Boom and Bust? A Political Economy Reading of India's Growth Experience, 1993-2013

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Kunal Sen is Professor at Institute for Development Policy and Management,
University of Manchester
email: kunal.sen@manchester.ac.uk

Sabyasachi Kar is Associate Professor at the Institute of Economic Growth, Delhi
email: skar_ieg@yahoo.com
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ABSTRACT

We examine the political economy causes of India's growth acceleration in the early 1990s, and the periods of high growth in the 1990s and early 2000s, and the subsequent slowdown since 2011. We argue that India's post-reform growth experience can be separated into three distinct growth episodes. The first growth episode was from 1993 to 2002 and was characterised by a set of predictable informal relationships (which we call 'ordered deals') between political and economic elites, which were relatively open as well. The second episode was from 2002 to 2010, and deals in this period became increasingly closed, leading to negative feedback effects from accountability institutions, the middle class and non-elites, along with structural retrogression of the economy. The third episode, beginning in 2011, was one of an incipient growth deceleration, and was characterised by increasingly disordered deals. We argue that this is the outcome of two separate phenomena: (1) increasing political de-legitimation of the growth process that was seen as highly predatory and corruption-intensive; and (2) the pushback from accountability institutions in the post-2010 period, leading to greater uncertainty in the deals environment in 2011–2014. For growth to return, we argue that more than economic reforms or infrastructure spending, it is necessary for a realignment of the relationships between political and economic elites and between elites and non-elites such that there is a return to 'open ordered deals' that are politically legitimate and provide an enabling environment for structural transformation.

Keywords: economic growth, boom and bust, India, deals, institutions

JEL Codes: O11, O43, P16
1 INTRODUCTION

For much of the 1990s and 2000s, India was seen as the 'new kid on the block' among countries that were growth success stories, and was one of the three fastest growing economies in the world, along with China and Vietnam (Sen 2009). This narrative of India's emerging growth miracle came to a sudden stop in 2011–2014, as growth slowed down considerably. The conventional wisdom on why economic growth in India stagnated usually attributes the growth slowdown to a combination of internal factors, such as the 'policy paralysis' that befell the central government in recent years and increased macroeconomic uncertainty, and external factors, such as the slowdown in global economic growth since 2008. In this paper, we provide a different reading of India's growth experience in the 1990s and 2000s, emphasising political economy and institutional factors that have received less scholarly and media attention in the current discourse on India's economic stagnation. We do so by situating the growth experience of India within a wider understanding of the nature of economic growth in developing countries. Since the seminal work of Pritchett (2000), there has been the realisation that a view of economic growth that is more consistent with the stylised facts of economic growth is one that takes economic growth as movements between different growth phases, rather than characterised by a 'steady state' rate of economic growth. Massive discrete changes in growth are common in developing countries, and most developing countries experience distinct growth episodes: growth accelerations and decelerations or collapses (Kar et al. 2013a). If economic growth in developing countries is strongly episodic, it is not surprising that India's growth has followed a similar pattern.

But why do we see such 'boom and bust' economic growth in developing countries? In this paper, we first provide an argument for why we see what we call 'boom and bust' growth in developing countries. We then identify India's growth episodes, using standard statistical methods to identify structural breaks in India's GDP per capita time-series. Using this method, we show that India's post-independence growth experience can be divided into three phases:

(1) a period of slow growth till 1993;
(2) a period of growth acceleration from 1993 to 2002; and
(3) a period of further acceleration in economic growth from 2002 onwards.

Most conventional explanations of India's growth slowdown attribute it to external factors or to macroeconomic variables, such as higher borrowing costs brought about by a contractionary monetary policy, but do not find much support. For example, the IMF (2014) states that two-thirds of India's slowdown is due to internal factors, and not to a worsening external environment. In addition, Tokuoka (2012) and Anand and Tulin (2014) find that the primary determinant of the investment slowdown is not an increase in the real interest rate but heightened policy uncertainty. This leaves open the question: what explains this increased policy uncertainty? Our paper tries to address this question.

As Jones and Olken (2008: 582) point out: 'Almost all countries in the world have experienced rapid growth lasting a decade or longer, during which they converge towards income levels in the United States. Conversely, nearly all countries have experienced periods of abysmal growth. Circumstances or policies that produce ten years of rapid economic growth appear easily reversed, often leaving countries no better off than they were prior to the expansion.'

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Based on more recent GDP data, we argue that India has entered a period of an incipient growth deceleration from 2011 to date. Next, we apply our framework of ‘boom and bust’ growth to India's growth experience, arguing that the institutional causes of India's growth in the 1993–2002 growth episode were different from those observed for the 2002–2010 growth episode. Using our framework, we also provide an argument for why India's economic growth slowed down in the post-2011 period. Finally, we highlight some implications that emerge from our research.

2 A FRAMEWORK FOR UNDERSTANDING 'BOOM AND BUST' GROWTH

As the recent empirical literature on economic growth shows, economic growth in many developing countries involves discrete and quantitatively massive transitions between periods of high growth, periods of negative growth, and periods of stagnation (Kar et al. 2013a). To fix our ideas on transition paths around growth regimes, we provide a simple sketch of these transition paths in Figure 1 below. Using a rough-and-ready way to demarcate growth regimes, we classify growth regimes into four categories:

1. a growth regime which we call 'miracle growth' where the average increase in per capita income is 5 per cent per annum or more;
2. a growth regime which we call 'stable growth', where the average increase in per capita income is between 0 and 5 per cent per annum;
3. a growth regime which we call 'stagnant growth, where the average increase in per capita income is around 0 per cent per annum; and
4. a growth regime we call 'growth crisis' where the average change in per capita income is negative.

Figure 1 Transition paths between growth phases

Source: Authors' illustration

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1 We base our reading of India’s growth experience on key informant interviews we conducted with representatives of the business sector and the media as well as on document analysis.
Growth acceleration is the transition from stagnation or crisis to stable growth or miracle growth. The ability of a country to sustain stable growth or miracle growth in period $t+1$ if it has experienced the same in period $t$ determines its ability to avoid growth collapses and can be defined as growth maintenance. If a country does not transition from growth acceleration to maintenance, it faces a growth collapse. It is necessary to understand the factors underlying these dynamics to characterise a country's growth dynamics. Figure 1 makes this clear.

It is not obvious that the factors that lead to growth acceleration will lead to growth maintenance as well, as Rodrik (2005: 3) argues: 'Igniting economic growth and sustaining it are somewhat different enterprises. The former generally requires a limited range of (often unconventional) reforms that need not overly tax the institutional capacity of the economy. The latter challenge is in many ways harder, as it requires constructing a sound institutional underpinning to maintain productive dynamism and endow the economy with resilience to shocks over the longer term.'

Once we view economic growth as transitions between the above growth phases, and in particular, the transitions from crisis/stagnant growth to stable/miracle growth, the key questions that need to be addressed are:

(1) what are the institutional determinants of growth acceleration? and
(2) how are they different from the institutional determinants of growth maintenance?

We turn to these two questions next.

2.1 The Institutional Determinants of 'Boom and Bust' Growth

What explains the move of the economy from regimes of stagnation or crisis to regimes of stable or miracle growth? Following the work of Acemoglu and Robinson (2008) and other new institutional economists, the conventional economic explanation for economic growth to occur is that formal institutions—such as written contracts, laws that protect private property, and properly functioning courts—need to emerge. However, institutions in most developing countries are weak, and even if formal institutions exist, they are unlikely to be enforced properly. More important in the explanation of growth acceleration is the existence of informal institutions in the form of personalised relationships between political and economic elites, which we call the 'deals' space. A deal is defined as 'a specific action between two (or more) entities in which actions are not the result of the impersonal application of a rule but rather of characteristics or sanctions of specific individuals which do not spillover with any precedential value to any other future transaction between other individuals' (Pritchett and Werker 2013: 45). An 'ordered deal' is a deal that is honoured, once negotiated between investors and state officials. A 'disordered deal' between investors and the political elite is where there is no certainty that the deal will be delivered. Economic growth is likely to accelerate when there is a movement in the deals space from disordered deals to ordered deals. Through 'ordered deals', the state can ensure that investors commit to
the investment decision and engage in production, so that rents can be generated through the production process. Investors need to consider this commitment to ‘ordered deals’ credible. In other words, investors must believe that the state or its agents will deliver on its implicit or explicit promise not to expropriate all or most of the rents accruing from the production process in the future, especially after investors have made investment decisions involving sunk costs in fixed capital. Investors also need to commit to share a part of their rents to the state (or its constituents, such as politicians) and to pay the state the necessary taxes when it raises revenue (Sen 2013).

What now explains the ability of the economy to stay in a positive growth process and for growth not to slow down or collapse? To understand this, we define ‘open deals’ as deals that are widely available to all investors, large or small, and not confined to an elite or a small group of favoured investors (Pritchett and Werker 2013). On the other hand, ‘closed deals’ are offered by the political elite only to a small group of investors. The move from growth acceleration to growth maintenance would depend on the movement in the deals space from closed ordered deals to open ordered deals, or from disordered deals to open ordered deals. An ordered deals environment, even if closed, may be able to sustain growth for a considerable period. But for growth to be sustained over the long run, the deals space must—while maintaining order—also become more open. This is because openness in the deals space drives economic competition and facilitates the entry of new firms, which leads to structural transformation as countries produce more complex products and as resources shift from low productivity sectors to high productivity sectors and firms. We set out the deals space in a 2X2 matrix, as in Figure 2 below, and how it relates to different phases of growth. A shift from disordered deals to ordered deals is associated with growth acceleration, and a shift from closed ordered to open ordered deals is associated with growth maintenance.

**Figure 2 The deals space**

<table>
<thead>
<tr>
<th>Kickstarting Growth</th>
<th>Closed Deals</th>
<th>Open Deals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disordered Deals</td>
<td>Only those with political connections get to make deals, and even they cannot be certain that officials will deliver</td>
<td>Any can make a deal, but no one is certain that officials will deliver</td>
</tr>
<tr>
<td>Ordered Deals</td>
<td>Only those with political connections get to make deals, but they can be confident that officials will deliver</td>
<td>Anyone can make a deal, and they and they can be certain that officials will deliver</td>
</tr>
</tbody>
</table>

Source: Authors’ illustration, based on Pritchett and Werker (2013)
However, there is nothing pre-ordained in the evolution of institutions that suggest that a move from a closed ordered deals environment or a disordered deals environment to an open ordered deals environment is linear. As economic growth originates in a country, two feedback loops occur from the growth process to the deals space. These feedback loops can be either positive or negative; in other words, whether with further economic growth, the deals space may turn from being open ordered to being closed ordered or being disordered. The first of these feedback loops is economic in nature, and would depend on the 'rents space', or the structure of economic opportunities in the economy. We characterise the rents space in Figure 3, categorising the economic structure of the economy in a 2X2 matrix, in two dimensions—whether the sectors in the economy are in exporting and/or import-competing sectors or not affected by international trade and whether the sectors are characterised by high rents (that is, excess profits) or are competitive.

**Figure 3** The rents space

<table>
<thead>
<tr>
<th>Export-oriented or Import-competing</th>
<th>High rent</th>
<th>Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic market</td>
<td>RENTIERS</td>
<td>MAGICIANS</td>
</tr>
<tr>
<td></td>
<td>Natural resource exporters</td>
<td>Manufacturing and service exporters, other agricultural exporters</td>
</tr>
<tr>
<td></td>
<td>POWER BROKERS</td>
<td>WORKHORSES</td>
</tr>
<tr>
<td></td>
<td>Legislative monopolies or oligopolies, natural monopsonies or oligopolies, mostly in non-tradable sectors</td>
<td>Traders, retailers, subsistence farmers, the informal sector</td>
</tr>
</tbody>
</table>

*Source: Pritchett and Werker (2013)*

We call the export-oriented high rent sectors 'rentiers' (the upper left cell of the 2X2 matrix), and the competitive tradable sectors 'magicians' (the upper right cell of the 2X2 matrix). We call the monopolistic or oligopolistic domestically oriented or non-tradable sectors 'powerbrokers' (the lower left cell of the 2X2 matrix), and the competitive domestically oriented sectors as 'workhorses' (the upper right cell of the 2X2 matrix). Rentiers are more likely to be natural resource-exporting sectors and magicians are likely to be manufacturing sectors such as apparel and electronics as well as tradable service sectors such as information technology (IT). Power brokers are likely to be real estate, construction, infrastructure, utilities and telecommunications, while workhorses are likely to be smallholder agriculturists and the informal manufacturing and services sectors.

We would expect firms in the 'rentier' and 'power broker' sectors to be the types of private sector actors more likely to push for closed deals than open deals, as these firms would lose out in an open deals environment, in which rents in these sectors dissipate with the entry
of new firms or from more open and transparent regulatory institutions. Since the state plays a large role in allocating licences and controlling the entry of new firms in these sectors, firms in these sectors are likely to strike close personalised relationships with the political elite, to capture the process of licence allocation or to create artificial barriers to entry.

On the other hand, firms in the 'magician' and 'workhorse' sectors are more likely to push for open deals than closed deals, for three reasons. First, these sectors are the most dynamic and 'creative destruction' is most likely to occur here, and firms in these sectors would benefit the most from an open deals environment. Secondly, given the inherent contestability of these sectors and the presence of a large number of economic actors, a closed deals space that excludes many of these actors is not likely to find political traction. Finally, these two sectors depend on an efficient power broker sector for cheap and high quality inputs to their production process, such as well functioning roads and reliable electricity provision, and would benefit from the competitive pressures that an open deals environment would bring to power broker firms.

Therefore, if the growth acceleration episode is biased towards the rentier and power broker sectors (say, due to a commodity price boom or due to the high growth of non-tradable sectors such as infrastructure and real estate), the economic feedback loop through the rents space could have a negative effect on the deals environment, making it more closed. On the other hand, a growth acceleration episode biased towards the magician and workhorse sectors is more likely to lead to further opening of the deals space.

The second of the feedback loops would be mostly political in nature, and would depend on how influential groups such as civil society, judiciary, the middle class, and the media view the growth process, as well as how non-elites mobilise themselves against elements of the growth process that they see as politically illegitimate. Particularly in countries with strong civil society presence and electoral politics, the political feedback loop can be negative if the deals environment underpinning the growth episode is seen as exclusionary or if the nature of economic growth is highly predatory. The political feedback loop can lead to changes in the distribution of power, as groups such as civil society, the middle class, and those excluded from the growth process begin to gain de facto political power, with greater political mobilisation and pushback from accountability institutions such as the judiciary and the media. Therefore, while a shift from a disordered deals environment to a closed ordered deals environment is often necessary for growth to accelerate, the political feedback effect may turn negative if the deals space remains closed for too long, especially in democracies.

If the positive growth episode is underpinned by closed ordered deals that do not become open over time, both economic and political feedback loops will likely turn negative and the closed ordered deals environment may become increasingly disordered, ending the positive growth episode. On the other hand, economic and political feedback loops can be
positive if the deals space becomes increasingly open, and the magician and workhorse sectors become increasingly important in the growth process, leading to structural transformation, as new firms, products, and industries emerge in the growth process. In this case, the positive growth episode will carry on, and sustained economic growth will result. We depict the different possibilities in Figure 4, which sets out visually our framework for understanding 'boom' and 'bust' growth.

**Figure 4** A framework for understanding 'boom' and 'bust' growth
3 IDENTIFYING INDIA'S GROWTH EPISODES

Before we examine the causes of boom and bust growth in India, we first need to periodise India's growth and, in particular, establish when their growth accelerations and decelerations occurred. We follow our own procedure, set out in Kar et al. (2013). This procedure differs from previous approaches that have attempted to identify the timing of India's growth acceleration, which have been either ad hoc, in that they have simply eyeballed the data to establish the timing of the break (such as Sen 2007), or used a statistical method (Bai-Perron 1998) mechanistically (such as Balakrishnan and Parameswaran 2007). Our approach combines the statistical approach with an economic filter to provide a more unified way of establishing breaks in GDP per capita data (see the appendix for details).

Our procedure identifies 1993 as the beginning of the first growth acceleration episode, and 2002 as the beginning of the second growth acceleration episode. In India, GDP per capita growth accelerated in 1993 to 4.23 per cent per annum (ppa) versus a predicted rate of 2.34 ppa and then accelerated again in 2002 to 6.29 ppa versus a predicted rate of 2.91ppa. The net present value (NPV) (at a 5 percent discount rate) of the additional output from the 2002 growth acceleration was USD 2.65 trillion (PPP). The NPV of output gained from the 1993 acceleration was USD 1.05 trillion. Therefore, the total NPV gained from growth accelerations since 1993 was USD 3.7 trillion. Taken together, India's two growth accelerations added about USD 4000 in PPP terms to the average Indian's income as compared to the counter-factual of what the income would have been without the two growth accelerations.

We plot India's real GDP per capita growth in Figure 5 (five-year moving average to smoothen out spikes in growth rates). As is clear from the figure, economic growth starts increasing steadily since the 1990s to 2010. However, economic growth declines sharply in the period 2011-2013 (the most recent year for which we have GDP data), and the average for these three years is 3.35 per cent as compared to 6.33 per cent in 2002–2010. While the economic growth slowdown may well be a temporary one, we will argue later in the paper that the decline in economic growth may well be medium-term and, thus, constitutes a growth deceleration phase.

4 UNDERSTANDING THE 1993–2002 GROWTH EPISODE

India's political economy has been supportive of pro-business and pro-growth policies since the 1980s (Kohli 2012; Mehta and Walton 2014). When Indira Gandhi returned to power in 1980, the government's economic policy focussed on promoting economic growth. This led to a growing alliance between the political and economic elites. As Kohli (2012: 30–31) notes: 'Just after coming to power in January 1980, ... Indira Gandhi let it be known that

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4 Most previous studies on structural breaks in growth rates in India find evidence of breaks in the late 1970s. Our procedure shows a possible growth break in 1979, but that this break is not significant enough statistically.
improving production was now her top priority. In meeting after meeting with private industrialists, she clarified that what the government was most interested in was production. Therefore, beginning in the 1980s, the Indian state clearly signalled to domestic capitalists its intention to credibly commit to an environment where private enterprise would be supported and growth-enhancing policies followed. This was reflected in changes in economic policies, such as the slow but steady liberalisation of import controls, especially on capital and intermediate goods. The shift in the relationship between political and economic elites from one of mutual distrust to a more collaborative and synergistic relationship was further accentuated with Rajiv Gandhi’s coming to power in 1985. Gandhi took particular interest in modern sectors, such as IT and engineering, and tried to bring in new economic elites from these emerging sectors into the relationship that the political elite had with the business sector. In addition, with the rise of non-traditional business groups in southern and western India, there was a growing diversification of business ownership, leading to a broadening of the political connectivity of the business elite (Mehta and Walton 2014).

**Figure 5** India's economic growth (annual change in per capita GDP, %, 1961–2013, five-year moving average)

![India's economic growth graph](image)

*Source: World Bank, World Development Indicators 2014, for 1960-2012, and IMF’s World Economic Outlook for 2013, our calculations.*

Therefore, by the late 1980s, the macro-level deals environment had already become distinctly 'ordered' and more open, with the emergence of new economic elites in both modern sectors and in regions outside the industrial heartlands of Gujarat and Maharashtra.
4.1 The 1993 Growth Acceleration Episode

Two further developments in the early 1990s led to a strengthening of the ordered nature of the deals environment, particularly at the micro level.

First, the dismantling of the industrial licensing system in 1991 removed an important source of 'disorder' in the deals environment at the micro level. This development ensured that the approval of applications that firms made for their expansion or that new firms made to enter the industrial sector during the previous licensing regime no longer depended on the whims and fancies of individual bureaucrats in the government.

Secondly, the removal of the import licensing system in the early 1990s for most commodities also meant that the highly discretionary and case-by-case nature of imports that were not on Open General Licence was done away with. As Bhagwati (1993: 50) noted: 'The industrial-cum-trade licensing system ... had degenerated into a series of arbitrary, indeed inherently arbitrary, decisions, where for instance one activity would be chosen over another simply because the administering bureaucrats were so empowered and indeed obligated to choose.'

The growth acceleration of 1993 was in great part due to the 'ordered deals' environment that had already taken shape in the 1980s and was enhanced by the dismantling of the industrial-cum-trade licensing system in 1991. These deals were largely open, as barriers of entry to many industries were removed. This was reflected in the entry of new firms in manufacturing and services, and especially in pharmaceuticals and IT (Alfaro and Chari 2009). At the same time, the Indian state's collusive relationship with certain sections of the business elite in the pre-reform period remained, and may have been accentuated by the rise of increasingly powerful regional business groups closely connected with regional political elites (Mehta and Walton 2014). Thus, during the 1990s, closed deals existed side by side with open deals and, consequently, many traditional industries (such as consumer durables) were still dominated by entrenched business groups that had emerged in the licence raj (Alfaro and Chari 2009).

There is evidence from detailed firm-level analysis of the 1990s of significant dynamism in the corporate sector in this period. Harrison et al. (2012) find a large allocation of market share from less productive firms to more productive firms in the first half of the 1990s, but not in subsequent years. Mody, Nath, and Walton (20011) find significant entry of new firms in virtually all industrial sectors in the early-to-mid 1990s, which stops in the late 1990s, with very little entry of new firms in the 2000s. Kathuria, Raj, and Sen (2013) show that the improvement in productivity performance in the manufacturing sector in the 1990s was not confined to the formal sector but encompassed the informal sector as well.

However, as Goldberg et al. (2010) show, much of the product churning in the 1990s was due to product additions rather than product shedding. In this sense, India's experience of the 1990s with 'creative destruction' was more 'creative' and less 'destruction'.

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The dynamism that one observes in the private sector in the 1990s is also reflected in indicators of growth and structural transformation. Thus, in the 1993–2002 growth acceleration phase, economic growth was mostly driven by the exporting competitive sectors (such as IT and chemicals) and domestically oriented service sectors such as hotels and restaurants (see Tables 1 and 2).

5 UNDERSTANDING THE POST-2002 GROWTH EPISODES

There were two distinct growth episodes in the post-2002 period; (1) a further growth acceleration episode from 2002 to 2010; and (2) an incipient growth deceleration from 2011 onwards. We discuss the features of these two episodes in turn.

5.1 The 2002–2010 Growth Acceleration Episode

In the 2002–2010 episode, India's per capita economic growth (6.42 per cent per annum) was faster than during 1993–2002 (4.15 per cent per annum on average). However, there was a shift in the pattern of growth towards non-tradable sectors such as construction, communications, and banking and insurance—the average growth rates of these sectors in 2002–2010 were 8.6 per cent, 23.1 per cent, and 11.2 per cent respectively, as compared to 3.4 per cent, 15.7 per cent, and 7.4 per cent in 1993–2002 (Table 1). Within the manufacturing sector, the importance of the refined petroleum sector in total gross real value added also increased sharply, with its share increasing from 5.6 per cent in 1993–2001 to 13.0 per cent in 2002–2007 (Table 2). There was also a shift in India's exports towards more resource-intensive sectors, such as refined petroleum and minerals, with the share of natural resource intensive exports in India's total exports increasing from 14.6 per cent in 1993–2002 to 19.5 per cent in 2002–2010 (Table 3). Thus, economic growth in the second growth episode was qualitatively different from the first episode, in that it relied more on rentier sectors (such as mining and petroleum refining) and other high rent power broker sectors (such as telecommunications and real estate). There was, however, strong growth in magician sectors such as IT (or business) services, which observed an increase in average growth from 2.9 per cent during 1993–2002 to 17.4 per cent during 2002–2010 (Table 1). At the same time, there was a larger increase in new firm entry during the 1993–2002 episode than in the 2002–2010 episode—a 53 per cent increase in new firms in the 1993-2002 episode, and 9.8 per cent decrease in new firms in the post-2002 period, as seen in Table 4 (Alfaro and Chari 2009).

In Figure 6, we plot the relative importance of the rentier, power broker, magician, and workhorse sectors as reflected in their shares in GDP over time. We see that both the power

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Footnote: We use GDP factor cost at constant price to calculate the shares of the four sectors. We include only sectors where much of the economic activity is produced by the private sector, as the rents space in Figure 3 does not apply to the public sector. In the rentier sector, we include mining and quarrying (only from 2002, as mining was under state ownership before 2002). For the power broker sector, we include utilities, construction, communications, and real estate (again, only from 2002, as these sectors were mostly under state ownership before 2002). For the magician sector, we include registered manufacturing and business services (IT). For the workhorse sector, we include agriculture, forestry, fishing, unregistered manufacturing, trade, hotels and restaurants, transport by other means, storage, dwellings, and other services.
broker and magician sectors have increased their importance in economic activity over time, and especially in the post-2002 period. This has been mirrored by a steady decline in the workhorse sector until 2002, followed by a sharp drop in the share of this sector in total output from 2002 onwards (the rentier sector has marginally increased its importance in the post-2002 period). The fall in the share of the workhorse sector, where most of India's poor are located, has negative implications for a growth strategy that favours the working poor, and suggests that this sector had less of a role in influencing the deals environment in the post-2002 period. Since this sector has a strong interest in an open deals environment, the decline in this sector implied that one important source of pressure for open deals was gradually diminishing over time. On the other hand, the net effect on deals with the growing importance of the magician sector (which characteristically asks for open deals) and the power broker sector (which characteristically asks for closed deals) was less certain.

What happened to structural transformation during this period? Hidalgo et al. (2007) view structural transformation as the upgrading of products in a country's economic structure such that firms in that country move over time to more complex products. Following this view, and using data on product complexity from the Atlas of Economic Complexity, we plot the five-year moving average of product complexity for India between 1993–94 and 2007–08 in Figure 7. We find that structural transformation (as captured in increasing product complexity) mostly increased during the 1993–2002 growth episode but fell during the 2002–2010 episode.

There was also a shift in the deals environment in this period from relatively open to closed deals. This was most evident in the increasing level of 'crony capitalist' deals that political elites struck with economic elites in 'high rent' natural resource sectors such as bauxite, coal, iron ore, manganese ore, and natural gas, at both national and regional levels. In various ore-rich states such as Jharkhand, Karnataka, Goa and Odisha, influential, politically connected business elites systematically underpaid mining royalties to state agencies (along with extracting iron and bauxite in excess of the amounts stipulated by the leases that the private mining firms held with the state governments). There was a succession of such scams, highlighted by the media. In 2010, the central government constituted a commission to investigate irregularities in the extraction, trade, and transportation of iron ore and manganese ore across the country. It was headed by Justice M.B. Shah of the Supreme Court of India. The Commission found evidence of 'enormous and large scale multi-stage illegal mining of iron ore and manganese ore running into thousands of crores of rupees every year' (Shah Commission 2012: 1). The Shah Commission also found clear evidence of collusion between ruling politicians at the state and national level and private mining firms, stating that 'the State has “gifted” property of thousands of crores in the hands of private companies/firms/individuals' (Shah Commission 2012: 604). There were similar concerns in the allocation of licences for coal deposit blocks to private firms by the Central Government in the 2004–2011 period, which were done preferentially at lower-than-market rates, instead of a competitive bidding process, according to investigations on the nature of the allocation process by the Comptroller and Auditor General (CAG).
Table 1 Average sectoral GDP per capita growth rates by regime

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<tr>
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</thead>
<tbody>
<tr>
<td>1 Agriculture, forestry, and fishing</td>
<td>0.59</td>
<td>1.30</td>
<td>1.46</td>
</tr>
<tr>
<td>1.1 Agriculture, including livestock</td>
<td>0.75</td>
<td>1.30</td>
<td>1.59</td>
</tr>
<tr>
<td>1.2 Forestry and logging</td>
<td>-1.42</td>
<td>-0.07</td>
<td>0.20</td>
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<td>1.3 Fishing</td>
<td>2.33</td>
<td>2.88</td>
<td>2.42</td>
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<tr>
<td>2 Mining and quarrying</td>
<td>3.41</td>
<td>2.21</td>
<td>3.42</td>
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<tr>
<td>3 Manufacturing</td>
<td>2.98</td>
<td>4.87</td>
<td>7.38</td>
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<tr>
<td>3.1 Registered</td>
<td>3.95</td>
<td>5.61</td>
<td>8.57</td>
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<td>3.2 Unregistered</td>
<td>1.86</td>
<td>3.52</td>
<td>5.07</td>
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<td>4 Electricity, gas, and water supply</td>
<td>6.95</td>
<td>3.87</td>
<td>4.89</td>
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<tr>
<td>5 Construction</td>
<td>2.78</td>
<td>3.41</td>
<td>8.75</td>
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<td>6 Trade, hotels, and restaurants</td>
<td>2.80</td>
<td>6.54</td>
<td>7.64</td>
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<tr>
<td>6.1 Trade</td>
<td>2.78</td>
<td>6.36</td>
<td>7.69</td>
</tr>
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<td>6.2 Hotels and restaurants</td>
<td>2.94</td>
<td>8.66</td>
<td>7.30</td>
</tr>
<tr>
<td>7 Transport, storage, and communication</td>
<td>3.58</td>
<td>7.42</td>
<td>11.05</td>
</tr>
<tr>
<td>7.1 Railways</td>
<td>1.95</td>
<td>2.02</td>
<td>6.17</td>
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<td>7.2 Transport by other means</td>
<td>4.17</td>
<td>5.32</td>
<td>7.52</td>
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<tr>
<td>7.3 Storage</td>
<td>2.40</td>
<td>0.39</td>
<td>5.82</td>
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<td>7.4 Communication</td>
<td>4.44</td>
<td>15.73</td>
<td>23.07</td>
</tr>
<tr>
<td>8 Finance, insurance, real estate, &amp; business services</td>
<td>2.85</td>
<td>5.86</td>
<td>8.46</td>
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<tr>
<td>8.1 Banking and insurance</td>
<td>5.69</td>
<td>7.37</td>
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<td>8.2.1 Real estate and ownership of dwellings</td>
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<td>2.96</td>
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<td>8.2.2 Business services (including IT)</td>
<td>3.29</td>
<td>14.96</td>
<td>13.56</td>
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<td>9 Community, social and personal services</td>
<td>2.53</td>
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<td>9.1 Public administration and defence</td>
<td>3.83</td>
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<td>5.30</td>
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<td>9.2 Other services</td>
<td>1.68</td>
<td>4.95</td>
<td>5.31</td>
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<td>10 Primary (1+2)</td>
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<td>1.38</td>
<td>1.68</td>
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<td>11 Tertiary (6+8)</td>
<td>2.81</td>
<td>6.18</td>
<td>8.04</td>
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<td>12 Infrastructure (4+7)</td>
<td>4.17</td>
<td>6.46</td>
<td>9.85</td>
</tr>
<tr>
<td>13 Agriculture (1)</td>
<td>0.59</td>
<td>1.30</td>
<td>1.46</td>
</tr>
<tr>
<td>14 Industry (2+3+4+5)</td>
<td>3.00</td>
<td>4.02</td>
<td>7.17</td>
</tr>
<tr>
<td>15 Services (6+7+8+9)</td>
<td>2.79</td>
<td>5.88</td>
<td>7.79</td>
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<tr>
<td>16 Total Gross Domestic Product (13+14+15)</td>
<td>1.86</td>
<td>4.15</td>
<td>6.42</td>
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Source: National Accounts Statistics, CSO
### Table 2 Average share in total manufacturing real gross value added

<table>
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<tr>
<th>Average</th>
<th>Food</th>
<th>Beverage &amp; Tobacco</th>
<th>Textiles &amp; Apparel</th>
<th>Refined Petroleum Products</th>
<th>Chemical</th>
<th>Metals</th>
<th>Non-Metallic Minerals</th>
<th>Machinery</th>
<th>Motor Vehicles and Accessories</th>
<th>Others</th>
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<tr>
<td>1993-01</td>
<td>13.80</td>
<td>11.28</td>
<td>5.60</td>
<td>20.59</td>
<td>16.18</td>
<td>4.82</td>
<td>7.93</td>
<td>3.63</td>
<td>16.18</td>
<td></td>
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<tr>
<td>2002-07</td>
<td>11.09</td>
<td>9.96</td>
<td>13.03</td>
<td>17.83</td>
<td>17.27</td>
<td>4.80</td>
<td>7.62</td>
<td>3.50</td>
<td>14.90</td>
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Note: Authors' calculation based on data from Annual Survey of Industries.

### Table 3 India's merchandise exports, 1990–2010 (% of total exports in commodities)

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<th>2000-01</th>
<th>2010-11</th>
</tr>
</thead>
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<tr>
<td>Agricultural products</td>
<td>14.57</td>
<td>9.66</td>
<td>6.36</td>
</tr>
<tr>
<td>Ores and minerals</td>
<td>4.21</td>
<td>1.87</td>
<td>2.27</td>
</tr>
<tr>
<td>Petroleum products</td>
<td>2.27</td>
<td>3.02</td>
<td>10.89</td>
</tr>
<tr>
<td>Leather</td>
<td>6.29</td>
<td>3.15</td>
<td>1.03</td>
</tr>
<tr>
<td>Chemicals</td>
<td>7.50</td>
<td>9.52</td>
<td>7.59</td>
</tr>
<tr>
<td>Engineering goods</td>
<td>9.77</td>
<td>11.03</td>
<td>15.29</td>
</tr>
<tr>
<td>Machinery and instruments</td>
<td>3.02</td>
<td>2.56</td>
<td>3.11</td>
</tr>
<tr>
<td>Transport equipment</td>
<td>3.02</td>
<td>2.56</td>
<td>3.11</td>
</tr>
<tr>
<td>Textiles</td>
<td>5.08</td>
<td>5.60</td>
<td>1.52</td>
</tr>
<tr>
<td>Garments</td>
<td>9.71</td>
<td>9.01</td>
<td>3.05</td>
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<tr>
<td>Gems and jewellery</td>
<td>12.70</td>
<td>11.94</td>
<td>10.64</td>
</tr>
<tr>
<td>Other commodities</td>
<td>21.85</td>
<td>30.09</td>
<td>35.13</td>
</tr>
<tr>
<td>Natural resource exports</td>
<td>21.04</td>
<td>14.55</td>
<td>19.53</td>
</tr>
<tr>
<td>Non-natural resource exports</td>
<td>78.96</td>
<td>85.45</td>
<td>80.47</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India, our calculations.

Note: Natural resource exports = agricultural products + ores and minerals + petroleum products
**Figure 6** The relative importance of the rentier, power broker, magician and workhorse sectors

**Source:** Authors' calculations, from National Accounts Statistics, CSO

**Figure 7** India's product complexity in exports, five-year moving average

**Source:** Authors' calculations, from Atlas of Economic Complexity, http://atlas.cid.harvard.edu
The existence of ‘closed deals was not confined only to natural resource sectors; it was also evident in an infrastructural sector such as telecommunications. The latter sector witnessed impressive growth in the 1993–2002 growth episode, driven by high demand for mobile phones among a rapidly expanding middle class. In 2008, under the aegis of the Ministry of Telecommunications (MOT), the Department of Telecommunications (DoT) decided to allocate second-generation (2G) spectrum licenses to mobile phone operators on a first come first served (FCFS) basis at a price significantly below the market price. Later investigation by the CAG found clear evidence of insider information being passed to selected private firms on the timing of the FCFS announcement, as well as of the very short time given to submit the applications (GuhaThakurta and Kaushal 2010). The CAG (2011) also found irregularities in the selective interpretation of the MOT of the recommendation of the telecommunications regulator, the Telecom Regulatory Authority of India (TRAI), which led it not to conduct a competitive bidding process for award of the 2G licenses. The CAG estimated the loss to the Indian exchequer due to the under-pricing of 2G licenses at over Rs 176,000 crores.

There were four factors of the emergence of a closed deals environment in the post-2002 growth episode, as compared to a more open deals environment in the earlier growth episode.

First, with increased demand for minerals originating from China, there was a sharp increase in the price of several minerals in the early-to-mid-2000s. This is evident from Figure 8 for iron ore; the price of this commodity increased rapidly from 2005 to 2010, before declining in 2011–2013. Consequently, increasing profits could be made in natural resource sectors, where the state had the power to allocate licenses for production to private firms. (In contrast, after the 1991 economic reforms, licenses were no longer required to start operations in manufacturing or services sectors such as IT). Therefore, there were clear incentives for political elites to preferentially allocate these licenses to selected economic elites on terms that were not transparent, or the most economically competitive, in return for extra-legal monetary rewards.
Secondly, as rapid economic growth in the previous growth episode spurred an increase in demand for the services of infrastructural sectors such as telecommunications (naturally oligopolistic and characteristically high-rent), political elites entered into rent-sharing arrangements with business groups that were awarded contracts to operate in these sectors. Strong private sector growth fuelled a similar surge in demand for commercial real estate, and there were increasing signs of ‘closed deals’ between political elites and real estate developers in the allocation of land for commercial real estate (Nagaraj 2013). This is evident from Figure 8, where one observes a clear increase in the proportion of wealth of Indian billionaires originating in rent-thick sectors (primarily real estate, construction, mining, infrastructure) as compared to other sectors (manufacturing, IT), from 2002.

**Figure 8** World price of iron ore, monthly, 1999 to 2013

![Figure 8](http://www.indexmundi.com/commodities/?commodity=iron-ore, accessed 1 February 2014)

Source: Gandhi and Walton (2012)

Secondly, as rapid economic growth in the previous growth episode spurred an increase in demand for the services of infrastructural sectors such as telecommunications (naturally oligopolistic and characteristically high-rent), political elites entered into rent-sharing arrangements with business groups that were awarded contracts to operate in these sectors. Strong private sector growth fuelled a similar surge in demand for commercial real estate, and there were increasing signs of ‘closed deals’ between political elites and real estate developers in the allocation of land for commercial real estate (Nagaraj 2013). This is evident from Figure 8, where one observes a clear increase in the proportion of wealth of Indian billionaires originating in rent-thick sectors (primarily real estate, construction, mining, infrastructure) as compared to other sectors (manufacturing, IT), from 2002.

**Figure 9** Distribution of wealth of billionaires by sources of wealth, 1996-2012, India

![Figure 9](http://www.indexmundi.com/commodities/?commodity=iron-ore, accessed 1 February 2014)

Source: Gandhi and Walton (2012)
Thirdly, with the increased fractionalisation of the political system at the national level (see Figure 10), and the growing importance of regional political elites in the coalition governments of the 2000s, 'closed deals' between these elites and powerful economic interests both at the national and at the regional levels become more prevalent in the post-2002 period. This was accentuated by the rapid turnover of governments and closely contested elections, both at the national and regional levels, which led to a shortening of the time horizon of political elites, who were more interested in finding ways to extract rents to finance elections that they would have to fight in the immediate future.

**Figure 10** Measures of total fractionalisation and proportion of seats won by the majority party, national elections, 1975-2009, India

![Graph showing measures of total fractionalisation and proportion of seats won by the majority party.](image)

**Note:** Total fractionalisation measures the probability that two randomly chosen members of the parliament belong to two different parties.


Fourth, related to the previous point, election campaigns became increasingly expensive as in the competitive Indian political system, political parties tried to outspend each other to attract voters with various inducements. Reforms in Indian election expenditure laws in 1975 and 2003 put the expenditures of party and supporters of individual candidates outside the purview of the expenditure limits on these candidates and banned corporate donations. These led to increased informal financing of election campaigns, and a greater reliance on informal deals to finance costly election campaigns. This was also reflected in the
increasing participation of criminals in electoral politics, as political parties preferred wealthy candidates who had the 'deep pockets' to finance their own campaigns. The growing reliance of informal private funding in the absence of state funding also meant that parties and politicians raised funds from businesses informally in return for discretionary contracts and regulatory favours (Gowda and Sridharan 2012).

5.2 The Post-2010 Growth Slowdown

Per capita economic growth slipped to 3.4 per cent over 2011–2013, due mostly to the onset of a disordered deals environment brought about by the negative feedback effects of the nature of the closed ordered deals that characterised the 2002–2010 growth episode, which was reflected in several corruption cases against the ruling elite. These cases of corruption were mostly observed in rentier and power broker sectors, where there were high rents to be shared between economic and political elites. As media accounts of corruption became widespread, and there was growing popular discontent at the flagrantly excessive levels of rents shared between political and economic elites in these deals, state legitimacy was being gradually eroded towards the end of the 2002–2010 growth episode. There was also strong social and political mobilisation of the masses against the attempts by the political elite in states such as Odisha and West Bengal to obtain land through extra-legal and often coercive means for mining or for providing land to large business groups to set up manufacturing plants. In addition, there was strong pushback from accountability institutions; for example, the Supreme Court of India banned iron ore exports, and the CAG investigated corruption in the allocation of 2G and coal block licenses.

All these developments made the 'closed deals' environment unsustainable towards the end of the first decade of the 2000s. In addition, with increasing uncertainty over the nature of deals, and as the ruling party at the centre lacked the authority to credibly commit to new deals in the face of both popular and legal challenges, deals became increasingly disordered as well. This is evident from the behaviour of investor perception of the risk of investment. After rapid improvement in the 1990s (except for a drop during 1998–2000) and during 2000–2005, investor perception of the viability of contracts started falling 2006 onwards. This suggests that, towards the end of the 2002–2010 growth episode, investors were increasingly concerned about the credibility of deals (Figure 11). In addition, in Figure 12, we plot investors' perception of the viability of contracts, which captures the risk of expropriation—a measure of institutional quality widely used in the literature (e.g. Acemoglu et al. 2001) as well as the probability of the repudiation of contracts. We note a sharp drop in this measure of investors' perception of institutional quality pertaining to investment from 2011 onwards.
Figure 11 Evolution of investors' perception of risks of investment

Note: The variable plotted is investment profile obtained from the ICRG database, which captures the viability of contracts, the restrictions on repatriation of funds, and payment delays. Higher values imply lower risk.
Source: Authors' calculations from ICRG database.

Figure 12 Investors' perception of the viability of contracts

Source: Authors' calculations from ICRG database.
Thus, the post-2002 episodes were qualitatively different from the 1993–2002 episode in that the deals environment had shifted decisively from being open to closed and, as we progressed into the 2000s, from ordered to disordered deals as well. This was also reflected in the increasing importance of natural resource sectors in India’s export basket, the importance of sectors such as construction in India’s economic growth, as well as a decline in structural transformation. As investor uncertainty increased, there was a fall in private corporate fixed investment in the second half of the 2000s (see Figure 13), and the rapid economic growth of the 2000s ended in 2010.

**Figure 13** Gross fixed capital formation (GFCF), public sector (PUB), private corporate sector (PCS) and household sector (HHS), as ratios of GDP, constant price

![Graph showing GFCF, PUB, PCS, HHS ratios from 1950 to 2010](image)

Note: GFCF: Gross fixed capital formation; PUB: public fixed investment; PCS: private corporate sector; household sector (HHS)

Source: Authors’ calculations based on the National Income Accounts of the Central Statistical Organisation, India.

It is premature to identify the slow growth period of 2011–2013 as the beginning of a growth deceleration episode, as there may well be a turnaround in economic growth in the post-2013 period. However, our discussion of the causes of ‘boom and bust’ growth in developing countries suggests that the decline in economic growth may well persist for some time to come and is not transitory.

### 6 IMPLICATIONS

Sustained rapid economic growth of well over a decade is a feature that we do not observe frequently in developing countries. India's per capita income gain over 1993–2011 is among
the largest income gains in growth episodes witnessed in the developing world in the post-
World War II period (Pritchett et al. 2013). Yet, there are clear signs that India's growth
acceleration ended in 2010. In this paper, we examine the political and institutional causes of
India's growth acceleration and its possible end. We argue that India's post-reform growth
experience can be separated into three distinct growth episodes: the first growth episode was
from 1993 to 2002 and characterised by a set of relatively open 'ordered' deals between
political and economic elites. The second episode was from 2002 to 2010 and deals in this
period became increasingly closed, leading to pushback from accountability institutions and
the middle class. The third episode, beginning in 2011, was one of an incipient growth
deceleration, and was characterised by increasingly disordered deals. We argue that this is
the outcome of two separate phenomena:

(1) increasing political de-legitimation of the growth process that was seen as highly
predatory and corruption-intensive; and
(2) the pushback from accountability institutions in the post-2010 period, leading to greater

A clear implication of our analysis is that the fundamental cause of India's current
economic stagnation is related to the institutional environment underpinning the 2002–2010
growth episode, and that relying only on greater infrastructural spending or more economic
reforms will not suffice to revive economic growth. Our analysis suggests that the high growth
episode of the 2000s contained seeds of its own destruction, and that it was inevitable that the
growth boom of the first decade of the 2000s was bound to end. The 'policy paralysis' in the
national government that one observes in the 2011–2014 period is simply an outward
manifestation of a closed deals environment falling apart, with the increasing challenge from
the middle class and other social groups and actors and the interventions of 'rule of law'
institutions in India.

A second implication of our analysis is that it is necessary to return to the ordered open
deals environment observed in the 1990s to revive and sustain economic growth. For this to
happen, a reconfiguration is required in the settlement between political and economic elites
(who straddle both rentier/power broker and magician/workhorse sectors, such as business
groups in natural resource extraction, telecommunications, and retail trade). In this
reconfiguration, economic elites should see an interest in moving from closed to open deals,
as the rents available from the closed deals diminish over time. Simultaneously, the political
elites should be more interested to invest in the state's capacity to regulate and discipline
these economic elites and allocate licences with greater transparency. In addition, there
needs to be a more open deals environment for the few magician sectors in India (such as IT
and pharmaceuticals) to grow, and new magician sectors in export-oriented labour-intensive
manufacturing need to be created.
At the same time, the relationship between the political class and the private sector on the one hand and accountability groups such as the professional middle class and civil society actors on the other needs to be realigned. In this realignment, there must be the recognition that 'ordered deals' between the state and the business sector are essential for economic growth to return as long as these deals do not lead to outright corruption or to the exploitation of socially marginalised groups such as tribal populations.

Impersonal rule-based institutions are not likely to be enforced in India for some time to come. The re-emergence of credible and repeated personalised relationships between economic and political elites that are neither exclusionary nor politically illegitimate is essential for economic growth to revive so that the predatory growth episode of the 2000s is not repeated. Only if all important actors—the private sector, political class, bureaucracy, media, judiciary, civil society and middle class—can recognise this reality and find a 'realistic middle ground' in the deals environment will economic growth return to India and be sustained.
REFERENCES


IDENTIFYING BREAKS IN ECONOMIC GROWTH

To identify episodes of growth accelerations in India, we use a procedure for identifying structural breaks in economic growth that uses the Bai-Perron (BP, 1998) procedure of maximizing the F-statistic to identify candidate years for structural breaks in growth with thresholds on the magnitude of the shift to determine which are actual breaks. This procedure involves the best fit of the BP method to the data in the first stage, and the application of a filter to the breaks identified in the first stage in the second stage. Our procedure avoids the weakness of the pure statistical approach to identifying breaks, that is, the BP methodology, which has low statistical power, leading to rejection of structural breaks even when they are 'true' breaks. Combining the BP test with a filter-based approach (where the filter is obtained from economic priors) provides an unified approach to identifying growth episodes (see Kar et al 2013 for an explanation of why the unified approach avoids the pitfalls of pure statistical and filter-based approaches). The magnitude filter was that the absolute value of the change in the growth rate after a BP potential break had to be (a) 2 percentage points if it was the first break, (b) 3 percentage points if the potential break was of the opposite sign of the previous break (an acceleration that followed a deceleration had to have accelerated growth by more than 3 ppa to qualify as a break), and (c) 1 percentage point if the BP potential break was of the same sign as the previous break, so if BP identified an acceleration that directly followed an acceleration (or deceleration that followed a previous deceleration) the magnitude had to be larger than 1 ppa to qualify as a break. To estimate potential breaks, we assumed that a 'growth regime' lasts a minimum of eight years (as in Berg et al (2012)). The use of shorter periods (e.g. 3 or 5 years) risk conflation with 'business cycle fluctuations' or truly 'short run' shocks (e.g. droughts). Longer periods (e.g. 10 or 12 years) reduce the number of potential breaks.
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