5 *Coalition dharma and India shining*

The Indian economy is one of the true success stories in the developing world. Over the past decade or so, a long-sluggish economy appears to have matured and, unshackled from restrictive government policies, is emerging as a global player. One indicator of this is the veritable cottage industry in books about India's economic growth with titles like *India: Emerging Power* (Cohen 2002), *India: The Emerging Giant* (Panagariya 2008), *India as an Emerging Power* (Ganguly 2003), and *India Unbound* (Das 2002). Alongside these and many other books on the topic, numerous articles have been penned on the Indian economy, each trying to understand why, after years of trudging along, the "elephant started to trot."[1]

My comparative advantage does not lie in adding to the now voluminous literature on the sources of growth in the Indian economy, or identifying the timing of structural breaks in India's growth trend. To those interested in those topics, I am content to recommend Panagariya's magisterial account of India's post-independence economic performance (2008). Rather my goal in this chapter is to tackle questions less well-answered by economists concerning the role political considerations play in this story. Specifically I apply the theoretical framework developed in this book to India to see if it can resolve the apparent paradox of India's rapid growth coinciding with a period of immense political fragmentation and instability.

The chapter is organized in two main sections. In the first section, I discuss India's national economic performance over time, and argue that coalition politics at the Center has aided, rather than hindered, economic growth in India.[2] In the second section, I test the argument

[1] "When Did the Elephant Start to Trot?" is the title of a recent article on the Indian economy by Kunal Sen (2007).

[2] "Center" refers to the central government in New Delhi.

using variation in business attitudes across major Indian states. The results of this analysis provide strong evidence in favor of the credible constraints argument, and I discuss the implications of my findings in the final section.

Elephant for sale: The modern Indian economy

Immediately after its independence from British rule in 1947, India launched an ambitious program to build a self-sufficient economy. Using tenets of the planned economy learned from the Soviets, early Indian plans emphasized the building of an indigenous industrial sector that would be supported ably by a vibrant agricultural sector (Balakrishnan 2007). This first phase of economic development had its successes, and by the late 1960s and its successful Green revolution, the Indian economy appeared to be poised for "take-off" (Panagariya 2008). But the second phase belied these lofty expectations. Political machinations in New Delhi led to an allegedly leftward and populist turn in policy and an emphasis on poverty alleviation over economic growth. The economy ground to a virtual standstill as industrialists struggled to do business in a stifling environment best epitomized by India's "Permit Raj." A bloated and uncompetitive state sector, coupled with restrictions on foreign competition and high tariffs on trade, led to years of poor economic performance and stagnant growth.

The late 1970s witnessed considerable political turmoil in India. Prime Minister Indira Gandhi enacted the Emergency in 1975, and began India's fortunately short-lived flirtation with dictatorship. Popular discontent with this move led to her ceding power in 1977 to the first non-Congress-led government in the form of the Janata coalition. Indira returned to power in 1980 for what proved to be her final stint in office (she was assassinated by her own bodyguards in 1984). Her return ushered in a third phase of the Indian economy. Starting in the late 1970s, the dismal performance of the economy had led to a growing recognition that change was needed, and efforts to liberalize the economy began. The economy responded, and for the first time in some years began to show signs of life. A severe balance-of-payments crisis in 1991 provided Prime Minister Narasimha Rao and then-Finance Minister (now Prime Minister) Manmohan Singh with the ideal opportunity to push through a comprehensive reform package that consolidated and furthered the path begun in the previous

decade. The Permit Raj was over, and Indian business was finally free to compete domestically and internationally (Jenkins 1999, World Bank 1996). The Bharatiya Janata Party (BJP)-led NDA (National Democratic Alliance) government that ushered in the twenty-first century continued this reform agenda, and while the current Congress-led UPA (United Progressive Alliance) government has been unable to enact any new reforms, it has done nothing to reverse the momentum either, confirming Ahluwalia and Williamson's piquant observation that India had a "strong consensus for weak reform" (2003).[3] Meanwhile India's economy is growing at hitherto unheard-of rates for a country that a generation earlier appeared content to pursue the "Hindu rate of growth," averaging 8 percent growth annually in the most recent years, and fueling speculation that it might soon be a worthy economic rival to China (Bardhan 2009).

Figure 5.1 compares India's economic performance to the rest of the world since 1960. The first graph displays India's average GDP growth-rate by decade versus that of the rest of the world. While India clearly lagged behind the rest of the world in the initial decades after independence, by 1980 the tide had turned and India's growth performance has outstripped the world average growth rate ever since. This improved performance is robust. No longer is India's growth fragile; in fact, growth-rate volatility is also decreasing over time as the second graph in Figure 5.1 attests. Using the popular coefficient of variation to measure volatility, this graph plots the volatility of India's per capita growth rates compared again to the rest of the world. Yet again, while India experienced more volatility prior to 1980, it was more stable after that point.

What do we know about this increased economic performance? Economists now believe that the major structural break of India's post-independence era occurred in 1978–9, even though public commentators often point to the economic reforms of 1991 as the major

[3] Chhibber (1999: 184) makes a similar point: "In the end, however, there is consensus among the parties on the desirability of reform – the parties hold the same position on whether to cut government expenditures or not – namely, that there shall be no cuts." Krueger and Chinoy (2003) provide a good summary of the reforms that remained to be implemented circa 2003 towards the end of the NDA government's rule. The *Economist* explicitly blamed coalition politics for the lack of progress on this reform agenda (October 29, 2005). Jenkins (2005) provides a cogent analysis of the NDA government's economic reforms.

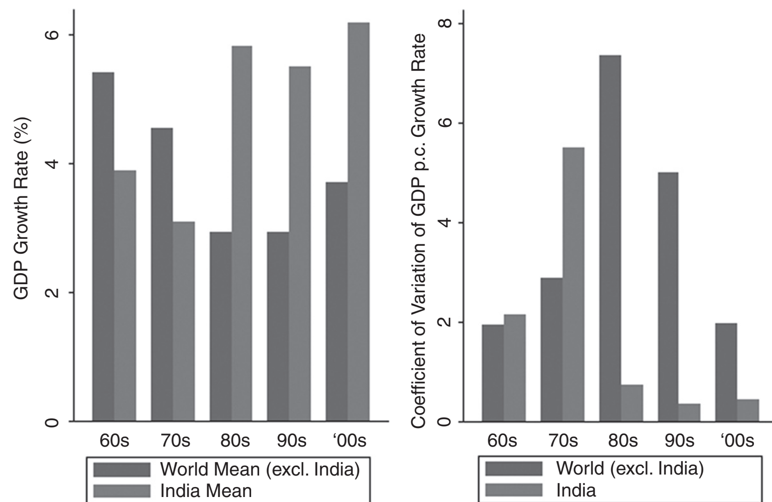

Figure 5.1 India's economic performance has improved in recent decades (source: author's calculations from World Bank 2006).

point of departure (Balakrishnan and Parameswaran 2007, Virmani 2006, Wallack 2003).[4] Further, the evidence suggests that rapid growth in the services sector, rather than in manufacturing or industrial growth, has been the engine for the Indian economy (Bosworth *et al.* 2006). Third, there exist real challenges to continued growth on account of limited infrastructure development and low levels of human capital formation, both of which hurt productivity. Finally, agriculture continues to be a volatile component of economic growth, with crop yields heavily dependent on rainfall (Virmani 2004).

The other thing we know is less easily understood. The rapid growth and increased stability of the Indian economy has coincided with a period of unprecedented political instability. The Indian party system has fragmented, shattering the stranglehold over power once exercised by the dominant and omnipresent Congress Party. Indeed, today, the Congress is but a faint shadow of its former self, unable to compete for power in many states around the country, and dependent on the

[4] A longer perspective reveals that 1950 provides the major structural break if one considers the entire twentieth century (Hatekar and Dongre 2005).

support of smaller regional parties in order to form a government in New Delhi. The Congress is not alone in this regard. Indeed, since 1984, when the Congress was swept to power riding a wave of sympathy after Indira Gandhi's assassination, no party has enjoyed a majority in the Central Government, and India has been ruled by a succession of minority and coalition governments for the past twenty years (see Table D.1 in Appendix D for a list of governments that have ruled India since independence).

India's experience with political fragmentation and increased propensity for minority or coalition governments provides important leverage on the question of whether the claims advanced here are spurious due to unexplored endogeneity. That is, are coalition governments *the result of* high and stable growth, rather than their cause, as I have argued here? More generally, did the form of India's political system and therefore the composition of national governments change because of economic factors? If so, then the relationship posited here might be spurious. Fortunately for my purposes, the India case unequivocally dismisses this as a possibility. In India, as Pradeep Chhibber and I have shown in previous research, the party system fragmented in the early 1980s (Chhibber and Nooruddin 2000), before the economic reforms of 1991 and the improved national economic performance since. Further, the reasons for this fragmentation had nothing to do with the economic performance of the period but rather with an Anti-Defection Law (ADL) enacted by then-Prime Minister Rajiv Gandhi (Nikolenyi 2009). The ADL changed incentives for politicians to remain with the catch-all Congress Party instead of branching off to form their own more regionally-focused parties from where they would wield greater influence over the government formation process and the flow of resources from the Center to the states. Ironically, Nikolenyi (2009) argues, Rajiv Gandhi pushed the Law through a reluctant Lok Sabha, (national parliament) hoping that it would improve party discipline within the Congress.

The political fragmentation of the Indian system is arguably accompanied by a social fragmentation too. Caste cleavages have become politically salient as parties try to win votes by offering reservations to different caste groups; the Hindu right continues to berate religious minorities; secessionist groups continue to fight the Indian government in Kashmir and the north-eastern states; and separatist groups, buoyed

by the recent creation of three new states, are growing more vociferous in their demands for their own states.[5] If anything, India's "crisis of governability" (Kohli 1991) appears to be worsening, and yet, the economy continues to grow steadily, domestic savings continue to rise, and foreign capital continues to flow into the country at increasing rates. How can we explain this apparent contradiction?

This paradox – high stable growth at a time of social and political instability – poses problems for the two major alternative explanations discussed earlier in this book. Dani Rodrik, for instance, argued that growth-rate volatility is the result of government's inability to handle social conflict in a cooperative manner, but India has reduced its growth-rate volatility at the same time that social conflict has increased. Dennis Quinn and John Woolley, by contrast, emphasized the role of elections in allowing risk-averse citizens to hold accountable politicians who might be tempted to enact risk economic policy. India, of course, has had a long uninterrupted history of democratic elections stretching back to its founding as a republic in 1950, such that elections per se provide little analytic leverage for explaining cross-temporal variation in economic performance. Moreover, the Indian electorate appears to be anything but risk-averse if its anti-incumbency tendencies are anything to go by. If incumbency advantage in most countries suggests that voters prefer the "devil they know," in India the opposite is true. Incumbents are more likely to lose their seats than to retain them, and electoral volatility is extremely high leading to a regular turnover in office (Linden 2004, Nooruddin and Chhibber 2008). Such rapid turnover, and anti-incumbency, should shorten the time horizons of politicians rather than lengthen them, and make them more likely to enact risky policy than to exercise caution!

A more plausible explanation for what changed politically to enable better growth is a change in the attitudes of key politicians. Starting in the 1980s, Dani Rodrik and Arvind Subramanian argue, attitudes of the national government under Indira Gandhi towards the private sector changed from being anti-business to pro-business (2004). Atul Kohli argues that this was the result of the creation of a state-business alliance (2004, 2006a, 2006b, 2007). This new alliance, and the change in attitudes, went a long way towards assuring investors that

[5] At the time of this writing, a separatist crisis in Andhra Pradesh is in full swing, with no indication of how it will eventually be resolved.

the fundamental rules of the game had changed, thereby encouraging entrepreneurial activity and energizing business (De Long 2003).[6]

That government attitudes were pro-business by the second half of the 1970s is undeniable. But this was not the first time that this had been the case. As Kunal Sen points out, many of the pro-business features of the Indira government from 1980 to 1984 identified by Kohli were also evident during her earlier stint in power:

> For example, in 1974, the national government declared the threatened strike by two million railway employees as illegal and arrested 20,000 workers and trade union leaders. . .In the same year, the national government abandoned the nationalisation of the wholesale wheat trade, a pet project of the left at that time. There was also clear changes in the attitudes of the economic bureaucracy towards a more liberal view of economic planning. . .While the changes in attitudes of the politicians and bureaucrats towards the private sector during this period were incremental, they were no less so than the ones pointed out by Kohli and [Rodrik and Subramanian] in the early-1980s. (Sen 2007:39–40)

From my perspective, the question is not whether the changes documented by Kohli and others in attitudes of key political agents in the early 1980s were lesser or greater than those Sen alleges occurred in the mid-1970s, but rather why these changes had a more profound effect on the Indian economy in the latter period than in the former. The framework I have offered treats economic agents as inherently risk-averse, such that the major problem faced by politicians is to convince these agents of the credibility of their reform promises. This is where the answer must lie: the reforms enacted in the early 1980s must have been deemed more credible by economic agents than those in the mid-1970s. But why would this be the case? Indeed, to push Sen's point further, in both cases the reforms were announced by a Congress government led by the same individual, Indira Gandhi. So what had changed?

What had changed was the basic nature and structure of the Indian political system (McMillan 2005). The Congress had ruled India uninterrupted from independence until 1977, and this control had extended to the state level for the most part too. But by the early 1980s, the Congress's grip on power was inexorably and unmistakeably weakened. Most state governments had now

[6] Sengupta (2008) takes a different tack on this question.

experienced non-Congress governments, and the states were growing more assertive in their dealings with the Center. The growth of regional parties all over the country cemented this state of affairs (Chhibber and Nooruddin 2000), and turned these smaller parties into veritable king-makers in Parliament as it became increasingly impossible for any one party to command a clear majority of the seats in the Lok Sabha. Coalition politics had become the name of the political game in India, and twenty-plus years since the last true majority government, the situation evinces no sign of changing in the foreseeable future. If anything, analysis of public opinion data suggests that the Indian electorate has learned to live with the reality of coalition politics. Asked about what they thought of coalition governments, 15 percent of respondents to the National Election Survey in 2004 said that coalition governments were tolerable under special circumstances, and, strikingly, twice as many people (31 percent) stated that they saw no harm in coalition governments.[7]

The observation that the period of improved national economic performance in India coincides with the emergence of coalition politics is anticipated by the theoretical framework developed in this book, and owes much to an analysis of India's public institutions conducted by Devesh Kapur (2005). Kapur, anticipating a more recent argument by Siddharth Chandra and Nita Rudra, argues that "while economic reforms increased growth on the upside in India, the limited consequences of government instability are due to India's polymorphic institutions, which have provided a kind of institutional safety net that has limited the downside and given it a systemic resilience" (2005: 30). Like Chandra and Rudra, Kapur argues that democracies like India are more likely to create a "thick institutional web" of organizations that serve as informal checks and balances against each other. Thus, the weakening of one set of organizations is offset by the strength of another, and, importantly, vice versa, so that no one part

[7] 16 percent said that coalition governments were never good, and 32 percent expressed no opinion. The exact question wording is: "Now I would like to know your opinion about a coalition government. Some people believe that there is no harm in a coalition government. Others believe that in special circumstances there is no alternative to it. While, for others, a coalition government is not good in any case circumstances. What is your opinion in this regard?" (Lokniti 2004). For a preliminary analysis of what explains variation in attitudes towards coalition governments, see Nooruddin (2009).

of the Indian political firmament can unilaterally alter policy direction without facing opposition from another.

The cornerstone of this complex institutional structure is coalition politics, which has had several noteworthy benign consequences. First, as a result of increasing anti-incumbency tendencies in the electorate, rapid governmental turnover has led to more political parties having a taste of power. This has bolstered norms of how to serve responsibly while in opposition (Bueno de Mesquita 1975, McMillan 2005). Second, coalition politics has bolstered India's federal structure and reduced the use of Article 356 powers (allowing the dismissal of state governments by the federal government). Third, and potentially most importantly over the long run, Kapur suggests that governmental instability has revitalized otherwise dormant "referee" institutions such as the Presidency, Election Commission, and the Courts that had previously been neglected. The lack of a dominant party, and the increasing churning of those in power, has led parties to turn to other public institutions in order to adjudicate policy debates (Kapur 2005, Rao and Singh 2005).

Of particular relevance to the question of national economic performance and the confidence of economic agents are signs that the Courts are becoming more assertive, and that the Reserve Bank of India is enjoying greater de facto independence (Khatkhate 2005, Mehta 2005). Courts in India have always been somewhat weak, but recent events suggest that they are waking up, and taking advantage of the relative weakness of the executive and legislative branches caused by coalition politics to assert their independence. The 1973 *Kesavananda Bharati* case is widely seen by scholars as a landmark judgement establishing the Court's right to judicial review and limiting Parliament's ability to amend basic features of the Constitution (Kapur 2005, Mehta 2005). The Indira Gandhi government did not take the Court's decision lying down. In 1976, during the Emergency, the Indian Parliament passed the 42nd amendment to the Indian Constitution, which limited the ability of India's Supreme and High Courts to decide if laws were constitutional or not. And, decisions by the Courts allowing the subsequent Central governments to use Article 356 provisions to dismiss uncooperative state governments had a deleterious effect on their perceived independence. In 1993, however, emboldened by a series of scandals that had significantly hurt the power of the executive and legislative branches, the Court reasserted itself, and assumed the power

of appointment of judges, shutting out the executive branch from this role. In subsequent rulings, the judicial branch reduced the executive's role in appointing judges to lower courts as well as to many quasi-judicial bodies (Kapur 2005: 55). These decisions, and the inability of unstable coalition governments to challenge them effectively, have made Indian Courts more independent than most of their counterparts elsewhere, and the locus therefore of many important public policy decisions in recent years through their rulings on public-interest litigations. Of course, the problems and weaknesses of the court system arguably exceed its strengths: it's still slow, over-burdened, and judges at all levels are essentially unaccountable. But, to echo Kapur's conclusion, "as long as succession procedures are institutionalized and it enjoys high external legitimacy, these weaknesses are not especially debilitating" (Kapur 2005: 55).

Another public institution to have gained power in recent years is the Reserve Bank of India (RBI). The RBI does not enjoy the statutory independence that characterizes the strong central banks of the United States and many OECD states, but economic liberalization and a relatively weaker Center have allowed it more leeway to act independently than in the past. The major problem historically was that the government's strong interventionist tendencies and ideological commitment to planning made the RBI a crucial instrument of government policy rather than allowing it to work independently. The liberalization of the financial sector of the economy in the 1990s has increased the room to operate for the RBI, and it responded well in its management of the debt crisis of the early 1990s, though it has done less well in terms of reining in the fiscal deficit run by the government or in providing price stability (Khatkhate 2005). The government is currently facing great pressure to bring inflation under control without sacrificing growth prospects, and one imagines that how the RBI responds will go a long way to shaping its future.

Returning then to the puzzle posed by India's recent economic growth, why did economic agents respond to the economic reforms of the last three decades vigorously ushering in a period of unprecedented growth rather than fearing that weak Central governments, the imperatives of coalition politics, and high electoral volatility would make any reform package short-lived and therefore any investment in response to such a package inherently risky? With the benefit of hindsight, the notion that India's leaders had seen the light and accepted

the necessity and utility of liberalizing the economy is temptingly plausible, and indeed there's little doubt that having a new generation of leaders at the helm (such as Manmohan Singh and P. Chidambaram) was important for reassuring economic agents of the sincerity of the reforms. But this wasn't the first time that reforms had been enacted, and the mid-1970s had seen dramatic reversals of reforms, the nationalization of industries and banks, and overt hostility to foreign investors. Why was this time going to be different? The answer, I would argue, lies paradoxically in the fragmentation of the Indian political system that has made coalition politics a must, arguably strengthened other public institutions such as federalism, the judiciary, and the central bank, and made policy change predictable and gradual. Thus, even if many observers of the Indian economy are frustrated by the lack of progress in deepening the reforms of the 1990s, a longer-term perspective reminds us that little changes rapidly in India, and that from the point of view of economic policy, predictably slow trumps quick and uncertain.

The "credible constraints" argument appears to fit the Indian data, and to provide analytic leverage on why India's economic growth spurt has coincided with greater political instability. In particular, it bolsters our confidence in the finding that emerged in the cross-national analyses reported in the previous two chapters that coalition governments in parliamentary democracies are especially beneficial for encouraging domestic saving, reducing capital flight, and therefore providing stable and high economic growth. The problem, of course, is that it is not possible to use the national-level data for India to provide a conclusive test of this hypothesis, since the period of coalition governments of the past two decades is different in other ways too from the earlier period of slow and more volatile growth. For instance, the policy regime is clearly more pro-growth than ever before, the external sector is more open, India's terms of trade situation has improved, the working-age population has increased, and India benefited from the dramatic revolution in information technology that allowed it to take advantage of the business-processing revolution in the global economy (Kapur 2002, 2005). While the credible constraints argument is plausible enough, so are these alternatives, and while any fair-minded observer would understand that all (or none) of these arguments might be correct, we cannot tease them apart in the Indian context by remaining at the national level.

Fortunately for these purposes, India's states display tremendous variation in economic performance and political situations, allowing me to construct a state-level test of the theoretical framework. The next section describes this test and its results.

Explaining variation in state-level business environments

India has a federal structure with twenty-eight states and seven union territories governed by the Center. The bulk of the population resides in fourteen major states, and the economic lives of these citizens depend heavily on the state in which they live. Figure 5.2 plots the volatility and level of economic growth by state for the 1995 to 2004 period.[8] The data come from the annual bulletins of the Reserve Bank of India (Reserve Bank of India 1967–2004). I use the data through 2004 only to ensure that only revised estimates of state per capita domestic product are included, since the government updates the most recent years' figures up to two years after they are first published as budget estimates. The data represented in the figure thus represents the states' economic performance in the period after the major economic reforms of 1991.

The relative placement of the states in Figure 5.2 will not surprise any one familiar with the Indian states (see Ramaswamy (2007) for a detailed analysis of regional trends in growth and employment in India). States in the Hindi heartland like Madhya Pradesh and Bihar perform least effectively with the lowest average growth rate and highest growth-rate volatility respectively. By contrast, states such as Kerala and West Bengal lead the pack over this time period, with the highest rates of growth and the lowest levels of volatility. The contrast between these two sets of states is striking in political terms. Madhya Pradesh, for instance, has experienced robust two-party competition with two effective parties contesting elections and has had single-party majority governments rule throughout the post-independence period. Kerala and West Bengal, by contrast, are coalition governments headed by Left or Communist parties. While West Bengal has been ruled by the

[8] Each of the fourteen largest Indian states, were they independent countries, would figure in the world's top fifty in terms of population, with the largest – Uttar Pradesh – placing in the top ten, just ahead of Japan. The comparisons that follow are therefore as significant in terms of the numbers of people affected as the comparisons of countries that underlay the last two chapters. I thank Jim Vreeland for reminding me of this point.

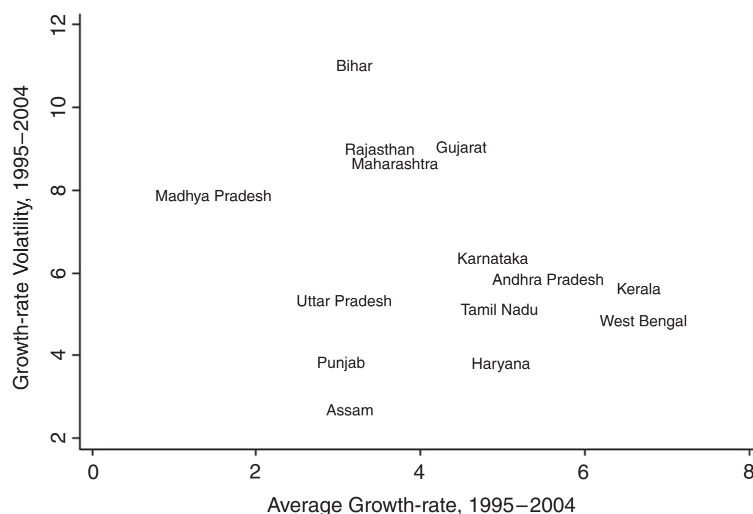

Figure 5.2 There exists considerable variation in economic performance across the Indian states (source: Reserve Bank of India, various issues).

Left Front throughout the period, Kerala has seen regular alternation in power, but has not had a single-party government since 1959. Since then, all ruling governments in Kerala have been coalitions led either by the Communist Party of India (Marxist) or the Indian National Congress (I), with only few exceptions (Kerala has almost seven effective parties contest elections on a regular basis). Today there are two explicit pre-election coalitions that vie for power: the Congress-led United Democratic Front and the Communist-led Left Democratic Front. And, yet, even though politics in Kerala is characterized by coalition in-fighting and incremental policy change, its economic growth has been both more rapid and more stable than its neighbors to the north that have had the supposed advantages of being governed by single-party governments capable of enacting good policy and of retaining office.

This contrast is replicated if we take a wider view and consider all fourteen major states for which data are available. If we compare states governed by single-party majority governments to those governed by coalition governments over the period of 1995 to 2004, the former have an average growth rate of 4 percent, while the latter grew a half-point faster each year (4.5 percent). The gap widens to almost a full point if we consider only the last five years of that time period.

One objection to this comparison should concern possible differences in the sources of growth in the two states, especially when one considers that the two states with the "best" economic performance appear to be states heavily influenced by Communist parties. Is it not possible that their high levels of growth are the result of heavy state involvement in the economy, which while boosting growth in the short-run is likely to hurt the development prospects overall by crowding out the private sector? To some degree, this is a valid concern, especially with regard to West Bengal (see Chhibber and Nooruddin 2007), but it is not the complete story. Both Kerala and West Bengal are attracting high levels of private investment, both domestic and foreign, and the latter has (infamously) been willing to buck trade unions within the state in its push for the development of Special Economic Zones (SEZs) for private sector investment. This observation is borne out by an analysis of the Firm Analysis and Competitiveness Survey of India, jointly conducted by the Confederation of Indian Industry (CII) and the World Bank in 2002.

In 2002, the CII and World Bank joined forces to survey 2,000 businesses in twelve major Indian states. The stated goal of the survey was to advise state governments on how they might change their policies to encourage the start-up and expansion of businesses in their states. The unit of observation therefore is an individual establishment of a firm, and the questionnaire posed a comprehensive battery of questions on the nature of the firm, its position in the Indian economy, and its perceptions about the major challenges facing it. These data thus provide a unique window into the business environments created by state governments, and allow a precise test of the hypothesis that coalition governments reduce fundamental uncertainties for economic agents, thereby encouraging them to engage in innovation and to take greater risks. The validity of this test is enhanced by the laboratory-like nature of India's states since one can control for national-level economic conditions and political institutions, and focus intensely on the key factor of interest, the presence of coalition governments.

Do coalition governments reduce uncertainty? The CII-World Bank survey asks firms about what issues are a problem for the operation and growth of their business. Specifically, the survey asks if "economic and regulatory policy uncertainty" is a problem. This question gets to the heart of my argument, and the data bear me out. In states governed by majority governments, 43.8 percent of firms said that economic and

regulatory policy uncertainty constituted a "major" or "very severe" obstacle to their ability to conduct and grow their business. In states governed by coalition governments, the percentage drops to 38.4 percent; this difference is statistically significant at the 0.01 level. While a 5 percent difference might not strike some readers as particularly significant, I would argue that it deserves attention. This after all is a comparison of firm views within the same country, governed by the same national policies, and interviewed in the same year. That there should be any difference in views about policy uncertainty across states is itself puzzling, and the fact that this difference occurs in a theoretically predictable manner is encouraging.

The lower uncertainty associated with doing business in coalition-governed states extends beyond policy uncertainty. The survey also asks firms the degree to which macroeconomic instability (for example, inflation and exchange rate instability) is an obstacle to their business. In majority-government states, 40.3 percent of firms rate such macroeconomic uncertainty as a major to very severe problem; in coalition-government states, by contrast, 35.4 percent do, and again this difference is statistically significant ($p = 0.02$). State governments have little control over inflation and exchange rate policy; that there should be any difference in perceptions of uncertainty with regard to these policies is testament to the greater general confidence in policy stability firms in coalition governments enjoy.

These findings beg the obvious question: does the higher confidence in coalition government states result in different sorts of firm behavior? In particular, are firms in these states more likely to engage in innovation and to take risks to grow their business? This is an important question in general because innovation breeds productivity, competitiveness, and through them, higher growth (Dutz 2007).

Firm-level investment in innovation research and development (R&D) is on the rise in India, though it still lags behind the benchmarks of other economies of India's size. Further, since government spending on research and development is extremely low (less than 1 percent of GDP according to a recent World Bank (2007) survey), the onus for the development of new technologies, and for adopting existing technology to new commercial purposes, falls on private firms. Increasingly, the high level of competition in the formal sector is leading firms to have to innovate to stay ahead, and this process is being encouraged by pressures and technological spillovers from foreign multinational

corporations that now operate within India. The continued growth and encouragement of such investment in innovation is vital for sustaining India's recent growth, and for broadening the bases of that growth. In particular, innovations that allow India's laggard industrial sector to catch up with the vibrant services sector will be crucial for providing a stable platform from which to grow the economy, and for creating broad-based inclusive growth through job creation (Chibber 2003, Dutz 2007).

The obvious benefits of investing in innovation notwithstanding, the risks of doing so have long appeared to dominate the thinking of Indian firms. Investment in research and development is future-oriented, and requires a willingness to take risks as there is a strong possibility that the investments will not pay off. Such irreversible investments – irreversible because the investment cannot be recouped once made, unless the innovation succeeds at some unknown future time – are less likely to be made under conditions of high uncertainty (Aizenman and Marion 1999). Therefore, other than the important tasks of enacting policies that create incentives for firms to invest in R&D, governments must also convince firms that the policies will persist well into the future. If, on the other hand, a firm is wary that a present reform-minded government will be replaced in the future by a less-innovation-friendly government that might roll back policies, it is likely to resist the incentives created in the present period and forego the investment opportunities. In India, where party system fragmentation and therefore electoral volatility are high, governmental instability will undermine firm confidence and make investments in innovation less likely.

The potential negative effects of increased party system fragmentation, I have argued, are counteracted by the stabilizing force of coalitional politics and the new status quo of coalition governments at the Center. To some extent, the increasing rates of innovation relative to the past offer basic evidence in favor of this claim, but as before it is impossible to rule out plausible alternative explanations by looking only at over-time national-level data. Fortunately, the 2002 CII-World Bank competitiveness survey asks firms explicitly about their investments in R&D. One such question is of particular interest for it asks firms whether they employed staff *exclusively* for the purpose of conducting R&D activities in the previous year. The hiring of staff exclusively for R&D represents a significant commitment

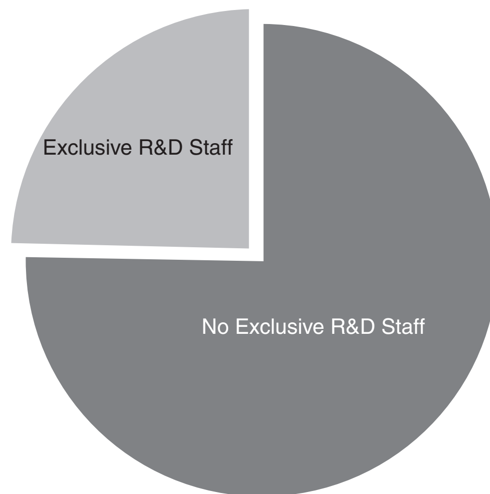

Figure 5.3 Investing in innovation is still uncommon among Indian firms (source: author's calculations using 2002 CII-World Bank survey).

of firm resources to innovation; so why are some firms more likely to incur these costs than others?

To begin, some basic trends in this variable are worth describing. First, as expected, most firms do not hire staff exclusively to conduct research and development; in fact, fewer than one-fourth of all firms surveyed in 2002 said that they had done so (see Figure 5.3). Second, there exists considerable variation across states in the degree to which firms located in them are willing to commit resources exclusively to research. Andhra Pradesh leads the way, with 45 percent of firms reporting that they employed staff exclusively for R&D activities. Gujarat (41%), West Bengal (30%), and Kerala (30%) follow as the most innovation-friendly states. The lowest-level of innovation activity by this measure occurs in Madhya Pradesh, where just four out of 101 firms reported having staff exclusively to pursue innovation. Haryana (9%) and Punjab (10%) also bring up the rear. It's no surprise that these patterns mirror those of the overall state-level economic performance discussed above.

Does this state-level variation in firm's investments in R&D have anything to do with the political situation in the state? We would expect the bulk of the variation in innovation activity to be explained by firm-level characteristics, especially since all these firms operate under the

same national-level policy regime. But, if my argument is correct, we should expect to see at least some evidence that firms in coalition-government states, whom we already know to perceive fewer obstacles due to policy uncertainty, to be more likely to invest resources to engage in research and development, *ceteris paribus*.

Using the 2002 Confederation of Indian Industries (CII) and World Bank Firm Analysis and Competitiveness Survey, I estimate a logit model of whether the firm employs staff exclusively for conducting research and development. The model controls for firm-level characteristics that are plausibly linked to innovation activity. These are (1) whether the firm was a stand-alone establishment or part of a larger network of establishments; (2) the age of the firm; (3) whether the firm is publicly traded on India's stock exchanges; (4) the market share the firm commands for its primary product; and (5) whether the firm exports any of its products to international markets. Data for all these questions come from the 2002 CII-World Bank survey. The political variables included were whether the state was governed in 2002 by a coalition government, and the level of party system fragmentation in the legislature, which I measure as the effective number of parties holding seats in the Vidhan Sabha (state assembly). Data for the political variables were collected by Pradeep Chhibber and myself from the Election Commission of India website (Chhibber and Nooruddin 2004; Election Commission of India 1987–98; Nooruddin and Chhibber 2008). I also include a random effects term to account for unobserved state-level heterogeneity. The results from this analysis are reported in Table 5.1.

To ease the interpretation of the results, Figure 5.4 reports the predicted probabilities predicting whether a firm employed staff exclusively to conduct R&D for different state-level political situations.

Clearly the state's political environment matters for firm's decisions about whether or not to commit resources exclusively to conducting research and development. Both political factors – whether there was a coalition government and the level of party system fragmentation in the state legislature – are statistically significant at the 0.05 level, even when one controls for firm-level characteristics that drive innovation and when one accounts for unobserved state-level heterogeneity. Further, the political variables matter in ways that are theoretically plausible. Coalition governments, as argued in this book, foster an environment conducive to innovation, while legislative fragmentation in the absence

Table 5.1 ***Firm-level investment in R&D across Indian states***

DV: staff exclusively for doing R&D?	β	Std. Err	p-value
Firm-level characteristics			
Stand-alone establishment	0.66	0.16	0.00
Firm age	0.001	0.004	0.88
Firm is publicly traded	0.57	0.19	0.00
Firm's national market share	0.01	0.003	0.00
Firm is an exporter	0.99	0.15	0.00
State-level political variables			
Minority/coalition govt	1.35	0.69	0.05
Party system fragmentation	−0.74	0.37	0.05
Constant	−0.32	0.90	0.72
State-level random effects		Yes	
No. of observations		1,220	
% correctly predicted		77	

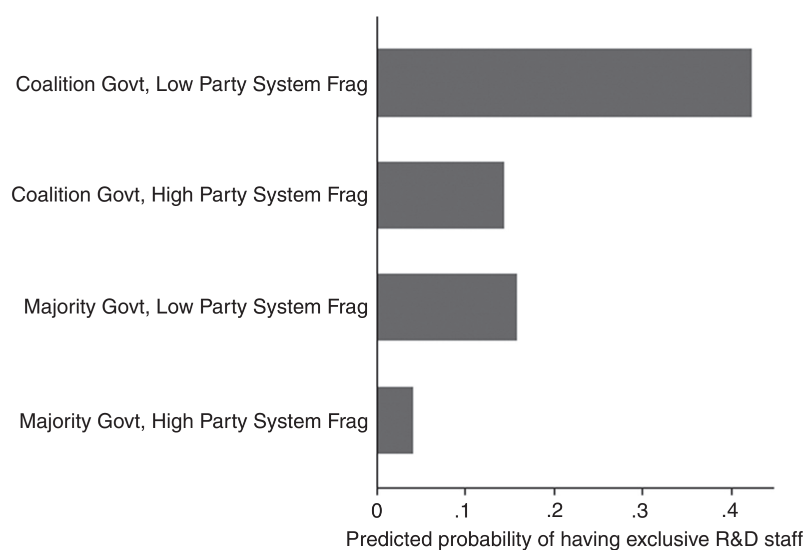

Figure 5.4 Firms in coalition government states with low party-system fragmentation are most likely to invest in R&D.

of coalition governments creates innovation-discouraging instability. To assess the counterfactual scenario of how much a firm's probability of hiring staff only to do research would change if one held all other factors constant but simply moved the firm from a state governed by a majority government to one governed by a coalition government, I generate predicted probabilities by setting all other variables at their modal or mean outcomes depending on whether they are dichotomous or continuous. The results are striking. *Ceteris paribus*, in a state with two effective parties in the Vidhan Sabha, changing only whether the state is governed by a majority versus coalition government, increases the probability the firm will emphasize innovation almost three-fold, from 0.16 to 0.42. In highly fragmented states, where at least four effective parties control seats in the state legislature, simply introducing a coalition government increases this probability from 0.04 to 0.14. Thus, even when one accounts for the dampening effect of legislative fragmentation, coalition governments encourage innovative behavior by firms.

While the use of such predicted probabilities is accepted practice for evaluating the effect of any one variable on the dependent variable in a multiple-regression setting, a valid objection to the above analysis might be that coalition governments are more likely to exist in more fragmented systems in the first place. When fewer parties compete effectively, the odds that one of them will secure a simple majority of the seats are higher than if many parties vie for power. As such, a critic might argue, the valid comparison is really whether firms located in coalition-government states are more likely to invest in innovation than their counterparts in majority-government states even when one allows the level of party system fragmentation to vary between the two. The answer is, they are. In fact, if one simply compares the average predicted probability for firms located in majority-government states to that of firms located in coalition-government states (a comparison that implicitly acknowledges that it might not make sense to "hold all else equal" since legislative fragmentation and coalition government are highly correlated with each other), firms in the latter are more likely to hire staff only for R&D than those in majority-government states, and this difference is statistically significant ($p = 0.048$).

Conclusion

India is growing, and with it the hopes and aspirations of its people. Conversations and newspaper editorials now debate questions with

utmost earnestness that not too long ago would have been dismissed as fanciful. Can India surpass China? How long until India is recognized as an economic superpower? The heady success of some of India's leading companies, which now are in a position to purchase leading foreign companies, underscores this new confidence in India's economic potential.

The same conversations and editorials also bemoan the hindrance to this potential posed by India's increasingly fractious political system. In particular, the new normal of coalition politics is seen by many as a problem to be overcome, even if no solution is apparent, as economic reforms do not proceed as fast as some would like, and as some critical members of ruling coalitions indulge in what critics decry as populist politics. The emerging wisdom among the pundits is that India's growth, to use Edward Luce's wonderful phrase, is "In spite of the Gods". In this telling, the real question is how much more would India have grown, or could India grow, if rather than having to deal with coalition governments that are held "hostage" by minor parties, India could be governed by strong majority governments committed to pushing through difficult economic reforms.

This book takes a provocatively different tack. Using a broadly comparative perspective, I have argued that rather than viewing its coalition politics as a problem, we might do better by recognizing its benefits. Coalition politics in a parliamentary democracy does make policy change more incremental in design, but it does not make it impossible. In fact, it's worth remembering that the major economic reforms of the past twenty years that are now lauded by economic entrepreneurs throughout India were enacted by minority and coalition governments. And in spite of the carousel-like nature of Indian elections, in which incumbents have a higher probability of losing their seats than of retaining them, the economic reforms passed have not been reversed even when the steadfast opponents of the previous government take their turn in power, or when the parties of the Left form the crucial support bloc for the government. This willingness to maintain the reform status quo certainly has much to do with a widespread recognition that the way forward for India requires increasing economic liberalization, but it owes as much, if not more, to the status-quo-preserving nature of coalition politics. If the *diktats* of coalition politics are to be blamed for slowing the reform process, they must also be praised for preventing its reversal (Gehlbach and Malesky 2009).

This argument is borne out both by a reinterpretation of India's recent economic growth in its light (see Kapur (2005) for a related effort), and by an original analysis of firm-level survey data, which shows that firms located in coalition-ruled Indian states are less likely to perceive economic and regulatory policy uncertainty, and macroeconomic instability, to be important obstacles to the growth and conduct of their business. This reduced uncertainty has the positive benefit of encouraging firms to commit resources to research and development, which should provide large future gains as the innovations bear fruit. The pervasive rhetoric calling for "stability" by India's captains of industry is striking in this regard. In fact, an analysis of the role of big business in Indian elections came to this startling conclusion a decade ago: "Big business in India today has set itself the goal of stability and this is an end that it sees as best served by the BJP or the Congress (I). *The ultimate ideal would of course be of a coalition that combines the two forces*, an Indian version of the 'historic compromise' that seemingly enshrines national interest above partisan political dissonances" (Muralidharan and Mahalingam 1999, emphasis added).

Nothing I have argued in this chapter should be read as denying the very real problems facing the Indian economy (Bardhan 2006, 2009). Sixty percent of all firms surveyed in 2002 said that corruption was a moderate or greater obstacle to their business; just over 50 percent said that basic infrastructure deficiencies, specifically in the provision of electricity, were a problem for their business. And almost as many identified high tax rates and inefficient tax administration as concerns. Others pointed the finger at poor skills and inadequate education of the workforce, which limited productivity gains. All of these problems must be attended to in short order if India's economy is to continue to grow at rates high enough to begin to lift the majority of its population out of poverty. The data analyzed here do not reveal any differences in perceptions of these problems across majority and coalition states, but future research on India would do well to investigate if either has a particular advantage in solving these problems. But, for now, the extant research suggests that coalition governments do at least as well, if not better, than their majority counterparts. In research with Pradeep Chhibber on the provision of public goods across the Indian states, I find that coalition governments in fact spend slightly less of their budgets on government wages and salaries than do majority governments, but that there is no statistically significant difference in spending on

development expenditures (Chibber and Nooruddin 2004: Table 2). Joshi (2004) suggests that national-level coalition politics might have the unanticipated benefit of encouraging parties to focus on "essentially local problems like roads, water and electricity". If true, he continues, coalition politics "might actually come out to be more conducive to national progress and India's rise as a world power than all that done in the name of holistic planning in the days of single-party rules."

Whether this positive scenario comes to pass will depend largely on how India's political parties choose to deal with the seemingly inevitable reality of coalition governments at the Center. The signs are positive. As Kapur (2005) argues, one benefit has been that formerly moribund public institutions, of which the Courts are the most salient example, are being revived. Another is that parties are beginning to negotiate the terms of "coalition dharma," a set of rules by which to conduct politics within a coalition. The dharma stipulates that all coalition partners treat one another as equals and no major decisions are taken without evolving a consensus over it. If observed, the theory developed in this book would predict a positive economic future for India. But if violated, as some have accused the Congress of doing in its pursuit of a nuclear deal with the United States during the summer of 2008, governmental instability will increase and policy production will decrease. Yet, even in that less-than-ideal scenario, little else is likely to change as India's polycentric institutional structure will preserve its core stability.[9]

India is an incredibly diverse society, with a politics to match. In this, it is not much different from many other developing societies that are struggling to generate economic momentum, while allowing for vigorous political competition between diverse political perspectives. I will develop this theme more in the conclusion to the book, but simply offer for now the thought that one way to incorporate such political diversity within a democratic framework is to necessitate power-sharing agreements, of which coalition governments are the most common. The recent experience of India's one billion people suggest that it is an experiment worth considering.

[9] Kapur (2005) uses the idea of polycentric structures to describe a system with multiple centers of power.