Dictatorship, Democracy and Institutions: Macropolicy in China and India

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Abstract

We explore the hypothesis that macroeconomic polices are influenced by political structure, through a systematic comparison of reform period macroeconomic policy choices and outcomes, in China and India. One decade lagged Indian reform in the context of similar economic and very different political structures offers a powerful natural experiment. Chinese low but positive real interest rates, facilitated by greater exchange rate volatility, and high infrastructure investment allowed it to outperform India in its first post reform decade. We find political structure did lead to specific inefficiencies in macroeconomic outcomes but macro-institutional changes exist that can improve policy**.** More openness under similar labor endowments give both countries the opportunity to commit to more effective, stable yet stimulatory, macroeconomic institutions and policies.

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1. Introduction

India and China together account for about one-third of the world's population, and are two of the fastest growing countries of the world. A comparison between them is of interest in itself. China allowed a role for markets and opened out in 1978; India reformed and liberalized in 1991, about a decade after China. They have similar economic but very different political structures. These changes constitute a natural experiment, therefore, that can help to clarify the consequences for economic performance of differences in political and economic institutions. The new comparative economics emphasizes the importance of such comparisons across countries (Djankov et.al., 2003). The natural sequencing makes it possible to contribute to the debate on the relative importance of endowments, institutions and policy to economic development (Easterly, 2003); and whether a democracy can hope to outperform a dictatorship.

The research on institutions generally finds that after controlling for institutions macro policy had no role; rather institutions implying weak governance and low accountability explained inappropriate policy. The macro policy variables used in the analysis are the traditional Washington Consensus variables, and the role of macro policy institutions is neglected. For example, the variables Easterly and Levine (2003) use are openness, exchange rate overvaluation, and inflation. However, the East Asian crises has brought out the weakness of the Washington Consensus, and highlighted the importance of the interest rate. Appropriate macroeconomic policy is context specific, needs to be more finely defined, and macropolicy institutions that would allow a commitment to better policy identified (Spiller et. al., 2003). The blunt openness index used in the studies would not be able to capture subtle effects of gradually increasing openness on political economy.

Chinese per capita growth really overtook India in the nineties. Differences in the macroeconomic policies followed, which were due to differing political structures, contributed to the gap. We focus on and systematically examine macroeconomic policy choices and outcomes in the two countries. Volatility in macroeconomic variables was higher in China than in India. Macro policy shows a stop go cycle in China--a case of too much too often, because of the greater freedom of the polity to make drastic changes. Sharp bursts of inflation but were soon controlled, however, and seignorage was less than the maximum possible as a concession to poverty. Indian inflation and seignorage rates were much lower. The Chinese clear focus on growth meant low but positive real interest rates were maintained, credit was easily available, savings, investment, and foreign investment encouraged. There were costs in terms of bad debts and low efficiency. Non-standard accounting and lack of transparency relieved international pressures and allowed monetary and fiscal stimuli for growth. Indian short-term populist consumption transfers put pressures on the government budget and reduced human and physical capital formation. In India macropolicy was a case of too little too late. Periods of high real interest rates choked growth in the reform decade of the nineties.

A comparison of one decade lagged outcomes, when deeper institutional features did not change, can isolate macro policy differences that contributed to higher initial Chinese growth. Among these are low real interest rates facilitated by higher initial exchange rate volatility. India grew faster in the new century after interest rates fell consistently and spending on infrastructure accelerated. A new method of calculating foreign inflows shows that a larger percentage of inflows were absorbed in reserves in India of the nineties compared to China of the eighties. Inflows accelerated for China in the nineties. India may experience a similar escalation in the next decade.

Institutions such as coordinated macropolicy rules can compensate for the pressures arising from a particular political structure and improve outcomes in both countries (Goyal, 2002). They can moderate the extremes of a dictatorship and raise the average performance of a democracy. A democratically accountable Central Banker would keep inflation in an acceptable zone and stimulate growth provided stricter rules restrain a populist fiscal authority. In a dictatorship, strengthening non-discretionary macro policy institutions will allow better information gathering and smoother adjustments. There are signs that both countries are adopting such institutions; again China leads India in this respect although it has the disadvantage of a more complete absence of markets and market friendly institutions.

The political economics literature emphasizes that conflicts of interest between groups with different goals will generally lead to distortions away from efficiency. For example, groups that lose relative positions will block reform, or will impose delays in order to shift the costs to others (Drazen, 1996). Or, because powerful groups cannot commit not to use their power to renege on their promises, political institutions and policies will not achieve the best outcomes, irrespective of which group holds political power. That is, the equivalent of a Coase theorem will not hold in politics (Acemoglu, 2003).

Political processes were responsible for inefficiencies in macroeconomic policy choices. But gradual and sometimes non-conventional reform strategies have delivered in both the countries. Why were they able to avoid low growth traps? Is there a chance that efficiency enhancing macro institutions will be adopted? If large populations are able to shift to higher productivity employment as the economies open out, most groups will align with the reforms. Gradualism gives time for the gains to become obvious. Given similarities in economic structures, openness can make it optimal for the very different groups with political power in the two countries to adopt better institutions. Thus openness combined with the large labor endowments[1] in both countries may

[1] Sachs and Woo (1994) was an early attribution of China's high growth after reforms to its surplus labor.

be able to overcome political frictions and reach more efficient institutions and polices. Openness also gives ideas a chance to penetrate strongholds of interests.

The recent macro narrative histories of the two countries are contrasted in Section 2 in the context of their differing political structures. In Section 3, detailed data comparisons illustrate the hypotheses made. Section 4 briefly outlines institutions that could improve macropolicy coordination. Section 5 concludes.

2. Structure and Macropolicy Choices

There are similarities in economic structure: both countries are big, with populations exceeding one billion and more than fifty percent of the population in agriculture, so that food prices have large macroeconomic effects. Both were very prosperous in medieval times then fell into a decline. They started with analogous levels of development in the forties, and followed the same sequence of strategies that led from a reliance on heavy industry, to agriculture led and finally export led growth, with greater reliance on the market. The fundamental drivers of growth and the labor-capital-land ratios are similar. Even so, China has always overtaken India both in rates of growth, and in switch points between strategies.

There are major divergences in political structure and institutions which reflect in policy choices. China has a one party authoritarian regime which likes to call itself a "dictatorship of the people"; India a multi-party parliamentary democracy. The Chinese are relatively homogenous, Indians heterogeneous and fragmented. The Chinese government can take quick flexible decisions and impose sacrifices on the people; India has more feedback, conflicts, and freedoms so that decisions are slow but robust. The Chinese government has a clear focus on growth and seeing East Asia's successes made it commit to openness; Chinese successes helped India decide to follow. Both had a rigid bureaucracy and controls meant to ensure redistribution and to reduce inequalities. Although China did not have private property rights and functioning markets like India did, it was quicker than India to decentralize economic decision making. It created intense local competition for investment funds, used economic incentives and showed that they can work even without full private property rights. In India, interest groups and checks on economic decisions created delays. Short-term subsidies were preferred over the development of long-term human and physical capital. Without the compulsions of elections, China was able to focus on longer-term endowment-improving policies such as health and education. Policy makers could be flexible, extract the maximum from one mode and then rapidly switch to the other.

2.1 The Indian Experience

Democracies face a tension between financial stability, and the pressures of re-election. Central bankers (CBs) are responsible for the first, and it is governing politicians that are subject to electoral pressures[2]. In a poor populous democracy, however, without indexation of wages and prices in the large informal sector, inflation hurts the poor who have the most votes. Therefore democratic accountability acts to force the CB to keep inflation low.

In low income democracies the more relevant trade-off is between growth and populism. Fiscal consumption transfers benefit the poor directly, and growth only indirectly. Dynamic inconsistency affects the government more than the CB. Even with excess populism, inflation can be kept low using administrative measures, but growth falls as funds available for capital formation are squeezed. When governments face budget constraints and agents place a larger weight on the present, redistribution takes the form of populist consumption subsidies, that reduce human and physical capital formation. These effects were particularly obvious in India after the oil shocks when many user charges and administered consumer prices did not respond fully to costs. Cross subsidization attempted was not viable in the long-term and led to a fall in quality and quantity of public services as investment was cut back. Prices of intermediate goods were raised. Thus government intervention largely took the form of short-term consumption subsidies rather than developing sustainable human and physical capital.

In the relatively closed import substitution and public investment driven model of development followed in India before the reforms of the nineties, monetary authorities were not independent of the fiscal; there was automatic monetisation of deficits. Since India is a democracy, the mandate of the government was growth but with rapid reduction of poverty. Redistribution is a major part of the political process in a democracy. Different groups successfully lobbied for subsidies. This should have put pressure on government budgets and led to increasing reliance on seignorage. Inflation is an easy to collect tax and it increases savings by redistributing in favour of higher saving classes. But where more than half the population was below the poverty line and an even larger percentage had no social security or other protection against inflation, governments concerned with re-election could not afford high inflation. Thus, although there was some positive seignorage revenue and automatic monetisation of the deficit, commercial banks' ability to multiply the reserve base and create broad money was partially countered through draconian compulsory reserve and statutory liquidity requirements. This, together with administered prices, restrained inflation at politically

[2] Journal of Economic Surveys (2000), volume 14, (5), surveys the "inflation bias" that afflicts the central banks of developed democracies. The discussion in this section is largely based on Goyal (2002).

acceptable levels. Although the Reserve Bank was not independent its democratic accountability forced it to restrain inflation.

After the cost shocks of the seventies, since user charges were not raised for many public services, revenue deficits rose. There was large public borrowing to finance consumption. Government's ability to fund much-needed infrastructure was seriously compromised. Thus political business cycles in India largely took the form not of increased money creation, but of a cut in long-term development expenditures, and interventions that distorted allocative efficiency; the future was sacrificed to satisfy populism in the present[3] (Goyal, 1999).

With the reform of the early nineties the delicate balance achieved between democratic accountability and credibility of the monetary regime was disturbed. Credibility acquires a larger weight in a more open economy. India's inflation rate although low by developing country standards was higher than the world rate. This had to be brought in line to reassure mobile global capital. Moreover, the fiscal-monetary combination followed in the past was not sustainable, as public debt had risen. Thus more autonomy was given to the Reserve Bank, the repressed financial regime was dismantled, interest rates became more market determined, and the government began to borrow at market rates. The informal nominal money supply targeting the Reserve Bank had been following proved inadequate under these changes; interest rates were volatile in the nineties, and the Reserve Bank moved towards using the interest rate as an instrument, basing its actions on a number of indicators of monetary conditions (Jalan, 2001). The movement to a soft interest rate regime was interrupted by episodes where interest rats were raised to quell volatility of the rupee. The other major change of the nineties was the higher level of foreign inflows; these now accounted for a growing share of reserve money. Reserves of foreign currency accumulated, and were sterilized by a contraction of Reserve Bank credit to the government, and by open market operations (OMOs). The latter became possible by the mid-nineties because of the financial liberalisation of the previous decade; the debt market was deepening and government debt could be traded at market determined rates. But as real interest rates rose and growth rates fluctuated, the government debt burden increased. The exchange rate regime moved towards greater flexibility and market determination. It was changed from a fix to a managed float in the early nineties. Depreciation was allowed in order to prevent real appreciation, but the nominal exchange rate was not allowed to appreciate. There was occasional excess volatility, but a crisis was avoided. Even contagion from the East Asian crisis was averted. But growth rates were lower than potential. In democracies, institutions and policies evolve, subject to domestic debate and pressure from a variety of interest groups. Policies can change, if at all, only slowly. Therefore if rapid non-discretionary response can be institutionalized it would enhance growth.

2.2 Chinese Experience

A dictatorship has the advantage over a democracy of making quick decisions, including large policy reversals, of being immune to interest group pressure to some extent, and of being able to impose large costs on the people. The disadvantages can be inadequate information on which decisions are made, less than full use of available information, and simmering or suppressed discontent. There is a large probability of the wrong decision being made, and only a few dictatorships have the flexibility to reverse decisions. It is also possible for a dictatorship to decentralize decisions, and create institutions, so as to minimize information loss. A responsive dictatorship can react faster to feedback than a democracy.

When the stagnation from the closed and controlled system compared to the growing prosperity of East Asia and Japan became apparent, the government, because of its focus on growth, took the decision to allow more economic freedoms, and to open and modernize the economy[4].

China shared with India the pressures of a large number of poor. But socialist ideas of equality, without the populist pressures of ensuring votes, allowed protecting the poor to largely take the form of sustainable long-term improvements in health and education. Adequate supplies and low prices of essential foods were also maintained over the period that food remained a major part of the average household budget. The Government was able to extract large sacrifices from the people, as long as these minimum requirements were met[5].

Macro policy making, however, was centralised, and showed both the ability to move in the right directions, and the absence of smooth changes, as a result. There were large stop-go cycles. Inflation reached higher levels in boom periods, than was permissible in the Indian democracy, although an active foodgrain price intervention policy provided some protection for consumers. But response to macro-cycles was rapid, with well-coordinated changes in fiscal, monetary and exchange rate policies.

China also had to set up markets and monetary and financial systems where none existed earlier. State controls and allocations had to give way to more market determined ones. There is danger both in letting go of controls when the rich network of institutions required for markets to work do not exist, and in keeping in place controls that choke markets. The Chinese government used economic incentives along with political controls

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[3] The argument is related to the fiscal illusion view of the "public choice" school, but unlike the latter can explain why fiscal decay would intensify after oil shocks. Indian democracy had a number of institutional features that succeeded in guarding it from fiscal decay before the shocks.

[4] This section largely follows Mehran et. al. (1996) and the World Bank (1999, 2000). There are also inputs from Naughton (1995), McKinnon (1994), Lardy (1995), and Sun (2001).

[5] An old Chinese saying is that for the Chinese food is God (Yabuli and Harner, 1999).

and was successful in coordinating policies in ways that stimulated growth and allowed markets to develop gradually.

2.2.1 Monetary-fiscal Policy

Among policy makers there was a conflict between enterprise reformers and price reformers. The latter wanted macro stability as necessary to achieve the required adjustments in relative prices. The former emphasized reform in incentives and institutions, for which a macro stimulatory atmosphere was more conducive. But since before the reforms China's infrastructure was very poor and government investment in this very low, the government borrowed heavily to invest in infrastructure. Consider the period 1984-88. Public enterprises had earlier been milch cows for the state, yielding a large part of its revenues. The reforms changed this. Budgetary revenues from this source fell steeply and so did budgetary funding of investment. But the State had made a priority investment plan for infrastructure spending. The increase was from nothing to 3 percent of GNP, and had to be financed by borrowing. Published budget deficits in China have always been less than 2 percent of GNP, comparing well with the 6.4 percent average for lower middle income countries. But total Central Government borrowing requirements were at 7.1 percent of GNP. Brean (1998) gives the average value, over 1986-1994, of a public sector deficit measure that takes account of all net lending by the Central Bank to government and state owned enterprises (SOEs) as 11.2 percent of GNP; the equivalent Indian measure was below 10.

Given the institutional structure it was not possible to cut credit allocation to public enterprises without harming output. Expansion of credit was the only way to make part of domestic savings available to the State for investment. Total credit creation rose from 8 percent of GNP to 15 percent annually after 1984. The policy was very successful in stimulating growth but it led to an inflationary crisis and cutback in 1988. Agriculture and rural enterprises had hard budget constraints. Loans to farmers were much lower than their deposits were. Savings, however, responded to growth. The annual average household savings rate rose from only 2 percent in 1978 to 15 percent of annual household income by the late eighties. These savings were then available to fund government investment.

The stop-go macro cycles continued. Inflation peaked again in 1994; measures to bring it down included fall in farm procurement prices. But fall in external demand intensified the domestic slowdown in 1997. This was worrying in the context of the Asian crisis, and when a 15 percent planned rise in infrastructure investment combined with interest rate cuts did not yield results, a large coordinated fiscal monetary stimulus was applied in 1998. The textbook co-ordination contrasts with the Indian response in similar circumstances, which was to reduce fiscal expenditure and stabilize interest rates. The Chinese fiscal stimulus, from large-scale public sector infrastructure projects, was about 2.5 percent of 1998 GDP, with 1.4 percent of GDP financed through

state commercial banks taking up special government bonds. This was complemented with a more relaxed monetary policy. Deposit and lending rates were lowered. The program accelerated GDP growth from 7 percent in the first half of 1998 to 7.6 percent in the third quarter and 9.1 percent in the fourth quarter (World Bank, 1999). The expansion in credit required a pliable banking system, but at the same time the banking system had to be modernized and correct incentives for credit expansion, savings and investment maintained.

2.2.2 Banks and Credit

The banking system was set up only in the eighties, with the allocation of investment funds shifting to bank lending from budgetary grants. Even so, bottom up cash and credit plans are still drawn up. These have a built in inflationary bias since they are based on estimates by local governments, which have an incentive to compete for funds and create inefficient excess capacity. But post reform the attempt is made to make credit plans consistent with overall macro targets.

In 1986 the Peoples Bank of China (PBC) was made responsible for monetary policy and supervision of the financial system, but under the authority of the State Council. The PBC had already begun setting interest rates over 1978-84, the phase of the re-establishment of the banking system. Over 1984-88 further diversification and more innovations followed. In 1986, for example, banks were allowed to adjust interest rates on loans above the administered rate, within a 10 percent margin. Over 1988-91, following inflationary pressures, there was some stabilisation and recentralisation in the "rectification program", but 1992 saw the return to market oriented macroeconomic management. Reforms continued, including the introduction of paperless trading. In the system then current, the output costs of across the board credit cuts were too high. It was not possible to discriminate between good and bad firms, although some variability in interest rates was achieved even in an administered interest rate regime.

Even in the nineties more than 50 interest rates were still administered by the PBC with prior approval by the State Council. But since 1985 interest rates were adjusted more frequently, in response to inflation, although never sufficient to fully adjust for inflation. Policy was constrained by conflicting objectives: to encourage savings as well as borrowing by financially constrained SOEs. Therefore loan rates were changed more freely than deposit rates, resulting sometimes in negative interest rate margins for banks. In general the margins were very narrow, although the bad debts were high[6]. Another measure used to reconcile low lending rates with attractive deposit rates was indexation of long-term deposit rates during periods of high inflation. A consequence of low margins and high deposit rates was heavy borrowing of banks from the PBC. This borrowing was often more profitable compared to mobilizing deposits.

Till 1993, 70% of the PBC's loan to state banks was made by the PBC's local branches, which were greatly influenced by the local governments. In 1993, the PBC centralized its operation. In 1995, China passed the Central Bank Law, which gave the PBC independence from local governments. These reforms reduced the local government's influence on the monetary policy and credit allocation decisions. Reforms are attempting to harden budget constraints for SOEs, bring in commercial considerations, and appoint asset management companies for bad debts.

In 1981 itself government securities were re-issued, and compulsory sales made to enterprises and individuals, with secondary market trading allowed in 1986, and extending to 63 cities by 1988, when fiscal bonds were sold to financial institutions. After high inflation the government even issued price-indexed bonds in 1990. With stock exchanges set up in the early nineties trading became more sophisticated. Since 1985 banks had been permitted to issue financial bonds with interest rates at 2 percent above deposit rates of similar maturities. The official debt GDP ratio remained at around 10 percent, but official data on government debt are suspect. Lower level borrowing is not well captured. There are many contingent and hidden liabilities in the banking and pension systems. As China opens out it appears that the level of national domestic debt was much higher than official reports had previously suggested. Properly measured government deficit ratios are as high as Indian deficits. In 1995, a new Budget Law came into effect, which prohibited the central government from borrowing from the CB on current account, although deficit financing was permissible on capital account. The deficit had to be financed with government bonds. More stringent restrictions of budget balance were imposed on local governments.

2.2.3 Exchange Rates and Foreign Inflows

When China became a member of the executive board of the IMF in 1980, the external value of the Renminbi was linked to a basket of internationally traded currencies. In 1981 a single exchange rate was established for internal settlements in an experimental trading system. At the end of the 1981, the official rate was about 1.74 Yuan Renminbi per USD while the internal settlement rate (ISR) was 2.8 Yuan Renminbi per USD. The experiments continued. At the beginning of the 1985, the use of the ISR was discontinued and all transactions were at the official rate set by State Administration for Exchange Control (SAEC). In 1986 the exchange regime was changed from pegging to a basket to managed floating. The official exchange rate remained unchanged at 3.72 Yuan Renminbi per USD from July 5th1986 to December 15th 1989, at which time a 21.2 percent depreciation of Yuan Renminbi was announced. At the end of the 1989, the exchange rate Yuan Renminbi against the US dollar was 4.72. Under the dual track approach there was an official rate and a swap

[6] The four main state banks had bad debts equal to 22 percent of lending by mid 1997 (Sun, 2001, pp.237). Estimates of

rate i.e. a market rate. The share of plan allocated foreign exchange fell to less than 20% of the total, because of rapid growth of the market track. In 1994 the official and swap market exchange rate were unified at the swap market exchange rate, a steep devaluation of fifty percent, after which it has retained its stable tie to the dollar. This stability contributed to resolving but there are pressures for revaluing the currency, especially in view of the dollar's depreciation and China's large foreign exchange reserves. Except for 1978-79 the BOP has been in surplus. In December 1996, China announced current account convertibility of its currency, but still maintained capital controls. It is resisting revaluation on the grounds that in the presence of these controls markets do not reflect the true demand for the currency, and an expected appreciation attracts speculative inflows.

China's success in attracting foreign inflows is summarized in Table 2. Foreign inflows were regarded as essential to raise technology, exports, and to modernize the economy. There are fears about capital flight and leakage, intensified by the flattening of reserves in the late nineties, in the presence of continued healthy foreign inflows of about 45 bn USD annually, but foreign capital has made major contributions to China. FDI has raised exports[7]. For example, Japanese FDI helped prepare Japanese style foods for export to Japan. The government actively helped Chinese multinationals develop following a major policy slogan of the nineties "grasp the large, let go of the small" (Nolan, 2001). About 50 to 80 percent of the inflows come from the Chinese Diaspora, both because of their close ties to families and place of origin, and because of conscious attempts to welcome them.

If macro policy choices are influenced by structure, they should result in outcomes that should be visible in the data. We turn to the data below.

3. Macropolicy Outcomes

We list stylized facts and make systematic comparisons based on broad macroeconomic data[8]. Figure 1 shows that it was only in the decade of the nineties that the per capita GDP gap between the two countries really widened.

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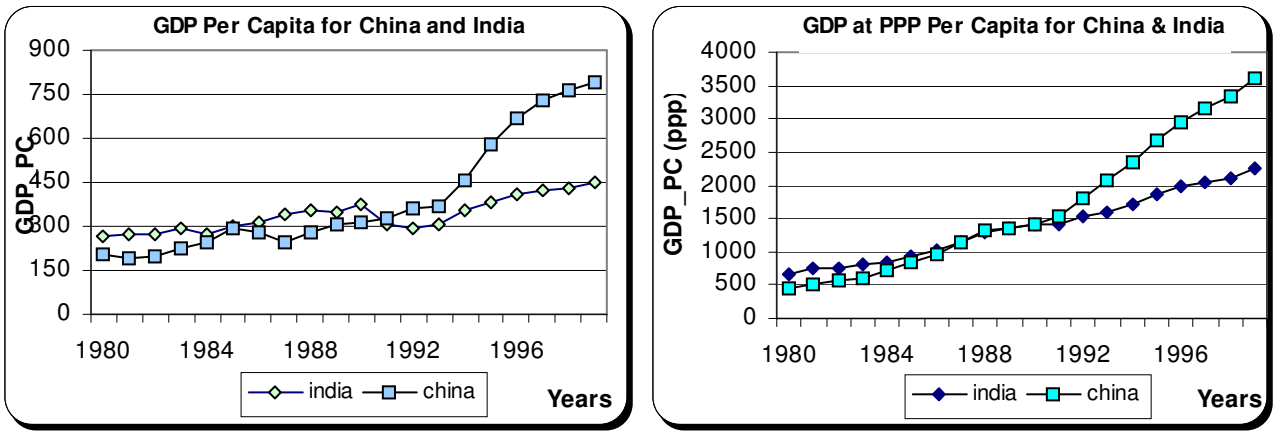
aggregate Non-performing assets to GDP vary from 20-45 percent.

[7] FDI's share of China's total export grew from negligible in 1984 to more than 12.5% in 1990 and to 30% in 1993. The share of joint ventures was even larger (Chen et. al., 1995, Sun, 1998, Wei and Liu, 2001).

[8] Chinese data are regarded as not very reliable because of non-transparent and non-standard accounting systems. Other problems are incorrect deflation, over reporting by local governments to boost allocations, but under reporting to reduce taxes. A part of the reported FDI may be pseudo (Jianping, 1998, Sicular, 1998). One study suggested that "round-tripping" of funds accounted for 25 percent of inflows in 1992 (Wei and Liu, 2001). But these cautions do not alter the

Table 1 gives averages and coefficients of variation of some key macroeconomic variables for the eighties and nineties. It shows very different relative performance. An interesting question to ask is if India is one decade behind China, then do macroeconomic policies need to be adjusted to allow it to experience Chinese growth rates in the new century? And if the answer is yes, then which policies need adjusting?

Figure 1: Per Capita Income Comparisons for China and India



(a). Normal (b). Purchasing Power Parity Terms

Sources for data: IFS CD-ROM January 2002, WDI CD-ROM, 2001.

Fact 1: The basic difference in macropolicy between the two countries is summed up in the much lower levels but much higher variation in interest rates in China; similar average inflation but much higher variation in China; average depreciation of the exchange rate was higher in India across the two decades, but Chinese exchange rate volatility was higher in the 1980s, but lower in the 1990s, compared to Indian exchange rate volatility in both decades; higher average growth rates in China; higher level in Chinese savings and investment ratios; and more variability in Chinese investment ratios.

The vital policy differences that impact on growth are the lower real interest rates. Higher exchange rate volatility facilitates a lowering and smoothing of real interest rates. Higher savings and investment ratios are partly a result of higher growth, and partly reflect the higher inefficiencies and inventories of a growth process where market institutions were not well developed. Lower real interest rates did not harm savings in China; instead they stimulated both investment and savings. Higher real interest rates in India in the nineties with

very real boom in both growth and FDI, and rise in standards of living. Other studies on FDI are Sun, H., 1998, Sung, Y., 1996.

respect to the eighties, and compared to China, did not raise savings rates, or succeed in lowering volatility of exchange rates. China's higher volatility in inflation and interest rates was specific to its structure and the stop-go credit cycles that occurred, and should not be replicated. Despite the cycles a low yet positive real interest rate was maintained.

Table 1:Variations in Macroeconomic Performances across Decades

1. (a) Averages	CHINA	CHINA	INDIA	INDIA
	80's	90's	80's	90's
Foreign direct investment, net inflows[1]	2.03[2]	31.80	0.11	1.71
Portfolio investment[3]	0.43	-0.27	0.01	2.05
Inflation[4]	5.55	7.10	8.35	8.59
Lending interest rate[5] (%)	8.01	9.14	16.50	15.46
Real interest rate[6] (%)	2.45	2.26	7.53	6.37
GDP growth (annual %)	9.25	10.40	5.87	5.62
GDP per capita, PPP	945	2612	1029	1838
Exchange rate[7]	3.03	7.50	12.52	34.40
GDP per capita	257.57	560.11	313.32	371.47
International reserves[8]	14.79	91.86	4.93	18.01
Savings rate	35.01	41.22	20.59	20.64
Investment rate[9]	28.57	34.04	20.86	22.41
(b). Volatility[10]				
	80's	90's	80's	90's
Inflation	0.77	1.08	0.16	0.35
Lending interest rate (%)	0.21	0.23	0.00	0.13
Real interest rate (%)	1.40	2.47	0.18	0.35
GDP growth (annual %)	0.40	0.25	0.32	0.40
Exchange rate	0.34	0.18	0.23	0.21
Savings rate	0.04	0.05	0.06	0.08
Investment rate	0.08	0.09	0.06	0.04

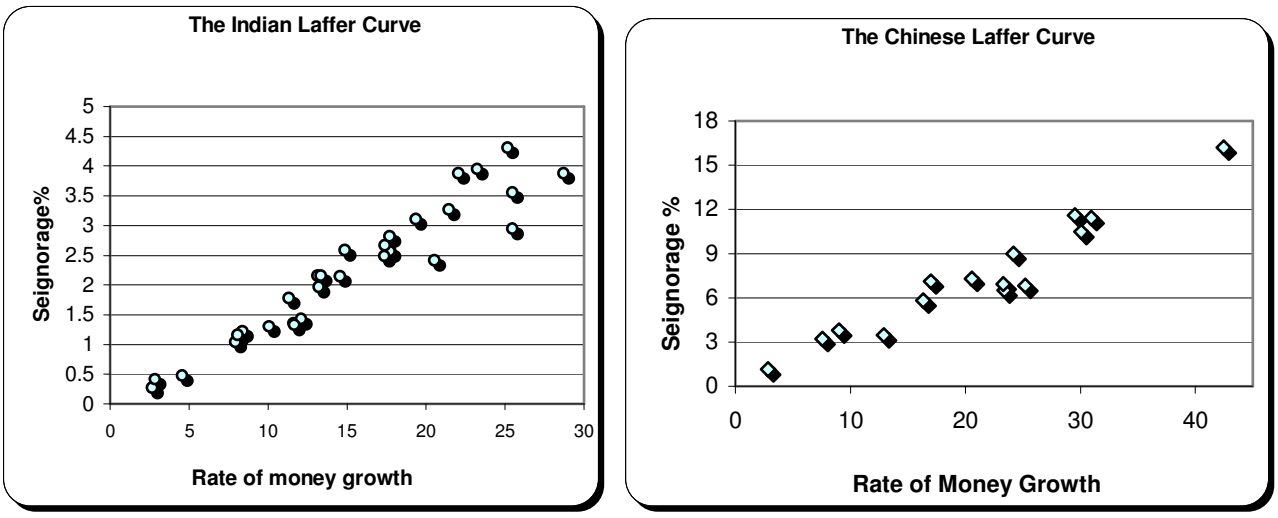
Sources: IMF CD-ROM January 2002, WDI CD-ROM 2001.

1. In billion US Dollars.
2. FDI average and variance for China and India has been taken over 1982-90 and 1981-90 respectively.
3. In billion US Dollars.
4. Inflation in the GDP Deflator.
5. Lending interest rate is the rate charged by banks on loans to prime customers.
6. Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator.
7. Average exchange rate (local currency per unit of dollar) the average of the period average.
8. Excludes gold and SDRs (current US Bn $).
9. Investment rate is equal to Gross Fixed Capital Formation as a percentage of GDP.
10. Volatility has been measured by coefficient of variation (standard deviation divided by mean).

For both governments expenditure exceeded revenue. In China the Government spent on infrastructure, in India on consumption subsidies. Moreover the financing of the deficit has implications for interest and

inflation rates. The gross fiscal deficit (GFD) equals government expenditure plus interest payments on debt minus tax revenue. A government can either print money or borrow to fund this excess of current expenditure over revenue. Carried to extremes both have their dangers. In deep financial markets the Central Bank (CB) can change the mix between the two through *open market operations* (OMOs), otherwise through direct transactions with the government. That is, if the CB buys (sells) government bonds in exchange for reserve money it issues, it increases (decreases) the stock of reserve money. If the CB prints money and buys government bonds held by the public, it monetizes the debt and increases the stock of money, which may be inflationary. A relative increase in bond financing can also increase the inflation rate, since as interest payments on government debt accumulate the GFD has to rise in the longer-run[9].

Figure 2: Points on Laffer Curves



(a). Indian Laffer Curve. (b). Chinese Laffer Curve

Sources for data: IFS CD-ROM January 2002, WDI CD-ROM, 2001.

The alternative is printing money, which generates seignorage revenue. The latter equals reserve money balances multiplied by their rate of growth. In a stationary equilibrium where major ratios are not changing the rate of inflation equals the rate of growth of money so that seignorage equals the inflation tax (money balances multiplied by the rate of inflation). Money balances are held by households and satisfy their demand for money. The rate of inflation is the cost of holding money, therefore money balances held fall with inflation. It follows that printing too much money will raise inflation (the tax rate) but lower money balances held (the tax base) and lower seignorage revenue. Thus plotting the seignorage ratio (seignorage revenue as a percentage of GDP) against the growth of reserve money gives a hump shaped Laffer curve, where the ratio first rises and

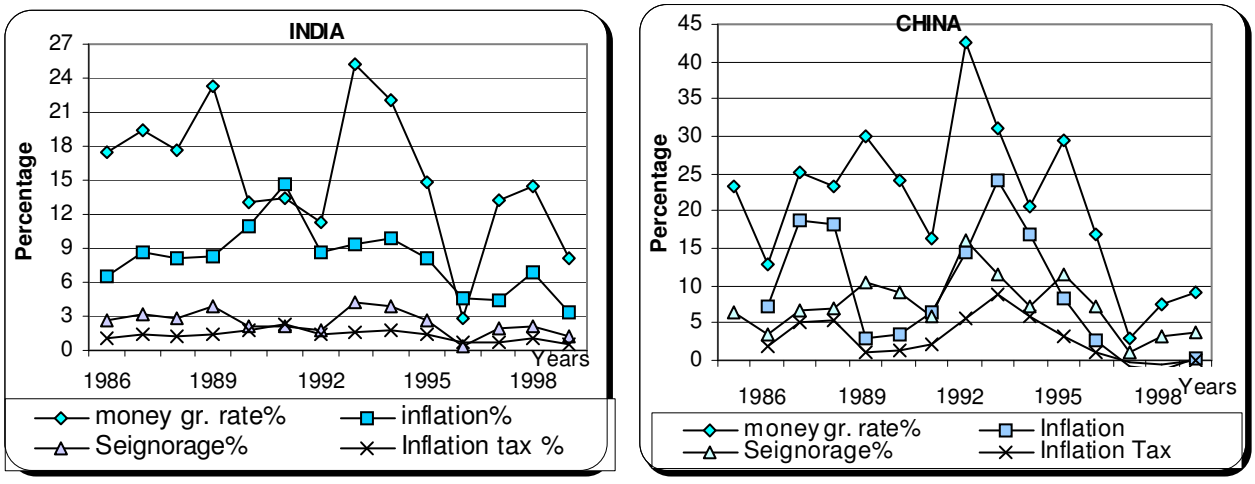
[9] Sargent and Wallace (1981) derived this "unpleasant monetarist arithmetic" which gives a fiscal theory of *inflation*.

then falls with growth of money supply. This ratio is calculated and the curves plotted for China and India in Figure 2.

Fact 2: India's average seignorage ratio, of between 2-3 percent of GDP, was lower than China's which was 6-8 percent, but both countries avoided falling on the wrong side of their Laffer Curves.

Democracy, an elected government, and sensitivity to inflation ensured that India's average ratio remained at between 2-3 percent of GDP, much lower than the Chinese average. China's seignorage ratio was 6.85 over 1986-90 and 8.09 over 1991-99. Indian inflation rates and therefore seignorage generally rose after the oil shocks of the seventies. The Chinese government was able to risk higher peaks and fluctuations in inflation, but inflation was a sensitive issue, so that it ensured that inflationary bouts were short-lived. Prices show a closer relation to narrow money which was used for transactions; broad money (deposits) was the main vehicle for savings. Thus both governments gave up potential seignorage revenues, even though this is an easy source of revenue in a developing country, where normal channels are difficult to tap. In developed countries this ratio is less than one percent. But peak hyperinflationary rates of seignorage in Latin American countries have exceeded the rates that would have maximised inflation tax.

Figure 3: Money Growth Rate, Inflation, Seignorage and Inflation Tax for India and China.



(a). India.

(b). China.

Sources for data: IFS CD-ROM January 2002, WDI CD-ROM, 2001.

Fact 3: In both countries the inflation tax is about half the seignorage ratio. The inflation rate is also always below the rate of money growth. In India the volatility of money growth and seignorage exceeds that of inflation and inflation tax; in China all the four series are volatile.

Administrative price intervention systematically kept the inflation rate below that of money growth in India. In part financial deepening and development increased the demand for money balances, allowing them to be absorbed without inflation. The picture of volatility suggests that reserve money was difficult to control in India but there was considerable inflation inertia; inflation was smoothed. In China the system of bank financing of SOEs according to a credit plan led to large increase in money supply; fluctuations in inflation were more acceptable.

Fact 4: Policy was able to bring down inflation rates after peaks in both countries.

Macropolicy was able to lower inflation rates, when many developing country governments were unable to control inflation, perhaps because governments in countries with a large number of poor are forced to moderate inflation. These pressures were higher in democratic India compared to China. The price of food is particularly sensitive. Higher prices were given to Chinese farmers with the reforms in 1978, reversing a period of surplus extraction from agriculture. But essential food prices were controlled and allowed to rise only in the nineties when the share of food had fallen in the household budget. Similar polices were less successful in India because of lower agricultural productivity and higher food budget shares. Periodic upward revisions in food procurement prices contributed to persistent low grade inflation, and an ineffective public distribution system created inefficiencies and was not able to adequately protect the poor. Inflation fell in both countries in the late nineties partly as border prices moderated the rise in food prices in more open systems.

Although massive monetary expansion and inflation were avoided, even so administrative controls played a major role in smoothing inflation in both countries. Price controls in China were used more to affect the transition from a system with no markets to a market driven system. Indian price interventions were often populist measures to subsidise consumption of the poor and buy votes.

Fact 5: Seignorage has been less than the maximum possible.

The scatter points of Indian data are all on the upward slope of the potential Indian Laffer curve (Figure 2a). They do not form a bell shape. Although both money supply growth and seignorage ratios are much higher in China, the Chinese data points also do not form a bell shape. The highest potential seignorage revenue lies at the peak of the bell shaped Laffer curve; after this peak revenue would fall since the tax base shrinks as demand for money balances falls. Seignorage in the two countries has fallen far short of the maximum

revenues that could have been raised by printing money; and the inflation tax has been even lower than seignorage, due to price controls.

Fact 6: China ensured real positive returns to savers, and low real interest rates for borrowers inspite of higher inflation volatility. Credit flows were also maintained. Indian real interest rates and bank spreads were much higher, and credit flows more constrained.

Although China had a complicated administered interest rates system positive real interest rates on deposits were protected by indexing them for inflation when necessary. The measure was withdrawn in times of low inflation. Since the Chinese government assured real positive interest rates and there were few other savings instruments bank deposits were the chief mode of savings and absorbed the large expansion in money supply. Intense competition for projects, and to complete growth targets at the local level, implied a large demand for credit from SOEs. This was largely accommodated except in the infrequent periods of correction, when it had an immediate high cost in terms of growth foregone, and was therefore soon reversed. The high household savings rate accommodated the large government borrowing requirements, and absorbed the huge expansion in broad money and credit.

In India, real interest rates rose in the nineties, as interest rates were liberalized. Large spreads charged by banks prevented lending rates from falling even as inflation fell. The weighted real interest rate on government securities was at an average level of 4.1 percent compared to 1.4 percent in the eighties. This is partly the reason interest payment accounted for about half of revenue expenditure in this decade. Sustainability of public debt requires the real interest rate to be less than the growth rate. Both high real interest rates and low growth rates increase the debt burden. The average annual per capita output growth rate in the nineties only improved to 3.7 percent compared to 3.4 percent in the eighties. Lower real interest rates would have lowered the fiscal deficit directly and also indirectly by improving growth.

Fact 7: China accepted higher depreciation and exchange rate volatility, which helped keep real interest rates low, in the earlier half of their growth period, and were rewarded by more stable exchange rates in the latter half; India used the interest rate defense to lower exchange rate volatility in the nineties, but was unable to prevent higher depreciation across the entire period.

The Chinese were focused on raising exports; this was the primary criterion of their exchange rate policy, and monetary policy was used to stimulate growth. Indian monetary policy was often diverted to defend the rupee

and sterilise reserve accumulation at the cost of domestic stimulus. In both countries controls on the capital account gave some degree of independence to monetary policy.

The remaining facts we present are derived from calculations in Table 2, which shows FDI, total capital inflows and reserves in the two countries. The focus is on the relative size of FDI and the use to which capital was put. In particular, to what extent did it fund an excess of investment over savings? Capital inflow has been calculated, in columns 5 and 6, as gain in foreign exchange reserves plus the absolute value of the current account deficit. The latter measures the excess of investment over domestic savings and the reserve gain indicates the monetary absorption of foreign inflows. A current account in deficit implies that capital inflows or reserve loss are funding an excess of exports over imports of goods and services. A surplus current account can contribute to a rise in reserves or fund a capital outflow. By convention reserve loss and current account deficit are given negative signs, while reserve gain and current account surplus are given positive signs. Reserve loss minus current account surplus indicates a capital outflow, which has a negative sign. The ratios calculated in the last two columns gives the percentage of this measured capital flow (CF) absorbed in change in reserves (RC).

Table 2: Capital Inflows and Foreign Exchange Reserves.

	India	China				India	China	India	China	India
in Bn$	Net FDI	Net FDI	Total FDI[1]	Net FDI[2]	Cap Flow[3]	Cap Flow	Forex Reserve	Forex Reserve	(RC/CF)%[4]	(RC/CF)%
1	2	3	4	5	6	7	8	9	10	11
1981	.092	Na			n.a.	0.42	4.783	3.764	n.a.	-543.49
1982	.072	.430			0.68	2.30	11.135	3.539	936.9	-9.8
1983	.006	.636			-0.90	2.73	14.476	4.318	-371.6	28.5
1984	.019	1.258			0.20	3.06	16.705	5.034	1120.1	23.4
1985	.106	1.659			6.63	4.69	11.913	5.549	-72.3	11.0
1986	.118	1.875			5.64	4.49	10.514	5.444	-24.8	-2.3
1987	.212	2.314	2.65	.84	4.42	5.35	15.236	5.603	106.8	3.0
1988	.091	3.194	3.74	1.31	6.11	5.72	17.548	4.148	37.8	-25.4
1989	.252	3.393	3.77	1.43	3.79	5.78	17.022	3.105	-13.9	-18.0
1990	.162	3.487	3.75	1.64	-0.43	5.14	28.594	1.205	-2722.8	-37.0
*1982-90**	*1.13*	*18.25*	*13.92*	*5.22*	*26.14*	*39.26*	**14.793**	**4.171**	**-111.5**	**-3.0**
1991	.074	4.366	4.67	1.53	0.80	6.67	42.664	3.580	1763.2	35.6
1992	.277	11.156	11.29	2.33	-29.62	6.37	19.443	5.461	78.4	29.5
1993	.550	27.515	27.77	6.6	13.37	6.22	21.199	9.807	13.1	69.9
1994	.973	33.787	33.95	10.23	23.51	11.26	51.620	19.386	129.4	85.1
1995	2.144	35.849	37.81	4.02	20.34	3.64	73.579	17.467	108.0	-52.7
1996	2.426	40.180	42.14	17.20	24.21	8.23	105.029	19.742	129.9	27.6
1997	3.577	44.237	52.39	27.09	-2.10	7.55	139.890	24.324	-1658.5	60.7
1998	2.635	43.751			-26.40	9.54	144.959	26.958	-19.2	27.6
1999	2.169	38.753			-11.40	8.26	154.675	31.992	-85.2	60.9
2000	2.315	38.399			-9.62	9.47	165.574	37.264	-113.3	55.7
*1991-2000**	*14.14*	*317.99*	*311.63*	*68.99*	*3.08*	*77.20*	**91.863**	**19.598**	**34.6**	**40.0**

Source: IMF CD-ROM January 2002 except column 4 &5.
Source: for Column 4 &5 China's Statistical Yearbook1998.
Note: All figures are in billion dollars except column 10 and 11.
** Total for 80's and 90's in first six columns (italics) and average in last four columns (bold).*

1. Data is from China Statistical Yearbook
2. This column gives the FDI flow to China subtracting that from Hong Kong, Macao, and Taiwan
3. Capital Flow is defined as Reserve Gain – Current Account Surplus. Capital inflow, reserve gain and current account surplus have a positive sign and reserve loss, current account deficit, and reserve loss a negative sign. IMF series no. 1d.d & 78ald were used.
4. Reserve Change (RC) as a percentage of Capital Flow (CF). Negative sign shows loss of reserve and vice versa.

Fact 8: In the eighties in China a larger proportion of capital inflows were used to increase investment rather than added to reserves, it was in the nineties that reserve accumulation really expanded. India first experienced large capital inflows from the nineties, but a large percentage of these were accumulated.

Column 10 and 11 in Table 2 give the share of capital inflows that were accumulated as reserves for the two countries. While the average value was negative for China in the eighties it was positive for India in the nineties. Foreign inflows were used to add to capacity in China of the eighties, but were wasted in expensive reserve accumulation in India in the nineties.

The aim of the reserve accumulation was a more depreciated rupee but it also meant higher interest rates. In the nineties the share of reserve money due to accumulation of foreign exchange reserves had gone up from 10.67 to 37.88 and that due to RBI credit to the government had gone down from 92.29 to 66.3. The share of government securities in commercial bank credit had gone up from 21.04 to 29.53. Moving towards market determined interest rates for government securities coincided with the period of large foreign inflows. Open market operations were also activated since the mid-nineties. Sterilised foreign exchange asset accumulation meant that the government had to turn to commercial banks for a larger part of its borrowing requirements, thus raising interest rates, attracting further inflows, and widening the revenue deficit (Goyal, 2002). Seignorage does not change if foreign reserves account for a larger share of reserve money, but funding of the government deficit does change. Indian foreign exchange reserves exceeded $100 billion by the end of 2003. Foreign savings available to supplement domestic savings were not allowed to lower the interest rates.

Fact 9: India attracted more direct foreign investment inflows in the nineties than China did in the eighties, once foreign inflows from Hong Kong, Macao and Taiwan are deducted from the Chinese total.

Since there is a strong perception that China attracts more FDI than India does, fact 9 is startling. Comparing column 2 of Table 2 with column 5 for China leads to this conclusion. Column 5 gives net FDI to China deducting that from the three neighbors Hong Kong, Macao, and Taiwan. Net FDI captures only inward investment, while the total FDI includes outward flows as well. Inflows of FDI are due to both push and pull

factors. In China's case the pull factors dominated in the eighties, but India can benefit from both push and pull factors, as global mobility has increased. India simplified procedures for FDI only in the nineties; thus the correct comparison is between India of the nineties and China of the eighties. It takes time for FDI to accelerate, just as FDI going to China really increased in the nineties India may expect more in the next decade. The average annual nineties Indian FDI[10] of 1.4 billion dollars (column 2) compares well with the eighties (column 5) Chinese figure of 1.3 (obtained by dividing the eighties total 5.22 by the number of years which are 4).

Fact 10: Net FDI to China in the nineties, after subtracting foreign inflows from Hong Kong, Macao and Taiwan, indicate a lower bound for expected net FDI into India over 2000-2010.

Thus the nineties values in the Chinese column 5 of Table 2, an average annual value of about 10 billion dollars, suggest FDI levels India may be able to attract. If India is able to tap its Diaspora, much as China actively mobilised its own, then the expected inflow may be closer to column 3. Contractual FDI into China peaked in 1993, thirteen years after inflows were permitted (Wei and Liu, 2001).

While both the countries had started reforming in the eighties, China was more fully committed to encouraging exports, FDI, and growth and reformed purposively from 1978. In India the real commitment to liberalization came only in the early nineties. China decided to allow foreign inflows in order to benefit from new technology and enhance learning, as part of the "four modernizations". Even so, its balance of payment surplus continued to be in surplus and domestic savings were high. India liberalized foreign capital inflows more hesitantly and only in the early nineties.

The differences in China and India's macroeconomic outcomes can be traced to their differing political structures. China was able to undertake quicker regime and policy change, explaining the higher volatility in key macroeconomic variables. The government was able to focus clearly on growth ensure low interest rates and high credit for investment, invest in infrastructure, encourage FDI, and use economic incentives. The high growth with low and positive real interest rates stimulated an explosion in domestic savings. The government's concessions to poverty were in quickly bringing down peaks in inflation, administering food retail prices, and a moderate use of seignorage revenue. Its non-transparent accounting and capital account controls gave it some freedom from international pressures, and allowed it to follow non-conventional stimulatory macroeconomic

[10] Indian FDI is underestimated according to international accounting conventions. For example, profits reinvested by foreign companies are not treated as FDI. A revision process is underway at the RBI and the figures will be revised upwards substantially. This will strengthen our point.

policy. There was a cost in terms of higher volatility and financial sector problems such as high bad debts for the banking sector.

India had the advantage of more functioning markets and economic freedoms, but in a democracy pressures form interest groups lead to delay. Quick regime or policy change and a clear focus were difficult to achieve. The pressures of election and high poverty ensured that inflation volatility and seignorage levels were lower than in China. The distortions in relative prices, required to keep inflation tax lower than seignorage, had a large cost in terms of lower efficiency and slower capital growth in India. There was also a loss of potential government revenue, as user charges of many public goods were kept below cost. Short-term populism harmed sustainable human and physical capital formation. Greater transparency and international pressures forced India to follow a conventional macroeconomic stabilization in the nineties, with high interest rates, and stagnation in public and private investment.

China needs to reduce macroeconomic volatility and make its financial sector fully modern. As it becomes more integrated with the rest of the world, its policy freedoms will need to be guarded in new ways. India needs the ability to respond faster and more freedom both from international pressures and from domestic pressure groups. Therefore the question of institutional structures that can facilitate these changes is important for both countries.

4 Macro Policy Rules

Can institutions, such as macro policy rules, compensate for some of the disadvantages of political structure[11]? Would they be credible?

The aim, for India, would be to constrain discretion yet retain flexibility, and lower response time, so that policies could be stimulatory, but within bounds. Chinese-style lower real interest rates and expansion in credit are required without Chinese volatility. An Indian fiscal responsibility act should focus on backloaded reductions of the revenue deficit while protecting capital expenditures, automatic stabilization, and incorporating escape clauses. This is "fiscal-deficit zone targeting". After the fiscal deficit reaches an acceptable zone, further reductions should be allowed to come through growth. With such legislation to restrain the revenue deficit and shift the composition of public expenditure towards investment, openness gives an opportunity for monetary authorities to lower Indian real interest rates closer to world levels. The real interest rate can be kept around the level at which the desired level of foreign exchange reserves is maintained. Such a policy set would not increase the inflation rate.

Since accountability, in a democratic polity, forces the CB to keep inflation low, a weak constraint on the CB, such as medium-term inflation zone targeting, is sufficient. Under such a constraint, inflation has to be maintained within the pre-defined zone over time. The zone stabilises inflation expectations, so that the cost of disinflation is lower. Thus measures to change aggregate demand would be required only if inflation is outside the zone; otherwise productivity improvements can be allowed to decrease inflation in their own time, under expanding potential output. This gives sufficient discretion to smooth nominal interest rates, and achieve desired real interest rates. Smoothing nominal interest rates lowers asset price volatility.

Instability in money demand, with the availability of close substitutes, has made control of monetary aggregates ineffectual. CBs now use the short-term nominal interest rate as the policy instrument, and as long as prices are not perfectly flexible they can influence the real interest rate in the short- to medium-run, taking account of expected inflation in setting nominal interest rates.

Exchange rate management can facilitate interest rate targeting and smooth nominal rates by lowering the need for an interest rate defense of the currency. The nominal exchange rate will, in the future, have a major impact on food prices and the CPI. Exchange rate management can therefore contribute to reduce inflation. Oil price shocks and rising agricultural support prices have contributed to inflation in the past. Agricultural trade liberalization gives an opportunity to stabilise food prices without alienating the farm lobby. Some prices will rise as administered prices are freed, but re-structuring and gains in productivity can compensate to some extent. Managing the exchange rate in a band around the real equilibrium rate will encourage exports. Random two way variation within the band will encourage hedging and prevent self-fulfilling one way bets on the direction of movement of the rupee, and major fluctuations. Thus exchange rate policy can fulfil its three objectives in a developing economy: price stabilisation, stimulating exports, and preventing a currency crisis.

Since populism has had more adverse effects on the government budget, while it has pushed monetary authorities towards keeping inflation low, stronger rules should insulate the government from populism. Rules embodying constrained discretion in macro policy will allow the strengths of democracy to be used and compensate for its weakness. Since such rules make long term consequences of policy clear, they help to align private sector actions with desired outcomes, make actions more forward-looking, and reduce the popularity of short-term populism. Both fiscal and monetary policies can work together to stimulate higher growth and lower inflation. This policy set will make coordination of monetary and fiscal policy possible in the short-run and resolve the dilemmas of long run financing of government expenditure.

[11] These are more fully developed in Goyal (2002).

China is in a better position, but it continues to be a developing country with many structural similarities with India. As it moves more fully towards a market system and adopts international standards these similarities will increase. Inflation zone targeting and use of the real interest rate as an intermediate target will allow smooth macro policy response. It will replace the quantity-based decentralisation embodied in the credit plan with price based-decentralisation. The credit demands of local governments will be restrained by the price of credit. The cost of a credit squeeze will fall, since only less productive projects will be rationed out. Institutional changes will moderate the demand driven credit booms, inflation, subsequent stabilisation and bottlenecks (Sun, 2001), while the government will retain its freedom to stimulate the economy in sustainable ways. Total factor productivity growth has been low, because of repetitive and often inefficient investments driven by intense local competition. Production was not efficient--additions to inventories were 5.3 percent of GDP in the nineties compared to only 0.4 in the USA. Much of early Chinese growth came from accumulation of inputs, and the very large Chinese savings rates gave the economy a great capacity for self-renewal even after mistakes (Yabuli and Harner, 1999). With better organisation it can move to more productive use of resources and productivity driven growth.

For both countries the supply side constituents of inflation are important. In more open economies, the exchange rate has a major impact on the price of food and inflation. With modern technologies, and as firms reach a high level of sophistication, it is difficult to maintain the closed capital account both countries have at present. China has a current account surplus and its companies are already investing abroad, and there are worries about leakage. Mechanisms to mitigate the risks of full convertibility are required. It is equally important for China to develop an exchange rate regime that minimizes the chances of a currency crisis, while reconciling an open capital account with some monetary policy independence, and low stable inflation.

But are such reforms feasible? They are a way of binding against the weaknesses of political structure, and delivering high but stable growth in the context of more open economies. The latter gives an opportunity for large surplus labor in both countries to move to more productive activities. The Chinese party can survive only if it delivers high growth, since the latter mutes the demand for more democratic freedoms. The Indian electorate is demanding better governance and infrastructure in order to make use of the new opportunities available. Therefore it is in the interest of the groups with political power to allow the birth of more efficient institutions. There are signs that this is happening in both countries. Chinese reforms of the nineties such as the new CB Law, and the Budget Law commit it to more efficient macroeconomic polices. Joining the WTO will allow it to introduce more transparency and competition, forcing its township and village enterprises free of bureaucratic patronage and allowing them to become efficient small market enterprises. India has

introduced fiscal responsibility bills at the centre and state levels. Persistent lowering and smoothing of interest rates and rise in government infrastructure spending has helped raise growth rates to 8 percent in 2003-04 and lower the fiscal deficit after a long time.

Openness also enhances innovation, and so do democratic freedoms. In the long-run the major share of growth comes from innovation. This gives an advantage to India in the long-run, unless China allows more freedoms. There are signs that it is moving in that direction with private property reinstituted and limited local elections allowed. But there is a long way to go. The dilemma is that the party needs growth to continue but long-run growth needs more freedoms. There is also a feedback from outcomes to political structure.

5. Conclusion

Structure has influenced the combination of monetary and fiscal policy followed in both countries. China has the lead given its clear goals and pragmatic, flexible stance. Its non-transparent accounting systems and authoritarian controls gave it the freedom to follow stimulatory macropolicy when it was necessary even if it led to high volatility, or imposed short-term hardships on the populace. The Government was careful to ensure the elements that encourage growth---openness, foreign direct investment, low real interest rates, good infrastructure, education and health. There are macropolicy rules that can make it possible for India to apply these lessons and attain independent context relevant policies; and give China continued macroeconomic independence but lower the associated volatility and discretion.

A fiscal rule can restrain the competitive populism of an elected government, and shift the electorate to a better understanding of the long-term consequence of current policy, making it possible for monetary policy to be stimulatory. The Government can shift from consumption subsidies to providing public goods such as education and infrastructure. Rule based coordination can restrain the credit inflation and neglect of efficiency in dictatorships. Such institutions use the strength but moderate the weakness of each political structure, and allow each country to improve on past performance. The combination of more openness and large surplus labor which has benefited from openness, in both countries, has made it in the interest of politically powerful groups to deliver more effective policies and institutions. Gradualism in reform has allowed these benefits to become obvious.

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