korea the lowest.

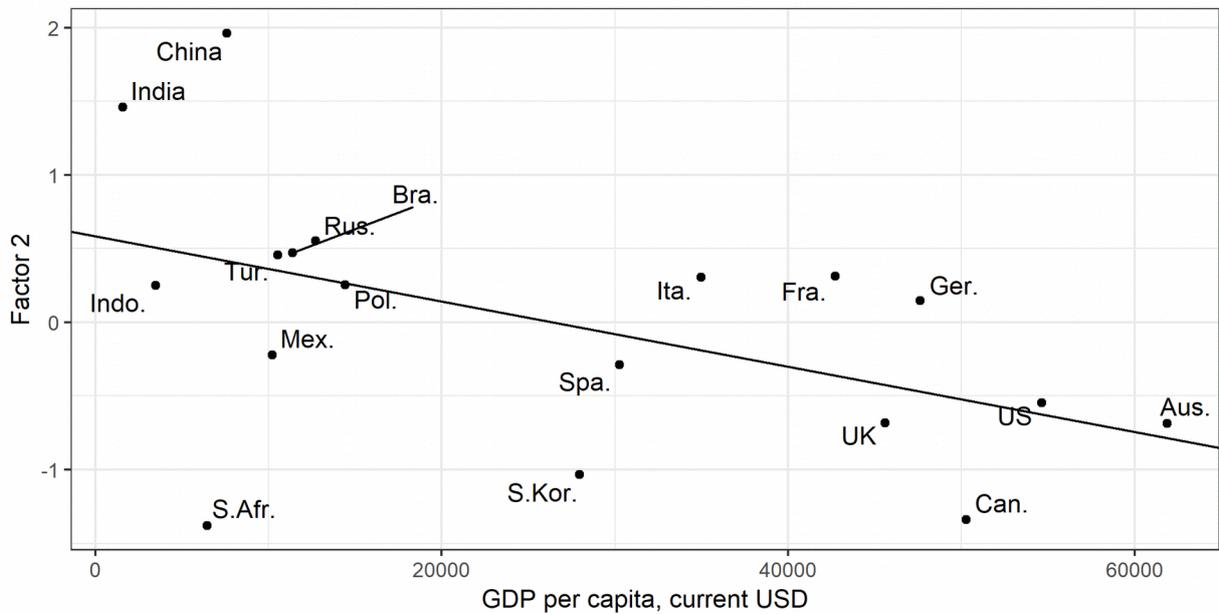
Table 12 highlights a negative correlation between GDP per capita and extra-governmental statism as captured by Factor 2. Whereas advanced capitalist economies stand between -1.33 (Canada) and 0.31 (France) on Factor 2, the middle-income countries in the sub-sample display a wider range of scores, from -1.38 (South Africa) to 1.96 (China). This suggests that significant developing political economies diverge more markedly among themselves than advanced political economies in their propensity to rely on SOEs and SOFIs. It may also come out as no surprise that China, India and Russia – three countries often singled out as “state-capitalist” – rank the highest on Factor 2.

Figure 11. Scatterplot of Factor 1 and GDP per capita



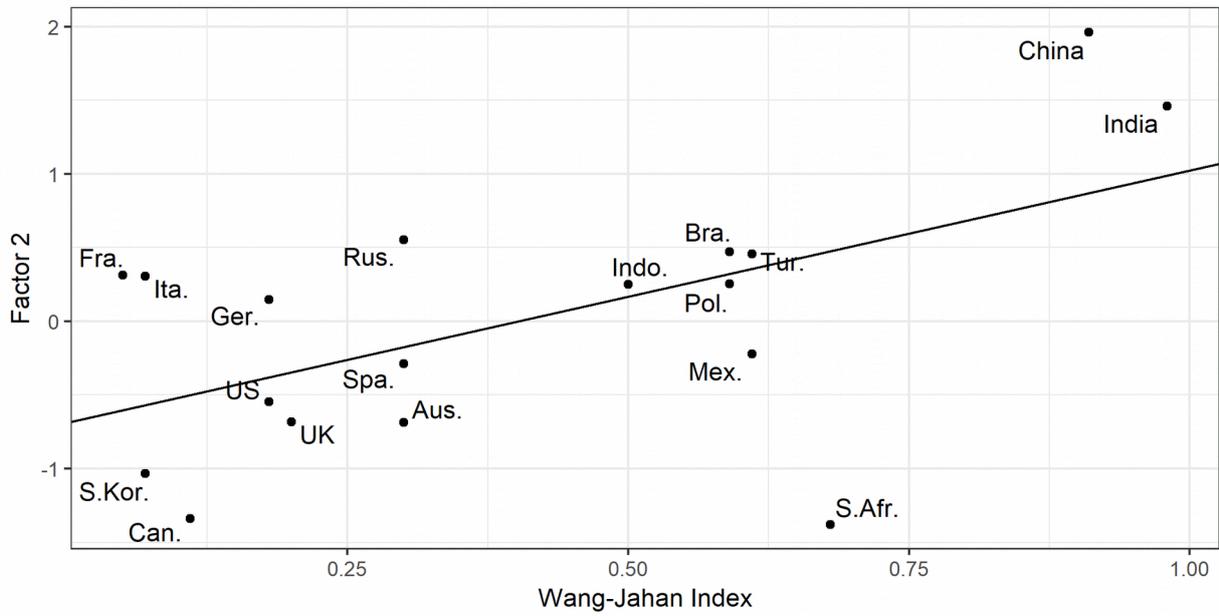
N = 18. Pearson coeff. = 0.51. A regression line is added.

Figure 12. Scatterplot of Factor 2 and GDP per capita



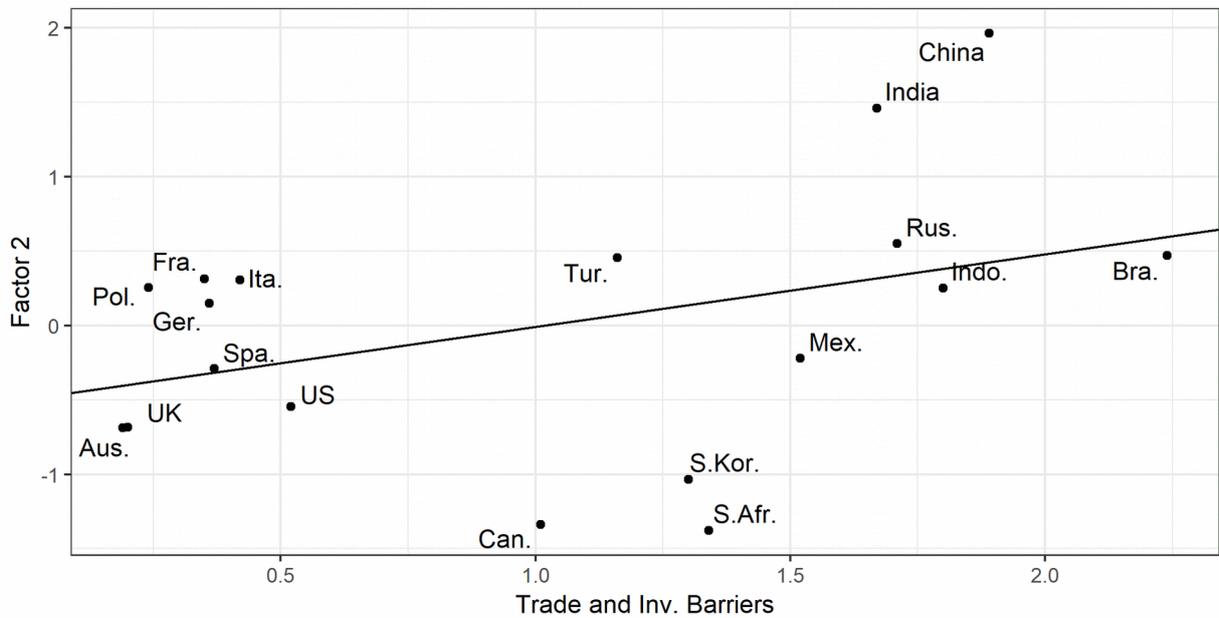
N = 18. Pearson coeff. = -0.50. A regression line is added.

Figure 13. Scatterplot of Factor 2 against the Wang-Jahan Index



N = 18. Pearson coeff. = 0.57. A regression line is added.

Figure 14. Scatterplot of Factor 2 against "Trade and Inv. Barriers"



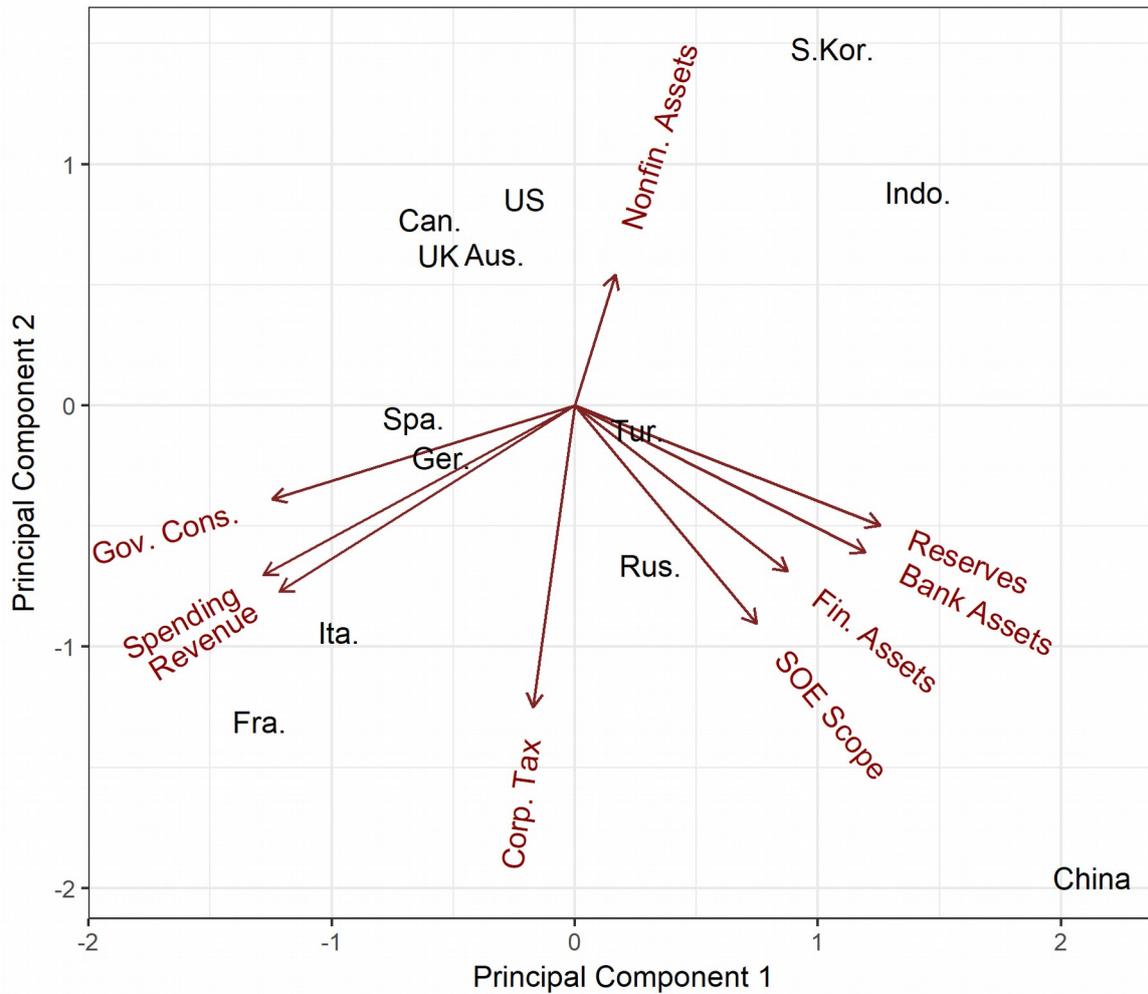
N = 18. Pearson coeff. = 0.38. A regression line is added.

Tables 13 and 14 further benchmark Factor 2 against two secondary indicators reflecting the intensity of regulation: an index of capital controls and an index of regulatory constraints on trade and foreign investment. Plotting the salience of extra-governmental statism against the Wang-Jahan Index of capital controls reveals a positive correlation between these two traits. This association is noteworthy, especially in view of the fact that Factor 2 loads the most on “Bank Assets”, a measure of the significance of state-controlled banking. In effect, there is a substantial argument to be made for the affinity between capital controls, state banking, and more broadly the prominence of the state corporate sector. Capital controls, by insulating the domestic financial sector against the risk of large-scale outflows, confers on states the ability to regulate and to direct banking activity to the advantage of corporate borrowers. Such a policy, sometimes labelled “financial repression” by its detractors, has often been used to channel low-interest bank credit to industrial SOEs, driving the economy’s investment rate upwards. This strategy has notably been pursued by China in recent decades (see Lardy 2008; Johansson 2012). It was also implemented, in the post-war era, by some Western countries such as France (see Zysman 1983).

Extra-governmental statism also displays a positive association with the intensity of regulatory constraints on trade and foreign investment, as shown by Figure 14. In this connection as well, one may venture an explanation for this seeming affinity between trade and investment protectionism on the one hand, and the prominence of SOEs and SOFIs on the other. In short, it is possible to hypothesise that states that are highly dependent on state-controlled corporate entities for enacting their policy objectives display a correspondingly stronger need to preserve the integrity of the corporate landscape against the disruptive effects of goods, services and investments from abroad. As with the potential affinity between capital controls and extra-governmental statism, this can only remain a conjecture at this stage, in so far as the mere variable correlation across the country sub-sample does not suffice by itself to establish a causal link.

Finally, a principal component analysis (PCA) was run over the nine indicators that were retained for the corrgram. The aim of the PCA was not to extract components for further analysis – which would have been redundant after the factor analysis – but to offer an overall visualisation in the shape of a biplot of variable loadings and country scores on the first two components. Components 1 and 2 account respectively for 47 and 26 per cent of the total variance. The biplot, shown in Figure 15, puts into relief the clustering of variables already highlighted in Figure 10. “Bank Assets”, “SOE Scope”, “Fin. Assets” and “Reserves” closely

Figure 15. PCA biplot for a subset of nine variables



align at the bottom-right of the biplot, while “Revenue”, “Spending” and “Gov. Cons.” point to the bottom-left. “Nonfin. Assets” and “Corp. Tax” align with none of the other variables, while pointing in opposite directions from each other. The four Anglo-Saxon economies are grouped together, displaying little affinity to governmental statism and still less to extra-governmental statism. France and Italy, on the other hand, cluster together at the bottom-left of the biplot, reflecting their “big government” political economies. Russia, Indonesia, and most strikingly of all, China, embody the ascendancy of extra-governmental channels over governmental ones (India does not appear in the biplot due to missing data points). As did previous visualisations, Figure 15 vindicates the existence of a global bifurcation on the basis of two alternative pathways of statism.

Discussion and conclusion

This study sought to investigate a significant yet typically overlooked dimension of political economy: the articulation of the state into governmental and extra-governmental institutions. It embraced as its starting point the straightforward observation that governmental organs on the one hand, and state-held corporate entities on the other, embody two distinct channels for actuating the state's involvement in the economic process. While this much is arguably well-known by practitioners of political economy, the empirical implications of this organisational bifurcation have barely been touched upon until now in comparative capitalism research.

The article addresses the contrast between governmental and extra-governmental pathways of statism by means of an exploratory investigation of stocks and flows of resources transiting through, and located in, governmental organs *versus* state-controlled corporations in over thirty countries. The objective pursued was to map the distribution of resources onto the institutional landscape of the state, both within and across significant developing and advanced political economies. The mapping also aimed to ascertain whether governmental and extra-governmental channels of state economic activity tend to manifest themselves as complements or as alternatives.

The analyses and visualisations provided in the study foreground the unevenness of major political economies' reliance on governmental *versus* extra-governmental institutions for channelling the state's participation in economic life. High-income economies tend to feature comparatively smaller SOEs and SOFIs as well as a greater dependence on the governmental circuit. The prominence of this circuit is the highest for the "big government" political economies of France and Italy as compared to the English-speaking advanced economies in the sample. Middle-income nations, for their part, tend to display more limited governmental extraction and spending, while also diverging markedly among themselves in their propensity to rely on the corporate state sector. China and India, in particular, emerge as standard-bearers for the extra-governmental route to the build-up of state economic influence. The mapping also suggests that state-controlled corporations often tend to act as substitutes for governmental organs, in so far as indicators reflecting the size of governmental *versus* extra-governmental resources are mostly negatively correlated. In this regard, it should be borne in mind that SOE and SOFI balance sheets represent powerful vehicles for funding the implementation of the state's policies and interventions from outside of governmental budgets.

Overall, the study vindicates the existence of a major fault-line running through the global political economy, not between stronger states and weaker states as such, still less between “state capitalism” and “free-market capitalism”, but between two opposite pathways for channelling the state’s involvement in the economic process. This unique topology of statism should guard scholars against the temptation to conflate the two pathways, or to reduce one to the other, lest the political economy of the state become damagingly lopsided. To illustrate, overlooking the state’s extra-governmental holdings and activities makes for a distorted view of national configurations that are heavy on the governmental side but much lighter on the state corporate side. The French state, for example, oversees some of the largest governmental inflows and outflows in the world relative to the size of the economy, yet after successive rounds of financial sector privatisations enacted in the 1980s and 1990s, it only reported 1.6 per cent of banking assets in state-controlled institutions in the latest edition of the World Bank’s Bank Regulation and Supervision Survey. Conversely, one finds economies where SOEs and SOFIs are so numerous and prominent that their aggregate revenues and expenditures dwarf those of governmental organs at all levels. China is the most striking exemplar of this pattern to emerge from this study.

Lastly, avenues may be suggested for delving further into the political-economic ramifications of the state’s institutional bifurcation. In this connection, a stumbling block that comparatively-minded political economists are likely to encounter is the relative paucity of readily usable data on SOEs and SOFIs in comparative format. To sound an optimistic note, however, the greater political salience of “state capitalism” on the world stage in recent years may spur more data-gathering efforts focused on the state-controlled corporate sector in the global political economy, if it has not already. This study, at any rate, will have achieved its primary aim if it has made a cogent case for the relevance, and potential fruitfulness, of an organisational reading of the state’s participation in the economy. The mapping provided in this research is best conceived as a preliminary exploration of a terrain still largely uncharted in comparative capitalism research. Its empirical findings, suggestive as they may be, are by essence limited by the descriptive research design and by the cross-sectional nature of the data. More research would be in order to address historical dynamics, as well as causal underpinnings, of governmental and extra-governmental pathways of statism. Such further investigations would find their place as part of a wider movement for broadening the outlook and for renewing the kinds of questions asked in research on the political economy of the state.

References

- Amable, B. (2003) *The diversity of modern capitalism*, Oxford, Oxford University Press.
- Bremmer, I. (2010) *The end of the free market: Who wins the war between states and corporations?*, New York, Penguin.
- Carney, R. W. (2015) “The stabilizing state: State capitalism as a response to financial globalization in one-party regimes”, *Review of International Political Economy*, 22:4, 838–873.
- Carney, R. W. (2016) “Varieties of hierarchical capitalism: Family and state market economies in East Asia”, *Pacific Review*, 29(2), 137–163.
- Chua, B. H. (2016) “State-owned enterprises, state capitalism and social distribution in Singapore”, *Pacific Review*, 29(4), 499–521.
- Gerschenkron, A. (1965 [1962]) *Economic backwardness in historical perspective*, New York, Frederick A. Praeger.
- Haggarty, L. and Shirley, M. M. (1997) “A new data base on state-owned enterprises”, *World Bank Economic Review*, 11(3), 491–513.
- Hall, P. A. and Soskice, D. (2001) “Introduction to varieties of capitalism”. In Hall, P. A. and Soskice, D. (eds) *Varieties of capitalism: The institutional foundations of comparative advantage*, Oxford, Oxford University Press.
- Hsueh, R. (2016) “State capitalism, Chinese-style: Strategic value of sectors, sectoral characteristics, and globalization”, *Governance*, 29(1), 85–102.
- Jahan, S. and Wang, D. (2016) “Capital account openness in low-income developing countries: Evidence from a new database”, International Monetary Fund.
- Johansson, A. C. (2012) “Financial repression and China’s economic imbalances”. In McKay, H. and Song, L. (eds) *Rebalancing and sustaining growth in China*, Canberra, ANU Press.
- Kurlantzick, J. (2016) *State capitalism: How the return of statism is transforming the world*, Oxford, Oxford University Press.
- Lanoszka, A. (2016) “Brazil’s challenges of post-interventionist bargaining: Emerging economy or state capitalism”, *Global Journal of Emerging Market Economies*, 8(1), 60–78.
- Lardy, N. (2008) “Financial repression in China”, Peterson Institute of International Economics.

- Liebman, B. L. and Milhaupt, C. J. (eds) (2016) *Regulating the visible hand: The institutional implications of Chinese state capitalism*, Oxford, Oxford University Press.
- Lin, N. (2011) “Capitalism in China: A centrally managed capitalism (CMC) and its future”, *Management and Organization Review*, 7(1), 63–96.
- Meggison, W. L. (2017) “Privatization, state capitalism, and state ownership of business in the 21st century”, *Foundations and Trends in Finance*, 11(1–2), 1–153.
- Musacchio, A. and Lazzarini, S. G. (2014) *Reinventing state capitalism: Leviathan in business, Brazil and beyond*, Cambridge, MA., Harvard University Press.
- Naughton, B. and Tsai, K. S. (eds) (2015) *State capitalism, institutional adaptation, and the Chinese miracle*, Cambridge, Cambridge University Press.
- Schmidt, V. (2002) *The futures of European capitalism*, Oxford, Oxford University Press.
- Schweinberger, A. (2014) “State capitalism, entrepreneurship, and networks: China’s rise to a superpower”, *Journal of Economic Issues*, 48(1), 169–180.
- Shonfield, A. (1965) *Modern capitalism: The changing balance of public and private power*, Oxford, Oxford University Press.
- Spechler, M. C. et al. (2017) *State capitalism in Eurasia*, Singapore, World Scientific.
- Zysman, J. (1983) *Government, markets, and growth: Financial systems and the politics of industrial change*, Ithaca, Cornell University Press.

Appendix 1. Sources and summary data for the “SOE Index”

The main source used for constructing the “SOE Index” was the 2015 edition of the Forbes Global 2000 ranking, featuring 2014 corporate metrics for the world’s 2000 largest listed firms. In the case of non-listed entities, the Forbes data was supplemented by the 2015 Fortune 500 ranking data, which includes listed as well as non-listed companies. To illustrate, the world’s seventh-largest company by revenue in 2014, according Fortune, was State Grid, a Chinese SOE that does not appear in the Forbes 2000 ranking because of its non-listed status. In addition to these two sources, it was also necessary to consult directly online corporate annual reports for 2014 for a limited number of entities – mostly policy-oriented institutions such as development banks – which appeared neither in the Forbes nor in the Fortune data despite being among the top ten asset-holders in their respective countries. Examples of the latter case include France’s *Caisse des Dépôts et Consignations* and South Korea’s Korea Development Bank. The “SOE Index” country score is then obtained by adding one point for each majority-held institution and half-a-point for each minority-held institution. Being minority state-held is defined by a level of state ownership between 10 and 50 per cent.

	Majority state-held	Minority state-held	“SOE Index” score
Australia	0	0	0
Brazil	5	1	5.5
Canada	0	0	0
China	8	2	9
France	4	0	4
Germany	3	2	4
India	6	1	6.5
Italy	2	2	3
Japan	1	0	1
Russia	7	0	7
South Korea	4	0	4
Spain	1	0	1
Taiwan	3	3	4.5
United Kingdom	1	1	1.5
United States	2 ⁴	0	2

4 The two American entities identified here are the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), two government-sponsored enterprises (GSEs) with private shareholders. Although their ownership structures are private, they were under effective state control as of 2014, having been put under “conservatorship” by the United States government in 2008 during the subprime mortgage crisis.

Appendix 2. Ten largest asset-holders by ownership in fifteen economies, 2014

Australia	Brazil	Canada
National Australia Bank Commonwealth Bank ANZ Westpac Banking BHP Billiton Macquarie AMP Limited Suncorp Bendigo & Adelaide Bank QBE Insurance	Banco do Brasil Itaú Unibanco Holding Caixa Econômica Federal ‡ Banco Bradesco BNDES ‡ Petrobras <i>Vale</i> BTG Pactual‡ Eletrobrás Safra‡	Royal Bank of Canada TD Bank Group Bank of Nova Scotia Bank of Montreal Manulife Financial Canada Imperial Bank Power Corp of Canada Sun Life Financial National Bank of Canada Brookfield Asset Management
China	France	Germany
Industrial and Commercial Bank of China China Construction Bank Agricultural Bank of China Bank of China China Development Bank † China Post † <i>Bank of Communications</i> China Railway ‡ CITIC <i>China Merchants Bank</i>	BNP Paribas Crédit Agricole Société Générale AXA BPCE CNP Assurances † Électricité de France Crédit-Mutuel-CIC† La Poste † Caisse des Dépôts et Consignations ‡	Deutsche Bank Allianz <i>Commerzbank</i> KfW ‡ DZ Bank† <i>Volkswagen</i> HypoVereinsbank‡ Munich Re Landesbank Baden-Württemberg † Bayerische Landesbank ‡
India	Italy	Japan
State Bank of India Life Insurance Corporation ‡ ICICI Bank Bank of Baroda Bank of India Punjab National Bank HDFC Bank Canara Bank Reliance Industries <i>Axis Bank</i>	UniCredit Intesa Sanpaolo Generali Cassa Depositi e Prestiti ‡ Banca MPS <i>Enel</i> Poste italiane † Exor <i>Eni</i> Banco Popolare	Japan Post Holdings † Mitsubishi UFJ Financial Mizuho Financial Sumitomo Mitsui Financial Nippon Life Insurance† Toyota Resona Holdings Sumitomo Mitsui Trust Nomura Holdings Dai-ichi Life Insurance

Russia	South Korea	Spain
Sberbank	Samsung	Santader
Gazprom	Shinhan Financial	Banco Bilbao Vizcaya Argentaria
VTB Bank	Hana Financial	La Caixa
Rosneft	KB Financial	Bankia
Lukoil	Woori Bank	Banco de Sabadell
Surgutneftegas	Industrial Bank of Korea	Banco Popular Espanol
Vnesheconombank ‡	Korea Development Bank ‡	Telefónica
Rosseti	Korean Electric Power	Iberdrola
Transneft	Korea Finance Corporation ‡	Mapfre
Otkritie FC Bank	Hyundai Motor	Bankinter
Taiwan	United Kingdom	United States
Cathay Financial	HSBC	Fannie Mae
<i>Fubon Financial</i>	Barclays	JPMorgan Chase
Bank of Taiwan ‡	Royal Bank of Scotland	Bank of America
CTBC Financial	<i>Lloyds Bank</i>	Freddie Mac
<i>Mega Financial</i>	London Stock Exchange	Citigroup
Taiwan Cooperative	Standard Chartered	Wells Fargo
Shin Kong Financial	Legal & General	MetLife
Taiwan Land Bank ‡	Prudential	Goldman Sachs
Hon Hai Precision	Aviva	Morgan Stanley
<i>First Financial</i>	Standard Life	Prudential Financial

Institutions are ranked by total assets in descending order. Bold fonts indicate majority state ownership and italic fonts minority state ownership. Most of the entities listed feature in the 2015 Forbes 2000 ranking. The symbol † identifies firms that feature in the 2015 Fortune 500 ranking but not in the 2015 Forbes 2000 ranking, while ‡ signals institutions that appear in neither.