Challenges for the Stability of State-Permeated Capitalism in Large Emerging Countries: The Cases of Brazil and India

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I. Introduction

Has the rise of large emerging economies come to an end? Considering crumbling growth rates and political turbulences, wide parts of the academic and public discourse tend to embrace this conclusion (see e.g. Anderson 2016, Evans-Pritchard 2016). The present paper takes up this debate and examines the stability of these countries' economic model from a Comparative Capitalism research perspective. We follow a comparative case study approach for Brazil and India to investigate whether the institutions of the economic model that brought about growth in the first decade of the 2000s have changed in a way that questions the continued existence of their particular model of capitalism.

Brazil and India share numerous features. They are both large emerging markets, but without the giant size of China. Both are formally democratic and organized as federal systems. Both had high rates of economic growth during the early 21st Century. However, while India continues to enjoy high growth rates, Brazil has encountered a recession over the last couple of years. These features should allow for a controlled comparison (within a most-similar-systems-design) to identify the sources of instability regarding Brazil.

To develop a framework for this comparison, we will draw on the conceptual developments within recent Comparative Capitalism scholarship (II). Second, we will document the different economic fates of Brazil and India during the last years (III). In a third step, we will highlight several challenges that might have destabilized state-permeated capitalism in Brazil, but not in India. These challenges relate to financial openness (IV), technology level (V), limits for the support of domestic manufacturing (VI) and the war against corruption (VII). The final section concludes, also with a view on the avenues for further research (VIII).

Our paper is a contribution to the recent public discussion on the destabilization of emerging market capitalism in general and of Brazilian capitalism in particular. Usually, the destabilization of emerging market capitalism during the mid-2010s has been linked to the tapering of quantitative easing policies by the US Fed and to declining revenues from commodity exports. In the case of Brazil, the massive economic crisis in addition is linked to the Petrobras corruption scandal. Usually, these accounts are combined with a call for deeper economic liberalism and the convergence on Western economic models to avoid future crises (e.g. ECB 2016, BBC 2017).

In contrast to these accounts, our paper develops an explanation for the diverging fates of Brazil and India that assumes that the large emerging markets have developed a distinctive and successful economic model that is based on very different institutions than in Western capitalism. From the perspective developed in this contribution, Brazil moved into a promising state-led direction during the rule of the Labour Party (PT). However, PT governments were unable (or unwilling) to fully mobilize the institutional complementarities of this economic model. The Brazilian problems are instead caused by the remaining features of liberal capitalism resp. features of liberal market capitalism that came as a corollary of the initial state-led orientation. India, in contrast, has remained on a rather stable path of state-led development.

II. State-permeated capitalism: The cases of Brazil and India

Our approach to the study of capitalism in emerging economies echoes prominent calls to rethink the international political economy in terms of a rise of state capitalism – with a prominent role given to China (Bremmer 2009; Musacchio and Lazzarini 2014; Kurlantzick 2016). More specifically, we argue that we are witnessing the emergence of a special type of state capitalism in large emerging economies more broadly. We call this type "state-permeated capitalism", given that close collaboration between different parts of state and capital – rather than strong centralized state control – is the defining feature of these economies (Nölke et al. 2015).

State-permeated capitalism is not unique to China. We can also identify the most important components of the model in India and, in a more moderate and temporary form, in Brazil during the rule of the Labor Party. In both economies, most major companies are either controlled by national capital or the state. In Brazil, however, Western multinationals play a major role as well, dominating several sectors that usually are considered quite important for late industrialization (electronics, car manufacturing etc.). In both country cases, however, companies are relatively independent from global financial markets. Investments usually are financed by retained earnings or by bank credit, with the major banks being under national control. Both corporate governance and corporate finance thus are organized in a way to enable long-term stability, at least for the major corporations. As a major effect, processes of financialization could be kept outside of the economy by and large.

State-permeated capitalism in Brazil and India can build upon a range of institutional complementarities which produce competitiveness for production on a middle level of technology (Nölke et al. 2015). While stable corporate governance and finance enable companies to pursue long-term economic strategies, industrial relations are strongly segmented, towards a well-paid and well-protected segment, a less well-paid and protected segment and a large informal sector, with limited solidarity between the segments. This allows for a competitive remuneration of the most qualified staff, but also allows for access to cheap labor in the formally less qualified and informal segments. The state supports this system of industrial relations through the selective non-enforcement of labor laws. At the same time, it assists in fostering innovations on a medium-tech level. Crucially, large domestic markets and the stimulation of domestic demand are a crucial backbone of this economic model. In both cases, the state provides protection against imports and foreign multinationals to support national companies. Moreover, in the Brazilian case, domestic demand has been stimulated during the PT rule by a series of social reforms, from raising the minimum wage via various social programs to easing credit access conditions for lower middle-class households.

For this study, we build on the premise that these commonalities provide the foundations for a controlled comparison to assess the relative stability of the state-permeated economic model under conditions of increased volatility and uncertainty in the world economy post-2008.

III. The diverging fates of Brazil and India

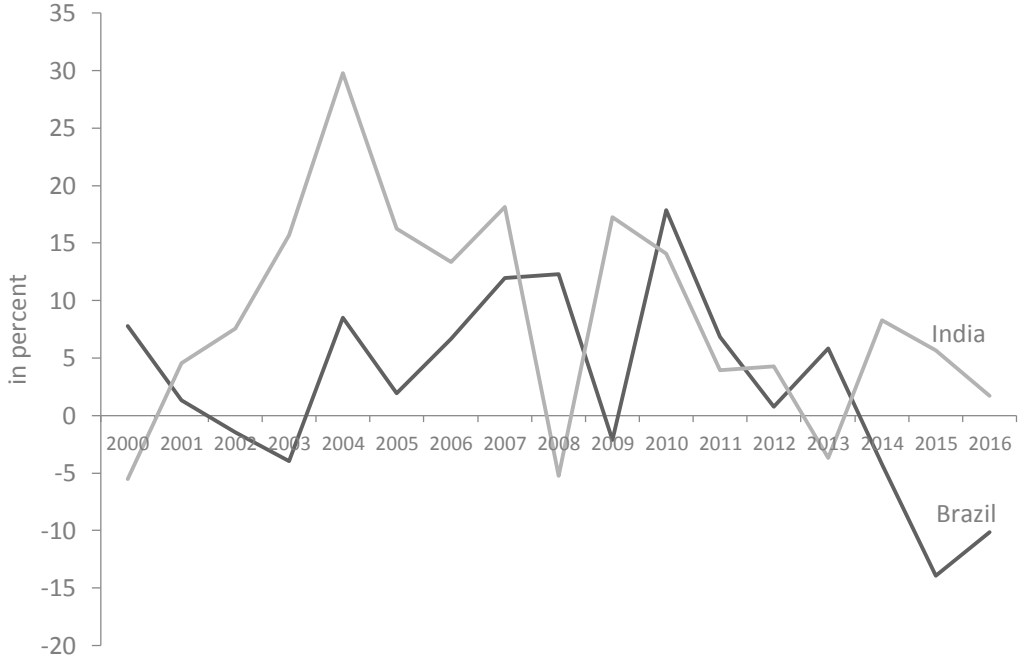
Over the last couple of years, India seems to fare much better than Brazil in terms of economic growth and political stability. Although India always had a higher average growth rate over the past 30 to 40 years than Brazil, their co-movement of GDP expansion and domestic investment over the 2000s has ended abruptly after 2012 (Fig. 1 and Fig. 2), leaving Brazil in a major recession. Subsequently, the rule of the Labor Party in Brazil was terminated, based on a parliamentary coup, after which the current Temer government seems to move away from the model of state-permeated capitalism: by reducing public expenditure, weakening

labor unions, privatizing state companies and allowing foreign multinationals to invest in core sectors of the economy, such as oil and gas exploration. While India has also seen a change in government with Narendra Modi's victory at the 2014 elections, its formal democratic institutions and economic institutions seem to have remained much more intact than Brazil's.

Figure 1: Annual growth of GDP in Brazil and India, in percent, 2000-2016

Source: World Bank, World Development Indicators (GDP growth), retrieved 10 March 2018

Figure 2: Gross domestic investment in Brazil and India, annual growth in percent, 2000-2016



Source: World Bank, World Development Indicators (Gross capital formation), retrieved 21 March 2018

Given these recent observations, the Brazilian situation seems to be fundamentally less stable than the Indian situation, suggesting different politico-economic trajectories after c.

2012-2013. Can this be accounted for by an external shock that hit the Brazilian economy harder than the Indian one and if this trend is indeed a sign of deviating from the state-permeated model and its institutional pillars? For one, Brazil is a largely closed economy, with the share of the export sector only attributing for about 20 percent of economic activity and therefore being less vulnerable for world market demand fluctuations (Germany, in comparison, has nearly 50 percent). Moreover, state-permeated capitalism in Brazil encountered a much more massive external shock already in 2008 but did not falter then. Volatile economic indicators and political turmoil usually signal fundamental challenges to a prevalent growth regime, but whose institutions may nonetheless prove resilient and adaptive, as comparative capitalism scholarship has been able to show time and again. Thus, it is likely that the instabilities since c. 2013 have internal origins.

In other words, the subsequent empirical sections investigate whether the institutional pillars of the economic model have changed in a way that compromizes the existence of a coherent state-permeated capitalism in Brazil as contrasted with India. A close-up of the key institutional domains of the Brazilian and Indian state-permeated market economies (SME) over the period from 2000 to 2016 allows us to identify possible critical junctures. Here, we will employ both descriptive statistics obtained from official or associational sources and qualitative evidence from specialized secondary literature and communication with country experts. Beginning with a discussion of the domain of corporate governance and finance, we will move on to the state of international economic integration, labor and innovation before we discuss the developments regarding the central coordination mechanism of state-permeated capitalism.

IV. Corporate governance and corporate finance

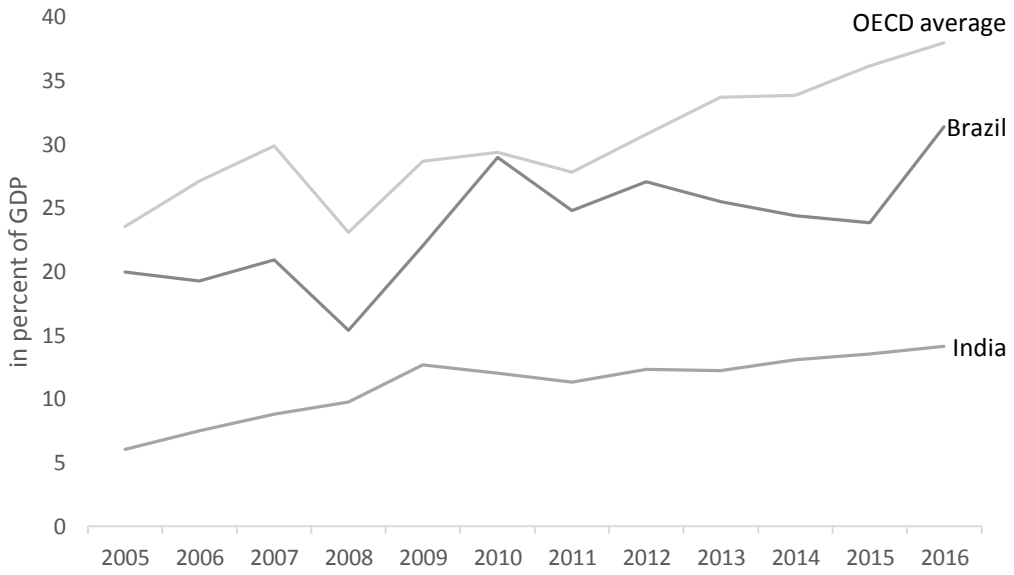
One of the intricate ideal-typical features of state-permeated capitalism is a strong complementarity between the institutional domains of corporate governance and corporate finance. Both spheres display a high level of 'insider' control through national capital enabling long-term investment decisions. This means, large corporate ownership is usually concentrated with well-connected families, business groups and the state, mitigating the short-termism of global capital markets and dispersed ownership – even though relatively high inflation rates have in the past fueled short-term economic decision-making within both countries. Brazil has also tended to be more open to foreign ownership than India, but continuously below the average of advanced industrial countries (see below Fig. 4). In the same vein of insider control, corporate finance is usually independent from international finance and rather dominated by internal funds or bank credit, of which the large bulk is provided by public banks. This means, there is a strong role for the state for the provision of firm financing, complemented by policies to potentially restrict cross-border financial flows and limit volatility (Allen et al. 2010; Gallagher 2014).

Which trends would subsequently indicate the departure from the state-capitalist trajectory? Processes of economic and financial liberalization as well as crisis-induced monetary volatility may put the complementarities and instruments of state permeation to a test, although there are no theoretically derivable thresholds. However, an obvious change in ownership structures and shareholding as well as of capital market financing may serve this assessment better. Analogously, a decrease in the share of (public) bank credit and the rise of new investors such as asset management firms, private equity funds, and mutual funds may indicate the erosion of some of the traits of state-permeated capitalism as this would imply a

reorientation of firms towards non-bank-based forms of finance. Finally, a significant worsening of external debt exposure, exchange rate movements and high interest rates may, sometimes rapidly, impact on the overall stability and vulnerability of the domestic economy.

As a proxy for changes in ownership we use foreign direct investments (FDI). In Indian companies they have increased over the past two decades, but with 14 percent of GDP FDI inward stock on a still relatively modest level. Moreover, interview data confirms that despite increased engagement of foreign investors in Indian firms, there is no evidence yet for a destabilizing effect for established ownership structures. The Brazilian trajectory, by contrast, shows a starker movement and displays a strong increase after 2015. thus the overall trend over the past decade indicates a greater openness for FDI inflows which increased by 10 percent of GDP between 2006 and 2016 (Fig. 4).

Figure 4: FDI stocks, inward, in percent of GDP, 2005-2016



Source: OECD Data, FDI stocks. doi: 10.1787/80eca1f9-en, retrieved on 24 March 2018

Correspondingly, international capital market financing seems to have received a greater role, particularly for large Brazilian non-financial companies (Kaltenbrunner and Panceira 2018), but the general image is rather mixed. First, the banking systems in both countries seem relatively stable, with a slightly growing market share for (incumbent) domestic and public banks on the one hand and a rather marginal role for both foreign financial institutions and stock exchanges for investment finance on the other (FSB 2016; FSB 2017, Tara and Dhamija 2018). Second, the strengthened entry of investment funds in the Brazilian case has not led to a profound change in corporate control or finance, because most of them participate in the traditionally highly profitable treasury bond segment, feeding into the specific (state-led) trajectory of Brazilian financialization (Bin 2016; Levinas et al. 2018).

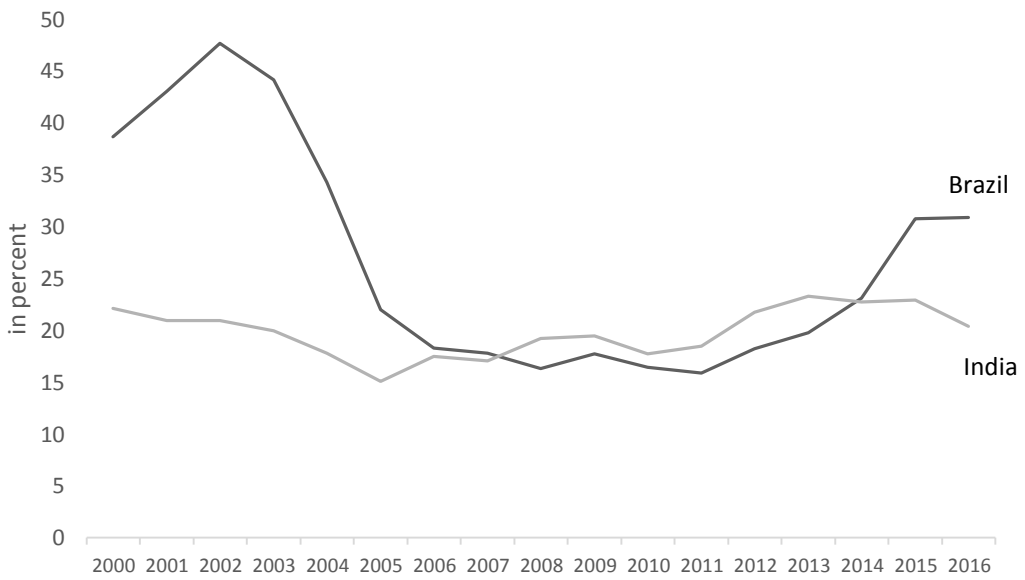
Nonetheless, transformations in a more direct feature of state intervention in Brazil, might counteract this stability. The public development bank BNDES which had been reinvigorated by the PT government and stepped up its activities following the global financial crisis and in the subsequent recession, had to face several constraining reforms recently after the Temer government came to power. While cuts to the funding from the treasury and the workers'

pension fund (FAT) creates growing pressure on its overall credit operations, the marketization of its interest rate through the new benchmark rate TLP will remove its key competitive advantage vis-à-vis other banks. Commentators from the private financial sector have deemed the reform "a hallmark of a deeper transformation in the Brazilian economy" (Santander 2017: 6). In India, contrary to Brazil, development finance institutions have ceased to play an important role due to the liberalization agenda since the early 1990s, but only to be substituted for by publicly controlled commercial banks (Chandrasekhar 2016). One might reason that this could be a potential path for Brazilian capitalism to make up for these remarkable reforms.

Lastly, related to country's international economic integration, the observation that domestic bank-based financing channels are dominant should divert from the potential vulnerabilities through financial openness and external debt. In Brazil, external debt has grown significantly since around 2011 and is approaching pre-PT-rule debt stocks of the early 2000s, whereas India displays a much more modest development (Fig. 5). This difference can partly be accounted for by the strong presence of multinationals in Brazil that produce higher levels of intercompany debt, but it is nonetheless associated with more vulnerability through global financial markets and exchange rate movements (Atradius 2016, FSB 2016, FSB 2017).

Against this background, Brazil and India have developed some protection against fluctuations on global currency markets: Both countries have accumulated substantial foreign currency reserves, to be able to intervene in case of a too strong devaluation of the national currency; and both countries also have instated diverse forms of capital controls (Gallagher and Prates 2016). Brazil, in addition, temporarily had introduced a tax on certain financial transactions, another protection against speculative financial flows. However, these capital controls remained haphazard in the case of Brazil (Dierckx, 2015: 154), while the financial transaction tax soon was abolished. Brazil therefore had very limited means to defend against global financial speculation. On the one side, high interest rates in Brazil – a preference of the independent central bank, avoiding a return to previous periods of hyperinflation and expression of the public bond-based financial incentive regime – has attracted massive carry trades. These carry trades have led to a strong overvaluation of the Brazilian currency. According to UNCTAD calculations, the Brazilian Real was over-valued by 80% in relation to its long-time optimal value in April 2011 (Nassif et al., 2011).

Figure 5: External debt stocks of Brazil and India, in percent of gross national income, 2000-2016



Source: World Development Indicators, retrieved on 22 February 2018

On the other side, financial fluctuations have also worked in the opposite direction during a crisis of confidence in the Brazilian economy. Here, massive capital outflows led to a sudden devaluation of the Real. While a devaluation of the Real is principally desirable (in order to increase price competitiveness), sudden currency swings are poisonous with regard to the stability required for long-term investments (Kaltenbrunner and Paincera, 2015: 1301). India, in contrast, suffered much less from carry trades and was not affected by a sudden stop, due to the more closed nature of the financial system.

In sum, we find much more movement in the Brazilian than in the Indian case, underlining the potentially more volatile character of a less coherent SME in Brazil. Both the recent dismantling of BNDES' capacities and the dangers of financial openness may well leave their imprint on Latin America's largest economy, while our indicators suggest a more stable outlook for the Indian political economy. Institutional change may play out for both internal and external reasons – suggesting the need for a closer investigation of each country's dynamic insertion in the world economy.

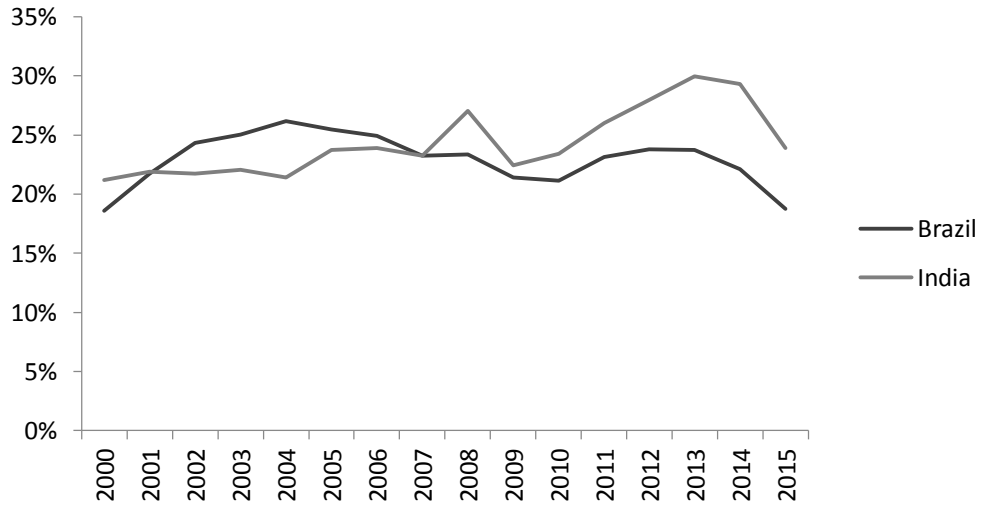
V. International Economic Integration

The 'success' of state-permeated capitalism in the first decade of the 2000s was also mitigated by a commitment by the state and its agencies towards the protection of the domestic industry against external competition. The aim was to nurture a domestic market with a particular demand structure that would best be served by incumbent industrial firms. Much of the growing domestic market would constitute of products for intermediate and final consumption of low to medium levels of technology. For domestic firms, this would not just provide monopolistic access to local markets, it would also limit the incentives to look abroad for market expansion – which would have had to include the development of products and production techniques that would prove competitive on the world market in the end (where emerging economies' firms would likely fail). So, state-permeated capitalism entailed an implicit consensus between the domestic industry and the state in which the former would not "go abroad" (by e.g. transnationalizing or upgrading) while the latter pro-

vides for special protection of their home market. For this, emerging economies would defend their protectionist measures also against external pressures to liberalize.

A departure from that 'consensus' would first and foremost manifest in an external policy that would promote exports and international trade integration. Yet, the more recent data does not indicate such a strong shift (Fig. 6).

Fig. 6: Export share of total industrial production



Source: UNIDO Industrial Database, WTO Statistical Database, accessed 18 March 2018

Limits for the support of domestic manufacturing could also come in the form of decreased protectionism or a move towards more free trade respectively. True, in the current state, the multilateral trade system is far from exercising pressure towards trade liberalization. On the other hand, a move towards more universal free trade principles would be a strong indicator for the destabilization of the state capitalist model as it would come endogenously from within the countries. Yet, there is little dynamism in this regard over the last years. India is still particularly protecting its agrarian sector in a constant fashion (much more than Brazil, whose meat-processing giants like JBS are global market players). As trade barriers (tariff and non-tariff) can vary greatly across sectors, wholesale tariff figures are to be taken with a grain of salt. However, even when we look at one of the most crucial sectors in trade and manufacturing, the vehicles sector, things remain relatively stable (Tab. 1). India decreased average external MFN tariffs (i.e. tariffs applicable for all importers) slightly but not dramatically.

Table 1: Average MFN tariffs for vehicles

	Brazil	India
2012	22,78	28,93
2013	22,78	28,93
2014	22,78	28,93
2015	22,44	25,42
2016	22,44	25,01

Source: WTO Integrated Database, accessed 14 March 2018

Yet, in the same period, India increased the number of non-tariff measures of protection, but still far less than Brazil (Fig. 7). Non-tariff measures relate to a number of trade constraints, including sanitary and hygienical requirements and technical barriers to trade (as

used by Brazil) as well as anti-dumping measures and quantitative restrictions (used by India).

Fig. 7: Non-tariff measures (NTMs) applied by WTO members in merchandise trade

Source: WTO i-Tip Database, accessed 17 March 2018

These data suggest at least a continuation, if not even intensification of protectionist measures to support domestic industries from external competition. Clearly, one would have to take a closer look at the sectoral and firm level for the precise mechanisms of state support, but for the moment the aggregated data does not show a move away from the state-capitalist model from the first decade of the 2000s. True, especially Brazil created an explicit export promotion agency (Apex-Brasil) but according to interview data, we would assess its impact relatively limited so far. India, although home to several potential world market players, does not engage in export promotion efforts on a national and encompassing way at all. Even if these export promotion policies were serious, they would have "to prove" against the institutional logic of state-permeated capitalism. But where this model of capitalism is rather coherent, alternative policies have a hard time to induce path change.

A final check for a potential destabilization of the support for domestic industries must look at the ways in which these are protected against the competition through foreign FDI. Apart from the repercussions on the stability of a closed shareholder structure (as argued earlier in this paper), FDI also relates directly to the extent to which domestic firms must cope with foreign producers in their countries. As we argued elsewhere (Nölke et al. forthcoming), FDI is a double-edged sword: it stimulates productivity enhancement through external competition, but at best in a way that keeps permanent competition from foreign firms out. Therefore, next to protection of domestic industries through trade measures, corresponding policies would also have to apply for the role of foreign investment. Were Brazil and India on the path towards more openness and a declining willingness to support their local industries, one would have to see it manifested through an increased attempt to attract foreign FDI on non-conditional grounds. Usually, these would take place under bilateral investment treaties including most-favorite nation treatment clauses.

Brazil signed 20 bilateral investment treaties (BITs), but none of them is actually in force (UNCTAD 2018). However, it just signed six BITs in 2015 (mostly with Latin American countries) which at least indicates that Brazil generally supports the idea of mutual investment

promotion and protection practices. India, with 61 BITs signed, appears to be much more investor-friendly at first sight. However, India terminated more than 20 BITs – mostly with OECD countries – in the last years. India did so because it wants to renegotiate her BITs on the grounds of a new model BIT that, among other provisions, would not automatically include most-favored nation (MFN) treatment but include stronger-than-usual investor control mechanisms at the discretion of the host state and its sub-national state levels, especially when it comes to investor-state dispute settlement (Ranjan and Anand 2017). What is looming here is the establishment of a non-universal model of bilateral investment regulation that is deeply at odds with the hitherto dominant MFN-based provisions as it puts much greater weight on the control of investment flows by the host state. Were India or Brazil negotiating or signing BITs in the style of TTIP or else, one could take it as an indicator for a weakening of the state capitalist consensus but their current stance towards investor protection largely keeps the institutional arrangements for foreign investment largely in shape.

Taken together, none of the challenges for the destabilization of state-permeated capitalism regarding their external trade and investment relations materializes. Compared to the other institutional pillars of state capitalism as we understand it here, this external dimension perhaps shows least dynamics, not least because the current shape of global economic policy is fragmented and the idea of universal global economic governance (embodied in the principles of international economic institutions) finds less support every day.[1]

VI. Industrial Relations and Innovation

The support of national industry via fairly high levels of protectionism and measures aimed at domestic demand stimulation is a crucial element of state-permeated capitalism. Given that most additional demand in emerging markets is still fueled by first-time consumers who base their buying decisions primarily on affordability and functionality criteria, production strategies of domestic industry heavily rely on these low-end market segments (Lim et al. 2013). Providing "good-enough" products for highly price-sensitive consumers has by now turned into a considerable competitive advantage, making emerging economies even to lead markets for such product categories (Herstatt and Tiwari 2017). Earlier technology strategies focusing on reverse engineering and technology transfer have gradually been replaced by indigenous innovation of a frugal or low-cost kind, i.e. creative solutions for everyday problems – be it "Kanju" in Africa, "Gambiarra" or "Jeitinho" in Brazil, "Jugaad" in India, or "Jiejian Chuangxin" in China. In contrast to liberal and coordinated market economies specialized in radical and incremental innovation respectively, state-permeated capitalism thereby has gained comparative institutional advantage in such frugal innovations for low-end market segments – at home but also in other emerging economies (Contractor 2013; Williamson et al. 2013).

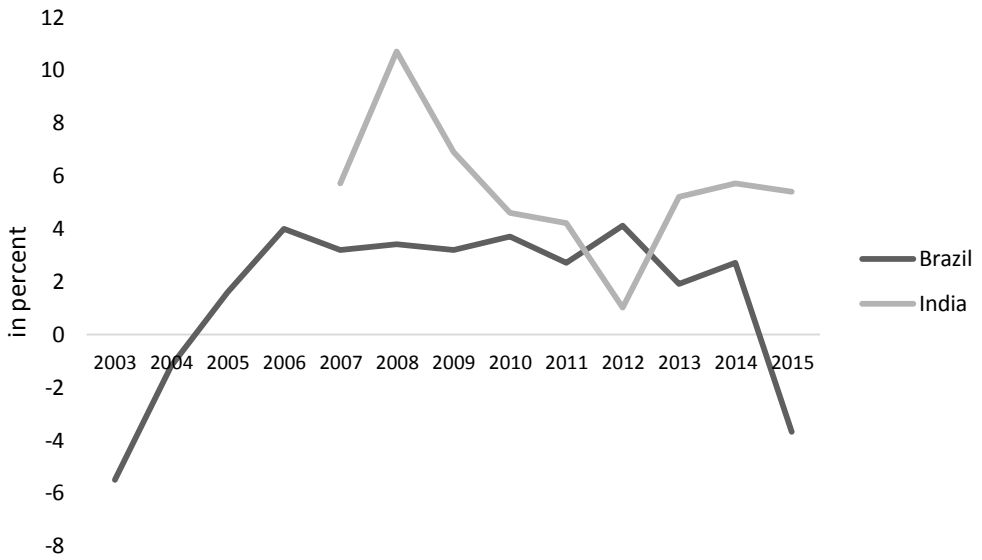
State-permeated capitalisms base their comparative advantage in frugal innovations on a row of institutional complementarities between the skills regime, industrial relations, domestic markets and innovation systems. Crucially, low-cost, predominately low-skilled, and highly flexible labor is the precondition for their price competitiveness. Given low rates of union density, most workers in effect are not subject to the very generous formal labor codes and are rather employed as contract workers, in other non-standard forms of em-

[1] What does indeed potentially threaten the capacity of state-permeated capitalism is the extent of country's external monetary stability. However, such macro-economic features are (unfortunately) not argued for within Comparative Capitalism – not least because this approach is developed against the experience of Western industrialized economies where monetary stability usually has not been put into question.

ployment (i.e. temporary, part-time, on-call work, or dependent self-employment), or even outright informally (i.e. without any regulation and/or security at all). Flexible or even atomized labor relations are complemented by an education system that is highly segmented, providing, on the one hand, masses of easily dismissible low-skilled (and therefore: low-cost) workers and, on the other hand, a high-skilled labor elite that despite of earning comparatively high wages still allows companies to compete on price internationally. Another main complementarity relates to the huge domestic markets of countries like India and Brazil, providing companies with (1) ample growth opportunities and (2) consumer segments thirsting for new products meeting their prime consumption criteria: affordability and functionality. In strategic sectors, state agencies provide the necessary technological and financial inputs for the bigger companies to become and stay competitive on a regional or even global scale (Nölke 2014). As long as these complementarities prevail, no major demands for technological upgrading arise and firms can focus on low-cost, 'good enough'-products. This has been quite successful for some time, notably during the impressive growth rates of the 2000s.

But how about the post-2013 period? Have declining growth rates in India and the deep economic crisis in Brazil been accompanied by alterations to the existing institutional complementarities between skills, labor relations, domestic demand and the innovation system? Regarding labor relations, trade union affiliation continues to be fairly low, inhibiting effective labor efforts towards collective bargaining and incremental upskilling. Although temporary employment in Brazil for instance is traditionally limited, high rates of job turnover exist nonetheless, as employers can dismiss workers easily even in regular employment contracts (ILO 2016, 60). In India, especially in the manufacturing sector, contract labor has grown significantly in recent years (up to 34,7% in 2011/12; ibid., 94). In addition, real wage growth halted from 2012 onwards and turning even negative in Brazil in 2015 (-3,7 %, see Fig. 8). Thus, there has been no shift from the low-cost labor regime but instead can be interpreted as a shrinking base for domestic demand as, in a domestically oriented economy, the resources for growth would have to be endogenous.

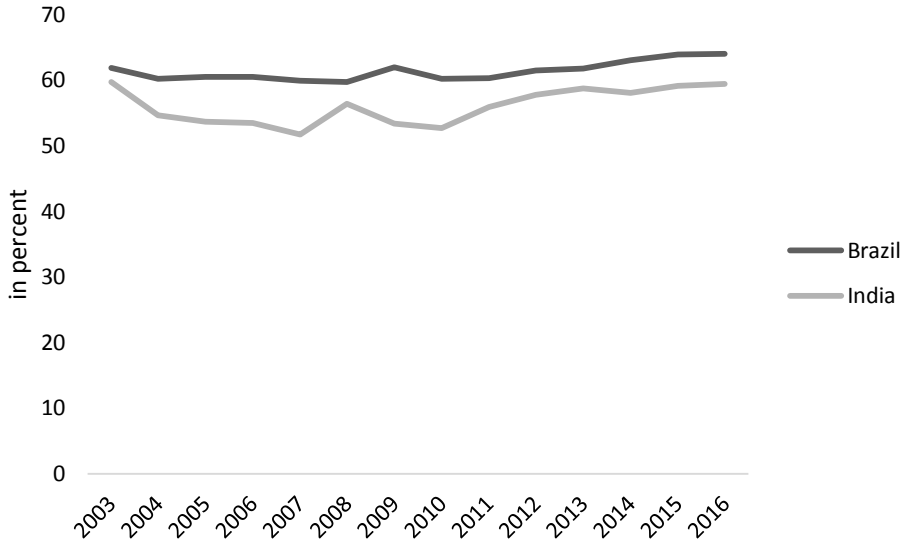
Fig. 8: Average real wage growth (%)



Source: ILOStat; Global Wage Report 2016/17

Regarding the relative importance of domestic consumption vis-à-vis exports for GDP growth and, hence, for the production strategies of companies, at first sight no major shift is identifiable (see figures 6 and 9). Although government spending in Brazil has been reduced sharply due to recent austerity measures, household final consumption expenditure is almost unchanged and still fairly high in comparative terms (64% in 2016).

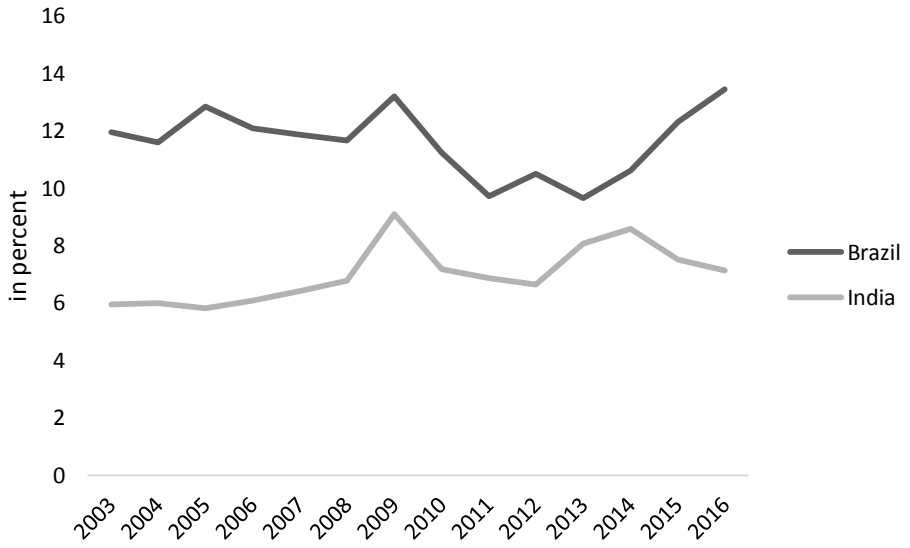
Fig. 9: Household final consumption expenditure, etc. (% of GDP)



Source: World Bank Development Indicators

In India, domestic consumption is continuously rising and is by now almost at par with Brazil (59%). Regarding high-technology exports, Brazil lies considerably ahead with a notable diverging trend since 2014, indicating that those Brazilian firms that have the option to export, are actually doing so since the turning point in 2012/13 (Fig. 10).

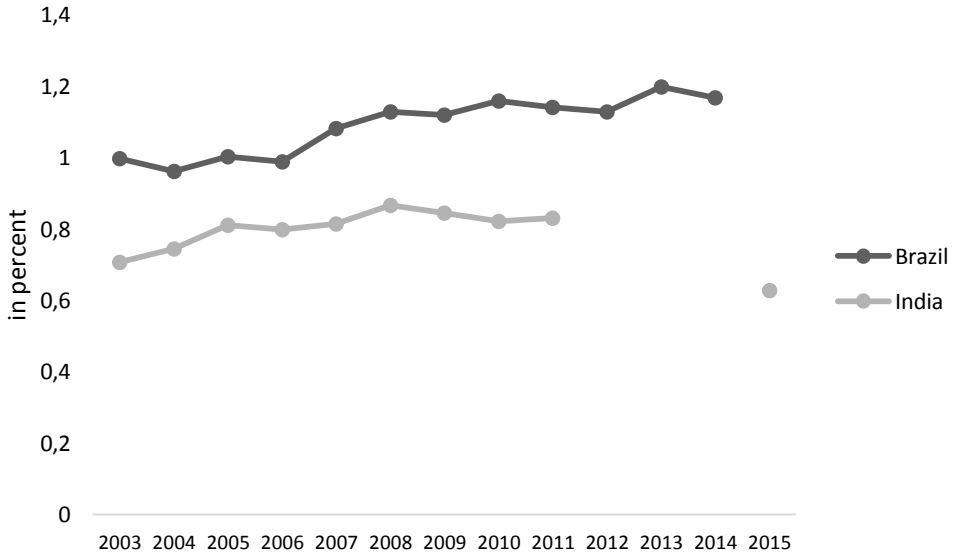
Fig. 10: High-technology exports (% of manufactured exports)



Source: UN Comtrade database

Regarding education, the bulk of investments in both countries first and foremost went into the expansion of primary and secondary education and the Science, Technology and Innovation (ST&I) infrastructure more generally. For some time, calls for a qualitative upgrading of the established infrastructure have been raised, given the overall low performance of the public education systems (Bruns et al. 2012; Hill and Chalaux 2011). Hence, currently we are witnessing broad scale policy initiatives in the realms of skilling (Skills India, Plano Nacional de Educação), entrepreneurship, and innovation more general. However, as both countries are facing budget constraints, investing large sums in comprehensively upgrading its production systems as in China is not a likely trajectory. Such pockets of globally competitive high-tech companies exist of course (e.g. Embraer, Petrobras, TCS, Wipro), but only in limited sectors with strategic importance such as aircraft, defense, oil/gas and IT. In addition, most of these companies base their competitive advantage on frugal innovations, investing only comparatively negligible sums in R&D (Fleury et al. 2013).

Fig. 11: Research and development expenditure (% of GDP)



Source: UNESCO Institute for Statistics

Speaking of R&D, Brazil has been spending considerably more than India in the recent one and a half decades (see figure 11). The current ST&I strategies in Brazil and India are, however, diverging, each by kind and by substance. Brazil, on the one hand, seems to adopt a German type of innovation system with the establishment of an applied R&D infrastructure modeled after the Fraunhofer-Gesellschaft (Embrapii, polos de innovação); India, on the other hand, tries to emulate a Silicon Valley type of innovation system with start-ups and seed funds playing a much bigger role (Start-up India). As big business in both countries is traditionally hesitant to invest in R&D, the state takes a lead role to reduce or share the risk inherent in innovative projects. One element is the provision of funding (grants or subsidized credit lines), another is public procurement or the integration into the supply chains of state-controlled companies. Furthermore, these initiatives are not primarily, as in the past, aimed at some selected national champions, but at the broader productive landscape, i.e. small and medium sized companies. However, India's ST&I strategy is far more centered on the notion of frugality – i.e. strengthening its comparative advantage and deepening the domestic-led growth model; Brazil, by contrast, is far more engaged in high-tech, R&D-based projects tai-

lored towards the export-oriented sectors, thereby departing from the so far pursued consumption-led growth model.

Summing up, we identify considerable dynamics in this institutional sphere of the political economies of Brazil and India. While the low-cost, low-skill labor regime underlying its production systems persist in both countries, there is a notably diverging trajectory with regard to its ST&I regimes. Whereas India tries to strengthen its comparative advantage in frugal innovation, Brazil seems to adopt a high-tech strategy tailored towards its export-oriented sectors.

VII. Central coordination mechanism: the downsides of the war against corruption

Each coherent type of capitalism contains a typical coordination mechanism. In large emerging markets such as China, India and Brazil, state actors take center stage, in close interpersonal collaboration with representatives of domestic business and based on norms of reciprocal favors (Nölke et al. 2015, 543). In the absence of well-working formal institutions (such as sectoral or regional business associations), informal institutions such as family ties assist in solving agency and information problems. Close collaboration between state agencies and domestic capital allows for the development of a fairly coherent strategy of industrial development. In contrast to the East Asian developmental states, however, this coordination does not predominantly take place through centralized top-down channels. Most of economic coordination can be found in decentral coalitions between business and state agencies, for example on the regional level. The existence of multiple decentral coalitions also helps in preventing comprehensive state capture by a single group of actors, as for instance in the cases of Russia (the oligarchs during the Yeltsin period) or South Africa (Zuma and the Gupta family).

We find this form of coordination in both Brazil and India. However, the mechanism does not always work smoothly in the Brazilian hybrid between state-permeated capitalism and elements of liberal capitalism. This hybrid poses restrictions to fully unfold this mechanism inter alia due to the need to incorporate foreign capital as a “third” party at the table, the deep divisions between domestic capital fractions and the additional fragmentation caused by the rise of the PT (Nölke et al. forthcoming, 103-106).

During the 2010s, both Brazil and India have witnessed a major change of government. In both cases, the change of guard went together with a fundamental shift of political parties, from Congress to BJP in India and from a PT-led government to a coalition of liberal parties in Brazil. Still, the change of governments did not fundamentally change the general coordination mechanism, even if the mechanism now may favor different business groups. In both Brazil and India, informal collaboration between state agencies and domestic capital generally remained the backbone of the central coordination mechanism up to date. It has neither been replaced by markets and formal contracts, nor by associations and inter-company networks. However, in both cases economic coordination has become more cumbersome, though not because of the change of government. During the late phase of the last Congress Party government in India, politics in the country were massively affected by an anti-corruption movement (Riley and Roy, 2016, 89-91). The scandals during the Commonwealth Games 2010 made the corruption issue more easily visible. Commencing in 2011, a series of mass protests highlighted the importance of the issue, prominently led by the activist Anna Hazare. In 2013 and 2015, the new anti-corruption ‘Aam Aadmi’ party even won the state

election in New Delhi. The societal mobilization against corruption made it increasingly difficult to maintain the smooth mechanism of informal coordination. Close informal interactions between representatives of state and business came under the general suspicion of corruption. Even the liberal Economist concludes that anti-corruption measures in India have had negative short-term repercussions:

> "Corruption produces bad decisions; concern over corruption produces indecision… Mines and other assets lie idle as courts dither over how crooked their owners are. Faced with this mess, private firms have cut investments; a fall in investment from 17% [...] in 2007 to 11% in 2011 is one reason why GDP growth has slumped to 5%, the lowest level for a decade. And ineffective efforts to deal with corruption seem only to have made things worse. India's cranky legal system, its overlapping investigative agencies and its raucous media have meant that responses to the problem may have done as much to paralyse business in general as to punish wrongdoers. Few senior people go to jail; but officials fear being accused of malfeasance, so many think the safest course of action is to make no decisions at all" (The Economist, 2014: 3).

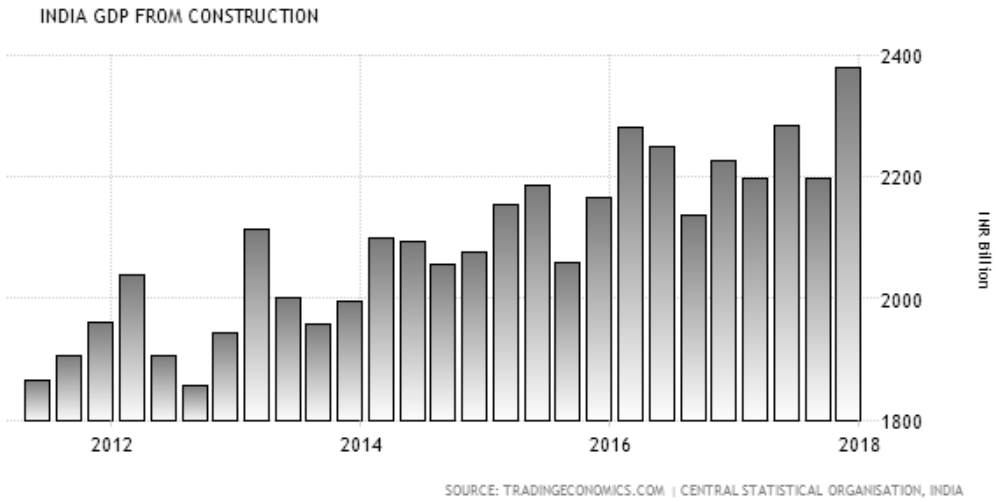
Similarly, the detection of the so-called 'Lava Jato' (car wash) scandal in Brazil massively increased public awareness with regard to corruption, starting during the second Dilma government. While massive corruption was a typical feature of Brazilian politics and even the PT had been forced to pay deputies monthly informal salaries to safeguard a majority in parliament – exposed in the so-called "mensalão" scandal – *Lava Jato* easily topped the historical accounts. Starting in 2013 and continuing up to date, the detection of vast amounts of kickbacks between the largest Brazilian company, several construction companies and politicians from various parties has taken center point in Brazilian politics, leading to the impeachment of the former president and other major party leaders. Lava Jato not only led to massive write-downs and lay-offs with Petrobras, but also to a political climate of uncertainty because nobody knows where the next anti-corruption investigation will be opened (Anderson, 2016: 19).

In both cases, prominent public debates about corruption make informal contacts between representatives of business and the state riskier. Full liberal transparency, as required by Western norms, does not harmonize well with the social foundations of the Brazilian and Indian economies. The breakdown of informal state-business-coordination due to comprehensive anti-corruption campaigns has led to a massive decrease of private and public investment. As argued earlier, reciprocal relations between representatives of state and business are important to make sure that public policy is tailored to the requirements of business, particularly in the absence of functional formal channels of state-business coordination. Even worse, state representatives do not dare anymore to make decisions on public investment, due to the threat of anti-corruption investigations. A decrease of public and private investment, in turn, has had massive repercussions on economic growth in the two rather closed economies, which heavily depend on domestic spending.

Anecdotal evidence highlights several major investment projects that have been cast into doubt due to anti-corruption operations, from the Dabhol Power Project via the 2G mobile phone licenses to a Vodafone acquisition of a major Indian phone company (Solomon, 2013: 911-913). Although these refer to typical one-off auctions of licences and infrastructure projects (in contrast to the issues at the heart of the Brazilian corruption scandal), GDP growth in India was markedly lower during the heydays of the anti-corruption campaign: around 5%

during 2012/2013 and about 7% from 2014 onwards (World Bank 2015, 5; see also section 2 above). Obviously, this does not mean a straight causal connection between anti-corruption campaigns and economic growth but simply should shed light on a crucial politico-economic mechanism that finds expression in real economic transactions. According to the World Bank, domestic demand was the main driver of this increase of growth, prominently triggered by public infrastructure investments that were massively rebounding since 2015 (World Bank 2015, 8; see Fig. 12).

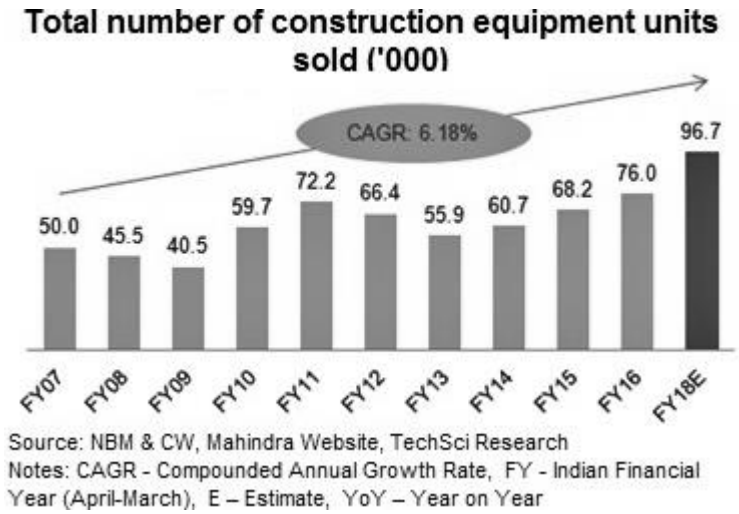
Fig. 12: Size of Indian construction sector (in billions of INR)



Source: Trading Economics 2018

Equally, sales of construction equipment decreased from 2011 to 2013 and rebounded thereafter (Fig. 13).

Fig. 13: Sales of construction equipment in India



Source: IBEF 2017

In Brazil, the effects of anti-corruption measures on economic growth were even worse. Petrobras had to scrap its investment plans and to lay off more than a third of its workforce. Many of the major Brazilian companies were implicated on the corruption scandal and

therefore, banned from doing business with the government. This did not only affect companies in the oil and gas sector, but also in the important field of engineering and construction, with Odebrecht as the most well-known case. Other anti-corruption operations have been started in other sectors, for example against the world's largest beef and poultry exporters, JBS and BRF. As in India, ongoing anti-corruption operations led to a general climate of mistrust and state officials did not dare to make decisions about investments anymore. While growth already had slowed down between 2010 and 2013 due to austerity policies, the Brazilian economy 2014 fell into its deepest recession for more than 100 years, with a drop of GDP of 3.9% in 2015 and of 3.6% in 2016 (Felter and Labrador, 2018; see also section 2 above). As witnessed in India, anti-corruption operations – via an increase of "economic policy uncertainty" (as measured by the IMF, based on quantitative text analysis of the newspaper *Folha de S. Paulo*) – mainly affected real investment which has contracted by around 30 percent between early 2014 and late 2016 (Krznar and Matheson, 2018; see also Fig. 2).

While not being able to fundamentally destabilize state-permeated capitalism, anti-corruption measures are indeed able to substantially decrease growth in this type of capitalism. Several studies have also documented the negative repercussions of these campaigns on investment in China and, thereby, on economic growth (Barnato, 2015; Nie et al., 2016; Wang, 2016). Crackdowns on the established practice of gift-giving – a well-established practices between officials and corporations in China – and more strict supervision of local government investment projects have led to an estimated reduction of 1-1.5% of GDP annually over several years in a row, leading Chinese observers even to the conclusion that "no anti-corruption is a better choice than anti-corruption" (Nie et al, 2016: 1).

To conclude, both Brazil and India did not deviate from the typical social coordination mechanism of state-permeated capitalism during the period under review. Still, massive anti-corruption campaigns have led to a temporary paralysis of public investments and a related dip in growth figures. In comparison, this problem has affected Brazil later and more massively than India, where the anti-corruption investment paralysis has faded after 2013. Given the importance of (public) investments and the related domestic demand for the growth model of state-permeated capitalism, the latter can be destabilized for extended periods by anti-corruption operations, another reason for the dismal growth in Brazil over the last years.

VIII. Conclusion: Beware of an inappropriate production system

In this paper, we have developed an alternative explanation for the current destabilization of emerging market capitalism. In contrast to the dominant interpretations highlighting either declining commodity revenues or corruption as main causes, we argued that the divergent economic fates of emerging economies such as Brazil and India can be better explained by looking at the socio-economic institutions underpinning their growth models. In a nutshell, our argument states that the successful growth of the early 2000s of both economies can be traced back to a coherent type of state-permeated capitalism. The divergence of the post-2010 period, however, occurred due to different degrees of adoption of this model.

Our comparison of the four main institutional domains of the Brazilian and Indian economy has demonstrated both the achievements and the contemporary challenges of state-permeated capitalism. An economic model based on close coordination between state agencies and major domestic companies, the utilization of demand stemming from large domes-

tic markets and institutional complementarities that are particularly well-suited to produce labor-intensive goods and services based on a middle level of technology have led to high growth rates over a considerable period. The case of India demonstrates how this model can be stable across long periods of time. At the same time, India may be well-advised to further pursue on this path, if it continues to create additional demand for domestic manufacturing by lifting hundreds of millions of workers out of poverty.

Similarly, a haphazard commitment towards state-permeated capitalism produces several contradictions that may undermine its stability over time. In the case of Brazil, these contradictions include

(1) a remaining openness to the global financial system, leading to destabilizing currency speculations and rising external debt,
(2) limits to the support of domestic manufacturing via demand stimulation, for example based on the exhaustion of fiscal resources,
(3) decreasing demand for the domestic technology mix and too high costs for comprehensive economic upgrading and
(4) a political destabilization of the general coordination mechanism in the context of the fight against corruption.

Therefore, in contrast to most existing research on institutional change in Comparative Capitalism our study does not highlight the incremental change of individual institutions within one model of capitalism, but rather potential for a systematic destabilization of the model as a whole. The different experiences of Brazil and India seem to indicate that a full embrace of the model of state-permeated capitalism works better for large emerging economies than a partial adoption of this strategy. In a way, this confirms the early VoC argument that pure types fare better than hybrids.

If it is indeed true that emerging market capitalism is more prone to radically depart from a coherent model than advanced economies, further research should delve more deeply into the possible trajectories of change of SMEs such as Brazil. Drawing on the vibrant CC scholarship on emerging markets (Nölke and Claar 2013; Rougier and Combarnous 2017), we would preliminary expect such fundamental change into three directions:

(1) the state withdraws from its proactive role by giving up control over the economy in favor of foreign investors and promotes an export-oriented growth model by integrating into global value chains, potentially transforming into a dependent market economy (DME) (Nölke and Vliegenthart 2009) like in Eastern European countries or in Mexico;
(2) the state withdraws from its proactive role but does not pursue a complete opening of the economy by preserving large domestic business groups in the non-tradable and resource-extracting sectors, thereby generating a detrimental situation typical for hierarchical market economies (HME) (Schneider 2013) which tends to lead to negative complementarities such as the low-skill trap like in many parts of Latin America but also South East Asia;
(3) the proactive role of the state degenerates into dysfunctional interferences into the economy and the close and productive relationship between state agencies and business turns into unproductive rent-seeking, leading to patrimonial capitalism (Schlumberger 2008) that can be found in many parts of the developing world but most prominently in the Arab countries and Commonwealth of Independent States (CIS) countries.

By doing so, the extended CC research program could develop more direct links to related areas such as development studies.

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