Reforming the Indian financial system

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Table 1 Financial intermediation and the economy

Parameter	Level (Trn. rupees) 1998-99	2008-09	Change (Times)	Share in GDP (Per cent) 1998-99	2008-09
GDP at market prices	16.16	52.29	3.23	100.00	100.00
Gross domestic saving	3.90	18.12	4.64	24.13	34.65
Household sector	3.30	12.61	3.82	20.42	24.12
Private corporate sector	0.69	4.70	6.81	4.27	8.99
Public sector	-0.09	0.80		-0.56	1.53
Gross capital formation	3.99	18.38	4.61	24.69	35.15
Public sector	1.22	5.24	4.29	7.54	10.02
Private corporate sector	1.24	7.08	5.71	7.67	13.53
Household sector	1.49	6.79	4.56	9.22	12.98

Source: CMIE Business Beacon.

1 Current structure of the financial system

1.1 Finance and the economy

In recent years, the Indian economy has grown sharply and has enjoyed high rates of savings and investment. This has inevitably involved a substantial role for finance as the intermediary between households and firms (Shah, Thomas, and Gorham, 2008). Table 1 compares components of GDP at current prices for 2008-09 against the picture as seen one decade ago. The nominal rupee-dollar exchange rate exhibited a depreciation of roughly 9% over this period. Hence, the bulk of the change across this decade can be interpreted as a change expressed in nominal dollars.

Over this decade, India went from being a medium sized developing country (with an aggregate GDP of $379 billion in 1998-99) to being a member of the G-20 (with an aggregate GDP of $1.13 trillion in 2008-09), with a rough tripling of aggregate GDP. Alongside this, the savings rate went up dramatically from 24.13% to 34.65%. This combination gave a 4.64 times rise in gross domestic savings: the financial system which used to handle a flow of $91 billion of savings in 1998-99 was handling $390 billion of savings in 2008-09.

In addition, the private corporate sector, which is the focus of the formal financial system, came to play a bigger role in investment. Gross capital formation by the private corporate sector grew from 7.67% of GDP to 13.53% of GDP over this decade. There was a rise of 5.71 times: private corporate

Table 2 Structure of liabilities of large companies

Parameter	Level (Trn. rupees) 1998-99	2008-09	Change (Times)	Share in total (Per cent) 1998-99	2008-09
Total liabilities	11.43	51.64	4.52	100.00	100.00
Equity	3.88	20.26	5.22	33.94	39.22
Borrowings	4.80	16.37	3.41	42.02	31.70
Local bonds	0.65	1.08	1.58	5.69	2.06
Foreign	0.60	2.39	4.19	4.98	4.62
Current liablities	2.75	13.64	4.97	24.03	26.42

Source: CMIE Business Beacon.

investment went from $29 billion in 1998-99 to $153 billion in 2008-09.

Through this combination of high GDP growth, rise in household savings, and a bigger role for private corporate investment, the financial system has come to play a more prominent role in the economy, and has achieved a significant size by world standards.

Through these changes, the materiality of financial reform has risen. With $390 billion of household savings being produced a year, and $153 billion of private corporate investment taking place a year, modest improvements in the capability of the financial system would help accelerate growth.

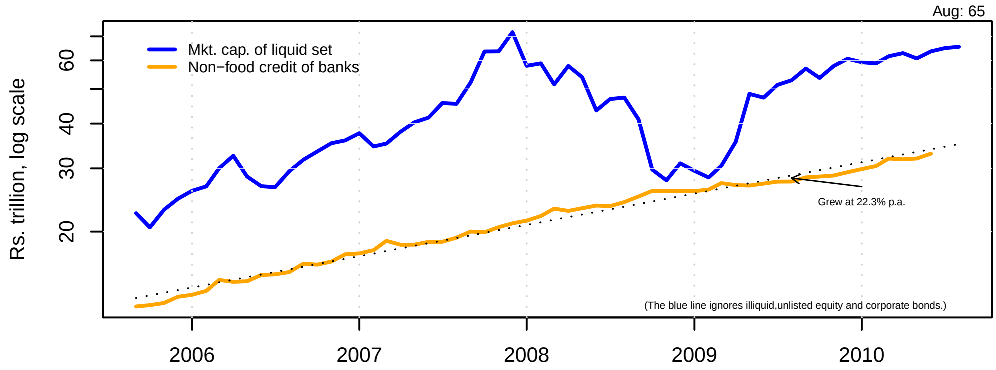
Table 2 shifts focus to the financing structure of large companies. For each of the two years (1998-99 and 2008-09), the aggregate balance sheet of all large non-financial firms in the CMIE database is computed and shown. The overall balance sheet grew much faster than GDP, with a rise of 4.52 times over the decade.

A pronounced deleveraging is visible. Equity, which used to be 33.94% of the balance sheet in 1998-99, made up for 39.22% of the balance sheet in 2008-09. Alongside this, the corporate debt market faded into insignificance: it grew by only 1.58 times, and went from 5.69% of the balance sheet in 1998-99 to 2.06% of the balance sheet in 2008-09.

The evidence in Table 2 pertains only to large companies. In addition, banks do lend to smaller, unlisted companies. In order to assess the role of banks versus the equity market, Figure 1 juxtaposes the market capitalisation of the CMIE Cospi index[1] against the aggregate non-food credit of all banks. This shows that in the comprehensive picture, bank credit is small in the

[1]This is a stock market index comprising of firms who satisfy a modest minimum requirement of liquidity on the stock market.

Figure 1 Banks versus markets



Indian economy, when compared with the market value of equities (Thomas, 2006a). This broad relationship has held up even though there has been an unprecedented boom in bank credit in the period under examination.

1.2 Financial repression

In most areas, the interactions between the Indian State and the economy is ruled by sound procurement principles. As an example, purchases of steel or cement by the government are done through auctions, where these commodities are purchased from the lowest voluntary bidder.

However, in the area of government borrowing, the Indian State does not borrow from voluntary lenders. The bulk of government bond issuance is forcibly placed with financial firms. These include banks, insurance companies and pension funds. As an example, banks are forced to hold atleast 24% of their assets in government bonds. The pension system operated by the Employee Provident Fund Organisation (EPFO) is almost entirely invested in domestic government bonds. Of the Rs.7.43 trillion invested by life insurance companies on 31 March 2009, 42.5% was in central government bonds and another 14.4% was in state government bonds.[2]

Indian financial policy thus ensures that the government gets roughly all

[2]This excludes the Rs.1.5 trillion invested by life insurance companies in 'Unit-linked Insurance Products (ULIPs)', where pre-emption by the government is essentially absent. *Source:* Insurance Regulatory and Development Agency (IRDA) Annual report, 2008-09.

EPFO assets, roughly half of the assets of life insurance companies and roughly a quarter of the assets of banks. Data for 2007-08 shows that of the total stock of Rs.11.47 trillion of government bonds, only Rs.1.7 trillion or 15 per cent were held voluntarily.

1.3 Protectionism

In most aspects of the merchandise trade, the Indian State has shifted away from protectionism. The Indian buyer of steel or benzene or mobile phones is able to choose between local and global producers without either quantitative restrictions or tariffs imposed by the State. Once the Goods and Services Tax (GST) is properly implemented, imported goods will face a GST-on-imports, and apart from that, customs tariffs would go to near-zero levels.

With financial products and services, in most areas, the local buyer is inhibited from purchase of products or services from offshore providers. This is done either through outright prohibition or quantitative restrictions (typically through capital controls), or constraints upon establishment of distribution channels for foreign producers (typically through financial regulation).

One example of such protectionism lies in the treatment of banks, where all foreign banks (put together) are permitted to open no more than 18 branches in India. This disables the extent to which foreign banks are able to build branches in India and offer competition to Indian banks. For another example, the Indian buyer of futures on the NSE-50 index has a choice of three venues where orders can be placed: India's NSE, the Singapore Exchange (SGX) and the Chicago Mercantile Exchange (CME). However, the prevailing capital controls are structured in a way which prevents an Indian resident from paying initial margin on overseas futures exchanges. Through this, offshore competition against the NSE-traded Nifty futures and options is undermined.

1.4 Public ownership

The third defining feature of Indian finance lies in the extent of public ownership. Roughly 80% of banking, 95% of insurance and 100% of pensions is held in public sector financial firms.

With insurance, it is possible to establish a private insurance company with no more than 26% of foreign ownership. With banking and pensions, entry is infeasible either for private or for foreign financial firms.

The combination of public ownership and protectionism hampers competitive dynamism in large parts of Indian finance. At the same time, competitive dynamism is found in certain areas. The barriers are the weakest with securities firms that seek to become members of exchanges such as NSE and BSE, and with mutual funds. In these two areas, India is *de facto* open to private or foreign firms that seek to establish business. Unsurprisingly, these are also areas where creative destruction is visible, with both entry and exit taking place every year.

1.5 Central planning

The fourth defining feature of Indian finances lies in the extent to which the government controls minute details of financial products and processes. The structure of legislation and regulation is one where everything is prohibited unless explicitly permitted. Hence, every time a firm wishes to make a modification to a small detail about a product or a process, it has to go to a government agency in order to request permission.

As a recent example, until recently, SEBI specified that securities trading must start at 9:55 AM and stop at 3:30 PM. In an element of liberalisation, SEBI has announced that exchanges can start and stop at any time of day, as long as the start of trading is after 9 AM and the end of day is before 5 PM. In most OECD countries, governments do not get involved in specifying the time at which trading starts and ends.

On a related note, on the equity derivatives market, options trading on the index involves cash-settled European-style options and options trading on individual securities involves cash-settled American-style options. None of these parameters can be changed without explicit approval from SEBI. In most OECD countries, decisions about whether options should be cash-settled or physically-settled, and decisions about whether options should be European-style or American-style, are not the purview of government.

1.6 Regulatory and legal arrangements

The fifth and final defining feature of Indian finance is the financial regulatory architecture. Table 3 shows the role and function of major government agencies in Indian finance. In addition to these external agencies, finance policy

Table 3 The role and function of government agencies in Indian finance

Agency	Functions
RBI	Owns and operates some critical financial infrastructure (a bond depository, a bond exchange, some payments functions). Regulation of banks, Non Banking Finance Companies (NBFCs) and Micro Finance Institutions (MFIs). Investment banking for the government. Regulating the payments system. Regulation of OTC trading on government bonds, currency market and derivatives on currency or interest rate underlyings. Shares regulation of corporate bonds, and exchange traded derivatives on currency or interest rate underlyings. Operates the system of capital controls.
SEBI	Regulation of equity spot and derivatives including both critical financial infrastructure and participants on these markets. Regulation of mutual funds. Shares regulation of corporate bonds, government bonds, interest rate futures and currency futures. Prudential regulation of foreign institutional investors operating on the markets which SEBI regulates.
Forward Mkts Comm.	Regulation of exchange-traded futures on commodity underlyings.
IRDA	Regulation of insurance.
PFRDA	Regulation of all aspects of the New Pension System (NPS)

work is undertaken by the Department of Economic Affairs (DEA), Department of Financial Services (DFS), Department of Consumer Affairs (DCA) and the Department of Company Affairs (DCA). There are also other government bodies which perform quasi-regulatory functions, including NABARD, NHB and DICGC.

This assignment of functions into agencies is embedded in the texts of laws before 1956, and thus reflects a vision of economic policy, and a state of development of the financial system, rooted in mid-20th century India.

An associated set of issues concerns the legal process. From the 1990s onwards, regulators in India have been placed in a legal setting where there is a clear separation between a regulator performing regulation while a private industry performs service provision, where the regulator is charged with creation of subordinated legislation through a transparent and consultative process, where the investigative and enforcement process is performed in a quasi-judicial fashion with full transparency of reasoned orders, and there is a fast-track specialised court which hears appeals. None of these principles were part of the ethos of governance in India in 1956. As a consequence, large parts of the financial regulatory landscape lacks these features.

1.7 Summary

In this section, we have summarised the key features of Indian finance. With a growing savings rate and a growing share of private corporate capital formation, and with a high growth rate of GDP, Indian finance is rapidly handling large amounts of capital approaching world scale.

At the same time, the policy analysis of Indian finance must contend with five defining features: a high degree of financial repression, a deeply rooted protectionism which excludes international financial firms and service providers from the domestic economy, where public sector firms dominate the worlds of banking, insurance and pensions and where roles and functions of government agencies – and the associated legal process – were defined by 1956.

2 The difficulties of this approach

2.1 Financial repression

As summarised earlier, India's financial repression involves forcing financial firms to place part of their assets with the government. The fraction thus appropriated stands at a quarter for banks, a half for insurance companies and nearly 100% for EPFO. Viewed narrowly, this is not an overt attempt at resource pre-emption. The proximate motivation is prudential regulation, where investing in government bonds is motivated by a quest for safety and soundness.

However, it is not easy to reconcile this stance with a quest for safety and soundness. Financial regulators of OECD countries are also concerned with safety and soundness, and do not achieve it through requiring such resource pre-emption. Banks, insurance companies and pension funds would be safer if their assets were diversified internationally, including purchases of government bonds of countries with lower credit risk than that of the Indian government.

India's financial repression imposes a tax upon formal pension, insurance and banking. This distorts the economy away from the use of formal pension, insurance and banking (Demetriades and Luintel, 1997). From first principles of tax policy, broad-based taxes such as an economy-wide income tax or value added tax (VAT) are a more efficient way to obtain the identical financing.

A related issue is that of information signals and incentives for fiscal prudence. In India, the primary focus in achieving sound debt dynamics has been upon fiscal responsibility legislation (Kelkar, 2004). However, the Fiscal Responsibility and Budgetary Management (FRBM) Act does not generate adequate incentive for government to achieve fiscal stability. Market-based financing from a bond market would yield improved incentives. When investors *voluntarily* buy government bonds, the cost of financing will reflect perceptions of fiscal stability. Through this, a subtle system of checks and balances will arise, nudging the government towards fiscal prudence.

In OECD countries, the dominant mechanism for achieving and maintaining fiscal balance is this process of bond issuance with purely voluntary purchases of bonds. This is a more effective mechanism for achieving sound debt dynamics, when compared with fiscal responsibility legislation. In India, a shift away from financial repression will give a voice to the bond market in debt dynamics.

2.2 Protectionism

The consequences of protectionism are well understood. Indian manufacturing experienced substantial difficulties when trade liberalisation was undertaken, but this then set the stage for a far-reaching transformation of technological and managerial capabilities (Panagariya, 2005). Indeed, many firms grew to achieve high productivity alongside exporting and overseas investment.

Similar gains are likely when the financial system is exposed to global competition. Indian users of financial services – both households and firms – will benefit from global standards of quality and pricing of financial services. Some Indian firms would find it difficult to cope with competitive pressure, and exit. But many firms would achieve high productivity, and go on to export and build globalised businesses.

The beneficiaries of India's protectionism in finance are the domestic financial firms, who face reduced competition and are thus able to pay elevated wages and generate elevated return on capital. The costs of this regime are imposed upon households and firms, who obtain financial services of inferior quality and elevated price. Conversely, the removal of protectionism will favour the households and firms who consume financial services, and impose costs upon incumbent financial firms.

A key motivation for trade liberalisation in finance lies in the analysis of

Indian *manufacturing* firms who face competition from imports. Once tariffs and non-tariff barriers are removed on steel, Indian steel companies face global competition from global steel companies. This necessitates the removal of tariff and non-tariff barriers for coal and iron ore also, so as to ensure that production in India is not disadvantaged through elevated input costs. By this same reasoning, Indian steel companies also require access to equity and debt capital, and an array of sophisticated financial services, at world prices (Aizenman and Noy, 2004).

The removal of financial protectionism is thus an integral element of the rolling back of protectionism in the Indian economy, alongside the rise of Indian firms who compete on a global scale against imports, in overseas markets and by becoming multinationals.

2.3 Public ownership

An extensive literature has emphasised the difficulties of bureaucrats as bankers (Demirguc-Kunt, 2008). Government ownership of banks hampers financial development and reduces economic growth. These effects are particularly pronounced in developing countries.

One element of the difficulties associated with public ownership is poor investment decisions, coupled with claims upon the exchequer for recapitalisation. The period from 2000 to 2010 has been a relatively benign one in terms of solvency of public sector financial firms. However, a steady pace of fiscal costs was still incurred. This ranged from coping with failed financial firms (e.g. IFCI and IDBI), to equity injections into public sector banks which were not generating adequate retained earnings, to fiscal costs associated with promises made by UTI. These expenditures exacerbate India's fiscal stress. From the viewpoint of core functions of the State in providing public goods, it is likely that the opportunity cost of these expenditures is substantial.

Under the present legal arrangements in India, deposits with public sector banks are guaranteed without limit by the government. This has important consequences for the liquidity risk faced by private banks. Under difficult conditions, such as the financial stress of late 2008, depositors have an incentive to switch from private banks to public banks. Thus, even a small presence of public sector banks with unlimited deposit insurance exacerbates the risk faced by private banks and induces systemic risk.

2.4 Central planning

Financial regulation in India involves central planning of the products, processes and market structure. Government agencies define clear sub-industries (such as "mutual funds" or "primary dealers"), carefully define the business areas which each firm that falls into a given category can pursue, and define every detail about products and processes.

In this environment, the process of change is slow. If a financial firm gets an idea for an improvement, it does not reap the benefits (of a short-term advantage over rivals) since it has to go to the regulator for a permission, and that permission would be given for all firms symmetrically. Bereft of incentive for experimentation and innovation, financial firms in India have tended to become bureaucracies, merely manning unchanging systems. Given the distance that Indian finance has yet to cover in meeting the needs of the economy, such stasis is unsatisfactory.

Bureacrats face asymmetric payoffs, where they can be penalised for actions taken, or when scandals or crises take place. However, bureacrats pay no cost when the Indian economy suffers from a poorly performing financial system. Central planning in Indian finance thus involves a bias in favour of inaction and prevention of financial development. This problem has interacted with weak human resources at financial regulators and led to a bias in favour of blocking change as a comfortable and risk-averse solution for employees of government agencies.

Central planning systems also generate poor outcomes when bureaucrats have conflicts of interest and when bureaucrats make mistakes. In a market based system, when mistakes are made, self-corrective forces are present to a greater extent.

In an ordinary market economy, competition between private firms (who have the flexibility to experiment with new ideas) and internationalisation (which brings new ideas through foreign players) generates a steady pace of change. In Indian finance, all these sources of change have been blocked. New impulses from outside the country have been blocked through protectionism. The domination of the public sector has implied that private finance is small. The central planning system, and weak competitive pressure, has robbed private financial firms of the incentives to make progress.

2.5 Regulatory and legal arrangements

Apart from the SEBI Act and the IRDA Act, the bulk of Indian financial law was defined by 1956. In the following decades, the ethos of governance in India has shifted greatly. Modern thinking in public administration emphasises that every agency external to government requires clarity of purpose: where it has a clearly understood purpose and is not burdened with conflicts of interest. In addition, an array of accountability mechanisms need to be setup to overcome the two-level agency conflicts: first between citizens and the elected government, and between the elected government and the agency external to government.

The Indian block diagram of role and function of agencies requires modifications to remove conflicts of interest. The role and function of RBI suffers from many conflicts of interest (Khatkhate, 2005; Chandavarkar, 2005):

- Conflict of interest between monetary policy and investment banking;
- Conflict of interest between monetary policy and banking regulation;
- Conflicts of interest between RBI as regulator versus RBI as player;
- Conflicts of interest between regulation and the interest of shareholders.

The removal of these conflicts of interest should be the first goal of reforms of regulatory and legal arrangements.

The second issue is that of economies of scale in regulation of organised financial trading. At present, regulatory functions on organised financial trading are spread across SEBI, RBI and the Forward Markets Commission (FMC). This separation between multiple regulators has forced an inefficient partitioning within private firms also: e.g. a brokerage firm operating on the stock market (where it faces SEBI regulation) is forced to create a separate subsidiary to trade on commodity futures markets (with FMC regulation) and a separate subsidiary to be a primary dealer (which involves an engagement with RBI).

Given the unity of organised financial trading, there are economies of scale and scope for both government and the private sector, through unification of regulation of organised financial trading. This requires pulling together the functions related to the bond and currency market from RBI, functions related to the stock market from SEBI and functions related to commodity futures markets from FMC, and merging these into a single agency.

More generally, the financial system has changed from one almost entirely dominated by public sector firms, to an incipient role for private and foreign firms, which has helped induce a substantial rise in the sophistication of the firms. This has inevitably given rise to large complex financial institutions (LCFIs) such as ICICI and HDFC, who serve households and firms across all aspects of financial services. At the same time, these firms have chosen to organise themselves through a large number of financial firms, each of which fits the requirements of one financial regulator. The financial industry is continually constrained by the existing financial regulatory architecture, and has undertaken large scale adaptations in order to achieve economic efficiency given the present financial regulatory architecture.

The third issue on regulatory and legal reforms is the rule of law. In erstwhile years, there was a limited emphasis on legal process in Indian finance. With a financial system that was dominated by public sector firms which were seen as an extension of government, formal legal aspects of the regulatory process were not taken seriously. From the 1980s onwards, the thinking in India on legal process has evolved considerably in the field of financial regulation and infrastructure regulation. An emerging consensus emphasises a legal process comprising of:

1. Drafting of subordinated legislation with public consultation and transparency so as to avoid mistakes and reduce legal risk.
2. Careful treatment of the enforcement function of a regulator through a quasi-judicial process.
3. Reasoned orders in public domain.
4. An appeals procedure at a specialised court, leading to the development of case law in the common law tradition.
5. Full transparency of all these aspects of the legal process through the web.

When compared with this process flow, there are many weaknesses in the legal process in Indian finance, particularly those that involve older legislations. Of the Indian agencies in finance, SEBI has made the most progress in terms of achieving a sound legal process. There is room for substantial progress at SEBI, and particularly with other financial regulatory agencies, in these respects. As an example, the legal process surrounding capital controls under the FEM Act (FEMA) is weak with none of the above five elements of sound legal process being in place. Given the extent to which capital controls are an integral part of the financial regulatory regime, this gap needs to be corrected.

The fourth issue requiring new work is a better mechanism for dealing with cross-cutting issues. Some countries have unified financial supervisors, which think comprehensively about all aspects of all financial firms. However, in countries where there are multiple government agencies, there is a strong need for coordination and dispute resolution between these agencies. Given the fact that financial regulation in India is dispersed across multiple agencies, and given the growing complexity of the financial system, better coordination mechanisms are now called for.

3 Economic consequences of these difficulties in financial policy

We now turn from concerns about how Indian finance works to concerns about what Indian finance delivers to the economy. The argument is often made that Indian finance is adequate because India has achieved trend growth of 7.5% per annum. This claim sidesteps but does not invalidate the question about what Indian per capita GDP and per capita GDP growth could be if finance performed better. The argument is also made that Indian finance is adequate because India has avoided systemic financial crises. This argument is also of limited importance. Extremely safe solutions might not be optimal; there is the question of a reasonable risk/reward tradeoff. Further, many countries have been able to have fairly sophisticated financial systems and avoided systemic financial crises. The avoidance of financial crises is not a sufficient test for adequacy of a financial system.

Suboptimal use of capital. When a country has a small capital stock, the marginal product of capital is expected to be extremely high. Microeconomic evidence shows many parts of the economy where the cost of capital is extremely high: ranging from loans to individuals to loans to small firms. There is substantial evidence about heterogeneity of the marginal product of capital across firms (Banerjee and Moll, 2010; Greenwood, Sanchez, and Wang, 2010) While this is seen as a problem of financial inclusion, it is equally a problem for efficiency of resource allocation. If finance were able to channel resources into places with a high marginal product of capital, overall output would rise. Further, finance plays a deep role in risk-taking, investment and productivity improvement at the firm level. When firms face strong financial constraints, productivity-enhancing behaviour is inhibited (Gorodnichenko and Schnitzer, 2010). An extensive literature has found strong links from financial development to growth acceleration, through such channels.

Weak monetary policy transmission. Another dimension where the weak financial system hampers the economy is the weak monetary policy transmission (Bhattacharya, Patnaik, and Shah, 2010). When finance works well, monetary policy can help stabilise the business cycle. When aggregate demand needs to be reined in, the central bank raises the short-term interest rate by a small amount. This change influences myriad asset prices in the economy through the channel of a proper Bond-Currency-Derivatives Nexus (BCD Nexus) and a competitive banking system. Through this, the central bank can help to combat fluctuations of the economy. This stabilising function of the central bank is largely infeasible in India, given the lack of competition in banking, and the absence of the BCD Nexus.

Lack of financial inclusion. In recent years, there has been a considerable focus upon the agenda of financial inclusion. For many decades, India has tried to increase the outreach of the financial system through a variety of policy interventions, including nationalisation of financial firms, directed credit, rules about branching which require opening branches in rural areas, etc. Broadly speaking, these initiatives have failed to deliver financial inclusion. A large fraction of households, and most firms, continue to be cutoff from the formal financial system. This is not just the concern for policy makers who work on poverty alleviation. It is an important concern for India's economic strategy, since financial exclusion adversely impacts upon GDP growth (through misallocation of capital) and upon stabilisation (as the presence of a large informal financial system reduces the effectiveness of monetary policy).

Adverse impact upon stability. The lack of a sophisticated financial system adversely impacts upon stability in many dimensions. As emphasised above, the lack of linkages between the large fraction of households and firms of the country, and the formal financial system, adversely impacts upon the ability of monetary policy to stabilise the business cycle. Deep and liquid markets are resilient: they are able to absorb shocks while continuing to be liquid. The weaknesses of Indian finance have implied low resilience of many key securities markets (Thomas, 2006b). In similar vein, fluctuations of capital flows have a smaller impact upon financial markets such as the currency market when financial development is superior (Saborowski, 2010).

In summary, the present organisation of Indian finance has an adverse impact upon India's trend GDP growth rate, upon the magnitude of fluctuations of India's GDP growth, upon the possibility of systemic crises and for the inclusion agenda.

4 What changed in recent decades?

Much has been written about the changes in Indian finance in recent decades. In this paper, we will apply the conceptual framework of the previous sections to describe and critique the eight areas where major changes took place in Indian financial policy in the last 20 years.

4.1 The revolution of the equity market

The equity and fixed income scandal of 1992, and the desire of policy makers to encourage foreign investors in the Indian equity market, in the early 1990s, helped in reopening long-standing policy questions about the equity market. From 1993 to 2001, the Ministry of Finance and SEBI led a strong reforms effort aiming at a fundamental transformation of the equity market. The changes on the equity market from December 1993 to June 2001 were quite dramatic (Shah and Thomas, 2000; Green, Manos, Murinde, and Suppakitjarak, 2010):

- A new governance model was invented for critical financial infrastructure such as exchanges, depositories and clearing corporations. This involved a three-way separation between shareholders, the management team and member financial firms. These three groups were held distinct in order to avoid conflicts of interest. The shareholders were configured to have an interest in liquid markets, and not maximise dividends.
- Floor trading was replaced by electronic order books.
- Counterparty credit risk was eliminated through netting by novation at the clearing corporation. This has supported a competitive environment where entry barriers have been set to very low levels,[3] and a steady stream of firm goes out of business every year.
- Exchange membership for foreign securities firms was enabled, thus making it possible for foreign investors to transact through their familiar securities firms.
- Physical share certificates were eliminated through dematerialised settlement at multiple competing depositories.

[3] It is possible to become a member of NSE and BSE, and perform clearing functions, with capital of below $0.4 million. This is a lower entry barrier when compared with mainstream OECD practice.

- Exchange-traded derivatives trading commenced on individual stocks and indexes. The NSE-50 (Nifty) index became the underlying for one of the world's biggest index derivatives contracts, with onshore trading at NSE, offshore trading at SGX in Singapore and CME in Chicago, and an entirely offshore OTC market.
- A diverse order flow was accessed from all across India and abroad, thorugh hundreds of thousands of trading screens. This gave heterogenous views, and a large mass of investable capital.
- Asymmetric information was diminished through improvements in accounting standards and disclosure.
- The eligibility rules for FIIs were enlarged through time, so that thousands of FIIs were operating on the market, bringing both foreign capital and heterogenous views.

Through these events, the Indian equity market has come to have a dominant role in Indian finance. The financing of firms has shifted away from debt towards equity. Nifty-related products (ETFs, futures, options, OTC derivatives) make up the biggest single traded product. NSE and BSE are at rank 3 and 5 in the world's top exchanges by the number of transactions, and this is the only global ranking in finance where India is found.

In the larger setting of Indian finance, the equity market is the first place in India where modern finance and financial regulation have taken root. This is a major change when compared with the India of old, where none of the financial markets worked well. Looking forward, the institutional capabilities and experience of these reforms will help in transforming other components of the financial system. As an example, in 2008, the institutional capabilities of the equity market were used with great success in establishing a currency futures market.[4]

4.2 Entry of private banks

India's starting condition, in the early 1990s, was one with an almost entirely government-owned banking system, where entry by foreign or private banks was blocked. In this environment, an important experiment in easing entry

[4]See *Currency futures: An example of how India changes*, Ajay Shah's blog, http://ajayshahblog.blogspot.com/2010/04/currency-futures-example-of-how-india.html on the web.

barriers took place from 1994 to 2004, where a total of 12 'new private banks' were permitted to come into being.[5]

In terms of barriers to entry, this remains an environment with onerous barriers to entry, given that only 12 new private banks were permitted, and that over 80% of assets remain in the public hands. In addition, strong entry barriers have gone back up, for after 24 May 2004, no new private banks have come about.[6]

At the same time, this limited opening has had significant consequences. While some of these new private banks fared badly, others have done well. They have experienced sharp growth in assets. They dominate certain newer market segments, such as cards and POS terminals. They have exerted a certain limited competitive pressure upon public sector banks. As an example, public sector banks now accept computers and ATMs on a scale that was not seen in 1993, and it is likely that competitive pressure from private banks has helped.

In summary, the limited economic reform, of bringing in 12 new private banks from 1994 to 2004, was one of the important milestones of change in Indian finance, even though it was highly limited in scope and onerous entry barriers remain in place.

4.3 Capital account liberalisation

India has had a highly limited opening of the capital account (Shah and Patnaik, 2007, 2011). The Chinn-Ito measure (Chinn and Ito, 2008) reports that India has had a constant score on *de jure* openness at -1.10, at a time when the world average went from -0.378 in 1970 to +0.495 in 2007.[7] This is because India's capital account opening has been characterised by quantitative restrictions, bureaucratic procedures, limitations upon rule of law and complex forms of legal risk (Sinha, 2010).

At the same time, there is considerable *de facto* openness. Over time, the

[5] Of these, seven have survived to 2010. In practice, one more significant private bank came to life – ING Vysya Bank – through the takeover of Vysya Bank by ING. Hence, in total, there are 8 new competitors in Indian banking in 2010 which were not present in 1994.

[6] The Budget speech for 2010 announced that some new private banks will be permitted to establish operations, thus breaking with this level of entry barriers.

[7] Over the same period, the average score of the G-20 countries went from +0.029 in 1970 to +1.51 in 2007.

sophistication of legal engineering has improved, and while the private sector is forced to incur substantial transactions costs including fees to lawyers and accountants. Through this, India's *de facto* openness has changed dramatically. As an example, the Lehman failure led to a crisis on the Indian money market and a breakdown of the operating procedures of monetary policy – even though offshore money market borrowing by Indian firms is banned. This emphasises the considerable gulf between the *de facto* openness and the *de jure* openness (Patnaik and Shah, 2009-10).

This has had powerful implications for the financial system. The strongest impact has been found in the areas where there is the greatest openness: i.e. the equity market. The presence of foreign investors, the competition from trading venues such as Singapore, London and New York, and the access for foreign financial firms to the Indian securities business: each of these has helped deepen markets, improve market practice, increase competitive pressure, give greater choice to domestic financial firms who are able to list and fund-raise abroad to a greater extent, and bring new knowledge into the country. These benefits have been obtained across all aspects of the equity market, ranging from venture capital to the IPO market to the secondary market to derivatives trading.

In other areas, notably the debt market and banking, the opening has been so limited that as yet significant gains have not been obtained. Demand for international financial services from Indian firms have burgeoned, alongside their internationalisation, including imports, exports and outbound FDI. However, these purchases of international financial services are increasingly taking place in Singapore and London, given the extent to which capital controls inhibit the production of these financial services by Indian financial firms.

This component of India's financial reform is, thus, similar to the entry of new private banks: What little has been done has mattered and has helped, but relatively little has been done.

4.4 The RBI Amendment Act of 2006

In 2006, an amendment to the RBI Act was passed, which established RBI as a regulator of the bond market and the currency market. This was a step in the wrong direction, given India's direction for reform on the regulation and supervision of securities markets (argued in Section 2.5). In all OECD countries but one, only one government agency (the securities regulator or the unified financial regulator) deals with all aspects of organised financial trading.[8] In India itself, shortly after 2006, expert committee reports were produced advocating the merger of all regulation of organised financial trading into a single regulator. The RBI Amendment Act of 2006 stands out as a step in the wrong direction; the policy agenda now involves reversing this.

4.5 Fiscal transfers to public sector financial firms

In recent decades, the exchequer has brought money into public sector financial firms under three scenarios:

- *Explicit obligations of the exchequer*: Some public sector financial firms encountered bankruptcy, and were always rescued using public money. This covers experiences such as Indian Bank, IFCI, etc.
- *Implicit obligations of the exchequer*: One scenario – the difficulties of UTI in 2001 – concerned implicit promises which were made by UTI, where upholding those promises required money from the Ministry of Finance.
- *Failure of banks to generate equity capital through retained earnings*: In a well run bank, the growth of equity capital through earnings retention should enable growth of the balance sheet. In India, on many occasions, public sector banks which failed to produce retained earnings and thus adequate equity capital were given additional equity capital by the government so as to obtain balance sheet expansion.

The Indian experience has been a healthy one, when compared with that of some other countries such as Indonesia, in that these payments have been relatively small. At the same time, a three-pronged modification of strategy is appropriate:

1. Problems should be solved before they are crystallised. Just as the UTI problem should have been detected and blocked ahead of time, today there are looming problems which will yield difficulties in the exchequer in the future. One example of these is the Employee Pension Scheme (EPS).

[8] In the US, the treatment of organised financial trading is split between the CFTC (which deals with derivatives) and the SEC (which deals with the spot market). Apart from this, the OECD practice involves a single agency which regulates all organised financial trading, with a unified treatment of equities, commodity futures, interest rate, currencies, corporate bonds, and derivatives thereof.

2. The discomfort associated with accessing public resources needs to be increased. Firms like IDBI and IFCI experienced rescues which were too comfortable from the viewpoint of the (civil servant) managers. This generates poor incentives for other managers of public sector financial firms.
3. Finally, government needs to deny additional resources to banks which have failed to build up adequate capital, for these are precisely the banks which are not efficient.

4.6 Critical financial infrastructure of the bond market

In the equity market, the strategy for critical financial infrastructure (exchanges, clearing corporations and depositories) was based on three principles. First, there was a three-way separation between shareholders, the management team and the member financial firms. Second, there was a competitive framework. Third, the regulator (SEBI) did not own critical financial infrastructure.

None of these three principles was used on the bond market. The critical bond market infrastructure involved a depository (the SGL) owned and operated by RBI and an exchange (NDS) owned and operated by RBI.

This was a problematic arrangement because RBI had conflicts of interest by virtue of being an owner and service provider, and at the same time being the regulator (after the enactment of the RBI Amendment Act of 2006). There was a loss of competitive dynamism when RBI's policy decisions leaned in favour of blocking competition against NDS and SGL. The implementation capability in SGL and NDS was limited, by virtue of being run by civil servants.

Entry barriers into membership of this critical financial infrastructure were enacted by RBI. A small club of financial firms (banks and primary dealers) was allowed to connect into this infrastructure.

This policy framework gave dismal failure in achieving bond market liquidity. On paper, India has an impressive bond market with trading screens, clearing corporation, etc. But the essence of a market is liquidity, speculative views, and resilience of liquidity. None of these are found on the Indian bond market.

4.7 Institution building of IRDA and PFRDA

Indian financial policy showed an impressive ability to throw up new institutions which rapidly made a difference in the form of SEBI (founded in 1988), NSE (founded in 1992) and NSDL (founded in 1995). In other areas, institution building ran into greater problems.

IRDA was established with the intent of becoming a regulator of the insurance business. In an unusual decision, IRDA was placed in Hyderabad, which led to an increased distance from the knowledge and staff quality of Bombay. While IRDA was relatively cutoff from the main Indian discourse on financial policy and regulation which takes place in Bombay and Delhi, insurance companies had a strong incentive to engage with IRDA. With focused lobbying by insurance companies acting upon relatively weak staff quality, and the lack of the context of the financial discourse of Bombay, IRDA came to increasingly share the world view of insurance companies.

Through this, IRDA came to increasingly support questionable sales practices and tax subsidies for fund management by insurance companies. The establishment of IRDA, thus, must be chalked up as a failure of institution building.

In similar fashion, PFRDA was intended to start out as a regulator and project manager for the New Pension System (NPS), and perhaps to grow into a full fledged regulator of Indian pensions in the future. PFRDA faced a difficulty akin to SEBI's early years in that its legislation has been delayed. At the same time, SEBI started chalking up important achievements in the 1988-1992 period. In addition, PFRDA has a strong contractual role in the NPS, which gives it regulatory powers through enforcement of contracts. Yet, in its first seven years, PFRDA has failed to emerge as a strong organisation.

The Indian discussion on the role and function of government agencies in financial regulation needs to be accompanied by a treatment of the difficulties of high quality agencies. While Indian policy makers have one important success in SEBI, which has emerged as a relatively high quality agency, Indian policy makers need to diagnose and the sources of problems at the other four agencies in finance (RBI, FMC, IRDA and PFRDA). The difficulties of IRDA and PFRDA serve as a reminder that even when an agency starts with a clean slate, without institutional baggage from a pre-reforms India, without conflicts of interest and archiac legal foundations, there is still a substantial risk of failure in institution building.

4.8 Payments system

A critical element of the plumbing which underlies the financial system is the payments system. Significant changes have taken place in this field, with the establishment of the Realtime Gross Settlement (RTGS) system. However, the requirements for the Indian payments system involves five dimensions:

1. Support for very high volumes by world standards, given the large number of economic agents in India;
2. 24×7 operation, given the need to function in Indian time, and to eliminate Herstatt risk in cross-border transactions around the globe;
3. Private management, so as to achieve efficiency and technological dynamism;
4. A competitive framework, with multiple competing providers;
5. A governance framework which induces a focus on efficiencies for the economy rather than maximisation of dividends.

At present, these features are largely absent in the Indian payments system. Existing systems support low transaction intensities, limited hours of operation, have an excessive role for government and lack competition. While critical financial infrastructure in payments has fared better than the critical financial infrastructure in the bond market, the outcomes are substantially below the requirements of the economy.

The governance problems in the payments system are akin to those seen with other critical financial infrastructure. Hence, there is an applicability of many of the key ideas seen in ownership and governance of critical financial infrastructure such as exchanges, depositories and clearing corporations.

5 Issues and priorities

In recent years, a strong effort in policy analysis has taken place on the problems of Indian finance (Varma, 2002, 2005; Lahiri, 2009; Oura, 2008; Bhattacharya and Patel, 2003; Echeverri-Gent, 2007), and the government has created a group of five internally consisted expert committee reports: the R. H. Patil report on the corporate bond market (Patil, 2005), the Percy Mistry report on international finance (Mistry, 2007), the Raghuram Rajan report on domestic finance (Rajan, 2008), the Jahangir Aziz report on establishment of the Debt Management Office (Aziz, 2008) and the U. K. Sinha on capital controls (Sinha, 2010). This section attempts a succint summary of the key ideas of this body of work.

5.1 Regulatory and financial architecture

The first task in Indian finance is the establishment of a sound block diagram of a set of government agencies which perform regulatory and supervisory functions, while satisfying the critical tests of (a) Clarify of mandate, (b) Lack of conflicts of interest, (c) Rule of law with strong accountability mechanisms and (d) Compatibility with economic efficiency. This involves seven tasks:

1. Establishment of National Treasury Management Agency (NTMA), and phasing out of financial repression.
2. Unification of regulation of organised financial trading.
3. Separation of banking regulation and supervision from the central bank.
4. Establishment of a meaningful deposit insurance corporation.
5. Establishment of PFRDA.
6. Establishment of the Financial Services Appellate Tribunal (FSAT).
7. Coordination and cross-cutting functions through the Financial Stability and Development Council (FSDC).

1. The conflict of interest that is inherent in the central bank being investment banker to the government would be addressed by establishing the National Treasury Management Agency (NTMA), a new agency which would work as an agent of the Budget Division of the Department of Economic Affairs in the Ministry of Finance. The construction of the NTMA has begun. At the same time, the experiences with IRDA and PFRDA serve as a salutory warning about the hurdles faced in India in building new government agencies. In addition, the NTMA will soon require enactment of legislation, a draft of which was created by Aziz (2008). If successful, the NTMA would reduce the burden of conflicting claims upon decision making at RBI, it would improve fiscal outcomes through access to a professional investment banker without conflicts of interest, and it would improve the functioning of the bond market. Alongside the creation of the NTMA, government needs to draw up a phased program for the removal of financial repression over a few years. This would additionally yield economic benefits in its own right.

2. As argued above, India is the only major country (other than the US) where regulation of organised financial trading is spread across three organisations (SEBI, RBI, FMC). Economies of scale and scope would be obtained by unifying the treatment of all organised financial trading – covering both spot and derivatives for both OTC and exchange for all asset classes – into a single agency. This requires legislative action in the form of replacing the RBI Amendment Act of 2006 and the Forward Contracts Regulation Act, and the existing SC(R)A and SEBI Act, by a new unified legislation.

3. The functions of banking regulation and supervision involve conflicts of interest from the functions of a central bank. Given India's difficulties of accountability and performance of government agencies, outcomes would be improved when each agency has clarity and focus upon a well defined task. In addition, the political problems that can arise in banking – particularly in an emerging market – make it harder to achieve and sustain central bank independence. Hence, there is merit in creating a Banking Regulatory and Development Agency (BRDA) as has been done in China.

4. While central banks interact with banks and a banking regulator interacts with banks, a third function which every economy requires is that of deposit insurance. The deposit insurance agency has to monitor banks, charge insurance premia to banks that vary with risk, ensure closure or merger of fragile banks before technical bankruptcy, and work as a channel for fiscal support in the event that a bank is indeed insolvent but is considered too large to fail. Fiscal interventions are inevitably political, and the deposit insurance corporation must be directly connected to the Ministry of Finance which should ultimately make decisions about the use of taxpayer resources. The distancing of the central bank and the banking regulator from decisions about fiscal support for fragile banks will help increase their independence and professionalism.

5. India's demographic structure is rapidly changing, and there is a short window of opportunity where a large bulge of young people in their working years can be drawn into an individual account, defined contribution pension system. The major design principles of the NPS (Dave, 2000, 2006; Shah, 2006) – emphasising a low-cost system which would be able to serve most of India's population – are well suited to the challenges of Indian pension reform. The political dimension of pension reform has worked relatively well, with the decision by the government to place all newly recruited civil servants from 1/1/2004 onwards into the NPS. The three critical challenges faced today are the sound implementation of the NPS, the establishment of PFRDA as a high quality financial regulatory agency and the enactment of

the PFRDA Act.

6. While India inherited a common law framework in 1947, the early development of the financial system involved many difficulties on the rule of law, as argued in Section 2.5. The rule of law requires that government agencies only act through reasoned orders in the public domain which are rooted in a well structured quasi-judicial process, and that aggrieved economic agents be able to appeal these decisions in a high speed court which has specialised knowledge of finance. The Securities Appellate Tribunal (SAT) has emerged as a successful appeals mechanism in connection with SEBI. This foundation needs to be built upon to create a Financial Services Appellate Tribunal (FSAT), which would hear appeals against orders issued by all financial regulators.

7. Even if all the presently envisaged reforms are enacted, India would have eight agencies in the financial system: RBI, SEBI, PFRDA, IRDA, NTMA, BRDA, DIC and FSAT. With the growing complexity of the financial system, there is a growing set of problems of gaps, overlaps and conflicts. As an example, in 2010 there was a highly publicised dispute between SEBI and IRDA on the regulatory treatment of insurance companies running fund management products. A large number of such difficulties have been simmering without achieving resolution. In addition, the financial stability function requires close coordination between financial agencies, given the need for new work on the bankruptcy process, achieving counter-cyclical capital requirements, and crisis response with the increasing domination of large complex financial institutions (LCFIs) in an increasingly inter-connected financial system. The proposed Financial Stability and Development Council (FSDC) will a ninth agency addressing these problems. It would be a council of regulators, with a permanent secretariat and with the Finance Minister as chairman who would be able to resolve inter-agency disputes.

5.2 A fresh approach to internationalisation

In finance, cross-border transactions can be achieved at near-zero transactions costs using modern technology. In comparison, trade in goods has a more limited potential given the larger transportation costs. In finance, there is a natural pressure for households to diversify their holdings internationally so as to achieve a free lunch of reduced risk. There is no comparable pressure in trade in goods which naturally encourages cross-border transactions. For these two reasons, internationalisation has a bigger impact upon finance when compared with its impact upon the real economy.

Ironically, the Indian real economy has thus far seen a greater internationalisation when compared with what has been experienced in finance. A fresh approach towards internationalisation must now be an integral part of financial policy.

This fresh approach must focus upon the interests of the *users* of financial services. The policy environment should support the ability for the households of India and the non-financial firms of India to obtain the highest quality and lowest cost financial services. This would reduce the extent to which the difficulties of Indian finance hamper the economy. This is analogous to the basic framework of trade reform, where the removal of trade barriers supports *buyers* in the economy (whether households or firms) and imposes heightened competition upon *producers*. The removal of barriers against foreign providers would yield immediate gains for households and non-financial firms, who would obtain improved quality and reduced prices. Domestic financial firms would then face higher competition, and a second round of benefits would be obtained through the transformation of financial firms which would then be triggered off.

This perspective is particularly relevant given the new rise of Indian multinationals, and the extent to which Indian firms compete with imported goods. When an Indian steel company is competing with imported steel, it is essential that this firm be able to buy coking coal at world prices. Trade barriers against the import of coal hamper the ability of the Indian steel company to survive. In identical fashion, policies which adversely affect the pricing or quality of financial services and debt and equity capital for the Indian steel company are detrimental to its ability to compete with global steel companies, who have access to world class price and quality for capital and financial services.

As with all middle income countries, India will *de facto* move towards scaling down and ultimately eliminating capital controls. However, in the intermediate period, India will have a significant system of capital controls. In the period that capital controls persist, two key ideas need to be brought to bear upon their structure and implementation:

1. Capital controls are an integral component of financial regulation. Hence, everything that is done for achieving the rule of law in the context of financial regulation (Section 2.5) needs to be equally applied to the field of capital controls. This will require modifying the existing Foreign Exchange Management Act (FEMA), which lacks critical features that are required for rule of law.

2. The system of capital controls should be carefully constructed so as to not induce important distortions in the financial system. Existing examples of capital controls which induce important distortions include: The bias in favour of foreign currency borrowing and the bias in favour of OTC derivatives. Systemic stability would be enhanced if Indian firms borrowed to a greater extent in rupees; yet the existing system of capital controls encourages foreign currency borrowing. Systemic stability would be enhanced if more derivatives transactions took place on exchanges; yet the existing system of capital controls discourages exchange-traded derivatives in favour of OTC derivatives.

The prospect of scaling down protectionism, and thus bringing in competition against Indian financial products and processes, may appear daunting. However, a significant extent of competition has already come about, particularly through the emergence of foreign investors, and through the easing of capital controls whereby domestic individuals can take $200,000 per person per year out of the country.

As an example, consider the biggest financial product of the country: Nifty. ETFs, futures and options on Nifty trade at multiple venues abroad as well as in India. OTC derivatives on Nifty only trade abroad. Through this, the Indian equity ecosystem is facing competitive pressure from overseas.

Other areas where offshore markets present competition include ADRs and GDRs which compete with spot equities, the Non Deliverable Forwards (NDF) market which competes with onshore derivatives on the rupee-dollar, and derivatives on the rupee yield curve. For OTC single-name CDS on Indian firms, as with OTC derivatives on Nifty, the offshore market has 100% market share since onshore trading is absent.

To the extent that Indian policy makers ignore this increasing scale of India-related finance taking place offshore, there is a risk of a hollowing out of the domestic financial system. The useful approach for policy makers is to take cognisance of this competitive environment. As capital controls and protectionism are phased out, competitive pressure will increase. This will generate a heightened focus on specific hot spots where Indian policies impede competitiveness of local firms – as happened in the phasing out of protectionism on India's merchandise trade – which is a beneficial pressure.

If the Indian financial system faces increasing global competition for India-related finance, and if avoiding a hollowing out of onshore intermediation has to require significant improvements in technology and process design for both private firms and for the government, there is no reason why competitiveness in this field must be limited to India-related finance. If world-class capabilities exist for financial services production, then they can be applied to international products also. As an example, Standard Chartered has done an Indian listing. Spot and derivatives trading on Standard Chartered in India is now in competition with Hong Kong and London. If India is able to compete against London in trading of shares of Reliance, then India may be able to compete against London in trading of shares of Standard Chartered also.

The prospect of India as an exporter of international financial services is thus tightly connected to the prospects for domestic financial intermediation in India for India-related underlyings. Two scenarios need to be compared. A gloomy scenario is one in which the domestic financial system hollows out, India-related finance moves to offshore locations, and Indian households and firms import financial services from superior overseas providers. Alternatively, if the Indian financial system is able to compete on quality and price, then a significant share of India-related finance will take place in India, and India will additionally be able to compete in the global financial landscape.

5.3 Critical financial infrastructure

Critical financial infrastructure is a special middle zone between government and ordinary private competitive firms. It includes exchanges, depositories, clearing corporations, and the payments system. These require a combination of top end management capabilities to achieve high technology and innovation, alongside a very high mission criticality both in terms of technological and in terms of governance failures. The traditional implementation by government monopolies yields poor results: both because governments lack the operational capabilities for effectively running these complex organisations, because there is a conflict of interest between service provision by the government and regulation by the government, and because public ownership tends to stifle competition.

At the same time, critical financial infrastructure providers are not ordinary firms where mere profit maximisation would suffice in achieving good results. Indeed, simplistic profit maximisation in these areas can yield perverse results. On one hand, there is the risk of extraction of surpluses through the exercise of market power, given that competition is unlikely to be perfect.

More importantly, the firms operating critical financial infrastructure are in a unique position of being the front line of financial regulation. The goal of profit maximisation often involves conflicts of interest against the goal of regulation.[9] This is unlike the issues faced with ordinary financial or infrastructure firms, where firms are regulated and there are concerns about monopoly power, but the complexity of firms themselves being regulators is absent.

This could lead to increased vulnerability of the economy to a crisis or scandal that could arise from an unscrupulous management team in the pursuit of profit maximisation. If a firm has the wrong incentives, there is a greater chance of difficulties arising in the weak enforcement climate of Indian regulation and legal system. If policy makers put a focus upon issues of ownership and governance, which strike at the very incentives of the firm, there is an opportunity at modifying the root cause of behaviour.

While India has evolved a world class equity market, progress in other areas of critical financial infrastructure has been inferior. It is important to diagnose the sources of these differences.

One important element of the success story of the equity market is the ownership and governance model which was conceived in the early 1990s for NSE and NSDL. On one hand, these were not government agencies: this freed them from the human resource and contracting constraints of government. At the same time, these were not simple profit-maximising firms. A three-way separation was established, between shareholders, the management team and member financial firms. These three groups were held distinct in order to avoid conflicts of interest. The shareholders were configured to have an interest in liquid markets, and not maximise dividends. Further, NSE and NSDL operated in competitive markets: they were not monopolies. SEBI stood distinct from these organisations, and supervised them.

While policy makers intuitively arrived at the right decisions in the configuration of ownership and governance of NSE and NSDL in the early 1990s, these principles were not encoded into policy documents, regulations or laws. There is a need today for a better articulated treatment of these issues. This is the subject of SEBI's Bimal Jalan committee, where the report has yet to be released. A better understanding of the unique policy issues of critical financial will help in achieving similar success in the remaining areas : the payments system, commodity futures, the bond market and the currency market.

[9]For a treatment of these conflicts of interest, see http://tinyurl.com/own-gov-cfi on the web.

5.4 Better implementation

In the 1990s, Indian financial policy makers displayed remarkable execution skill in bringing SEBI, NSE and NSDL to life. More recently, there has been an implementation shortfall in many attempts at institution building.

In four important areas, the political difficulties have largely been addressed, and the opportunity to make progress is manifestly visible:

- Transforming IRDA into a sound insurance regulator;
- Building the New Pension System and PFRDA;
- Building the National Treasury Management Agency (NTMA);
- Building the payments system.

The political roadblocks against progress in these four areas have been largely overcome. In each of these areas, there is a good sense about what is needed to be done; the bottleneck lies in actually doing it. In this a group of problems, policy makers need to focus on execution. It is important to diagnose the sources of failure in previous attempts on these four fronts, and emerge with a substantially different implementation plan and associated project management strategy.

In recognition of this implementation shortfall, in June 2010, the Ministry of Finance setup a *Technical Advisory Group for Unique Projects (TAGUP)* in June 2010, chaired by Nandan Nilekani.[10] While the implementation of the NPS and the NTMA are explicitly listed as goals of TAGUP, the key ideas could be highly relevant for building a payments system, and partially relevant for building IRDA.

5.5 Strategy on public sector financial firms

A looming question that Indian financial policy cannot avoid confronting is the medium-term and long-term strategy on public ownership. There are strong economic arguments in favour of a clean separation between a government doing regulation and supervision, and a purely private financial industry. As an example, in the equity market, almost all turnover at exchanges comes from a market comprised of private financial firms with free entry and a steady pace of exit.

[10] See http://www.pib.nic.in/release/release.asp?relid=62367 on the web.

In comparison with the broad question of public versus private ownership in the context of infrastructure regulation or financial regulation, there is one unique feature in banking. Consider a banking system in which there is only one small government owned bank which has unlimited deposit insurance while ordinary banks have limited deposit insurance. In times of stress, when depositors become concerned about failure of one or more private bank, there will be a large shift of deposits from private banks to this government owned bank. This very shift of deposits can induce systemic stress given the liquidity mismatches that are inherent in banking. Thus the presence of even one government owned bank, where deposits are as safe as government bonds, increases the risk of systemic crisis in banking.

At present, the political consensus in favour of bank privatisation does not exist. However, medium-term and long-term thinking about Indian finance needs to look beyond the immediate configuration of political interests. As the generation change in Indian politics comes about, the feasible set could change significantly.

In the transformation from a public-sector dominated industry to a private-sector dominated industry, there are three role models visible in India: mutual funds, telecom and airlines. In all three cases, a decade ago, there was no political consensus in favour of *en masse* privatisation, and yet each of these industries has been largely privatised by 2010. The key breakthrough in each case lay in the removal of entry barriers. Once private competition came in, the public sector firms started losing ground. This process was accelerated in the case of mutual funds by a crisis at UTI.

In Indian economic policy, telecom and airlines are similar to banking in that part of the rationale for government ownership lies in the belief that this is conducive to the inclusion agenda, of delivering services to a larger number of households. However, with banking, decades of a certain policy package has failed to make significant headway on inclusion. With telecom and airlines, the *de facto* privatisation of these industries was of critical importance in unleashing competitive pressure, achieving technological dynamism, crashing prices, and dramatically increasing inclusion. This suggests that if a similar approach – of opening up to private and foreign entry – is taken in banking, it is likely to yield progress on the inclusion agenda in contrast with the existing failed policies on inclusion.

Across these three industries, only two elements of privatisation are visible: the privatisation of the monopoly international telecom company (VSNL) in 2002, and the gradual process of privatisation of UTI. However, privatisation was not of essence in each of these stories. The transformation of each of these three industries came about primarily through the removal of entry barriers, which then led to a gradual process of loss of market share by the public sector.

This suggests that the primary focus in banking should be upon improving competition by removing entry barriers. This requires addressing six dimensions of entry barriers in banking:

1. Barriers against dedicated ATM network companies,[11]
2. Barriers against formation of new private banks,
3. Barriers against branch expansion of private and foreign banks,
4. Barriers against a greater role for new technologies of mobile phones and the Internet in retail payments,[12]
5. Barriers against money market mutual funds,[13]
6. Barriers against securitisation.[14]

This needs to be located in strategic thinking about the next five to ten years of banking policy. As an example, policy makers need to avoid injecting equity capital into public sector banks: this augments capital of management teams who have failed the market test, and hampers the gradual process of loss of market share.

In addition, policy makers need to avoid mergers between public sector banks. The research literature (Das and Kumbhakar, 2010) shows that there are limited economies of scale in Indian banking, so there will be little economic efficiency from merging state owned banks. When, in the future, the political climate is supportive of privatisation, this will be most feasible for small

[11]At present, ATMs can only be owned by banks. Hence, the entry barriers in banking imply entry barriers in ATM network rollout. Competitive dynamics can be obtained through permitting multiple competing private ATM network companies.

[12]At present, payments products can only be owned by banks. Hence, the entry barriers in banking imply entry barriers in payment systems. Competitive dynamics can be obtained by permitting mobile-based payments, and innovative Internet-based payments through firms such as paypal.

[13]Money market mutual funds can exercise competitive pressure against demand deposits of banks.

[14]With securitisation, there can be an unbundling of functions where certain specialised financial firms can perform origination functions, while investors (including banks) can hold securitised assets on their balance sheets. To the extent that securitisation is able to come about, this represents an unbundling of the functions of banks and thus exerts competitive pressure upon banking.

banks. As an example, privatisation in Indian telecom took place for the smallest firm (VSNL), but not for the large firms – MTNL and BSNL.

5.6 Tax policy

In the area of financial taxation, there are three key questions: (a) What should be the role for taxation of transactions? (b) How should tax policy confront the internationalisation of finance and (c) What should tax rates for capital gains be? Of these, the third question (taxation of capital gains) is largely a question about the political economy of tax policy. A wide array of policy choices in that regard are compatible with the existence of a capable financial system. The other two questions, however, have strong implications for the emergence of a capable domestic financial system.

In the field of public finance, the problems of taxation of turnover are well understood. As a consequence, the world over, tax reform has reduced or eliminated transaction taxes. While a variety of proposals for taxation of financial transactions have been made, the logical flaws of taxation of transactions – which are well understood in the field of tax policy – remain. This implies that Indian financial policy needs to move in the direction of elimination of stamp duty and the securities transaction tax (STT).[15]

Turning to international finance, a core principle of tax policy when thinking about cross-border transactions of financial products and services involves not distorting the decisions of economic agents. Decisions about investment or derivatives positions should be driven purely by economic considerations of risk, return and liquidity, without tax-induced distortions of portfolio composition, choices of financial intermediaries, and the location of transactions.

One way to achieve tax neutrality is the strategy of the VAT: to focus the burden of taxation upon residents and exempt non-residents. This approach has, largely, been put into place across OECD countries. As a consequence, a German investor is neutral between placing a currency futures order in London or in Frankfurt: in either event, his tax burden is the same. A British buyer of an Australian index fund or share or currency futures only pays income tax in Britain. The global market for currency futures is fully competitive: all high seas prices are free of taxation. An Indian buyer of currency futures chooses neutrally between a currency futures market in Chicago, New

[15] As an example of a recent treatment of these questions, see *Financial sector taxation: Balancing fairness, efficiency, and stability*, by Thorsten Beck and Thomas Losse-Mller, http://www.voxeu.org/index.php?q=node/5121 on the web.

York, London, Singapore, Hong Kong, or Mumbai, since he is a resident of Mumbai and all the other cities use residence-based taxation.

In previous years, global discussions on moving towards residence based taxation in finance have bypassed India. India largely taxes based on the source of the activity, a principle rooted in assumptions of a poor nation experiencing only inflows or one way flows of capital claiming resources where it can. However, in recent years, with increased economic integration, source-based taxation creates a number of unintended bad policy outcomes for the Indian economy. The use of source-based taxation is inimical to development of the domestic financial system.

As an example, foreign investors have a choice between trading shares of Infosys at NSE or BSE, as opposed to trading ADRs in New York or GDRs in London. New York and London have residence based taxation while India does not. This generates a bias in favour of not sending the order to Mumbai. These identical issues surface in the global viability of IDRs, the competition between NSE and SGX and CME on Nifty futures, the competition between the onshore and offshore markets for rupee-related derivatives, etc.

In all these areas, attempts to obtain tax revenues from the financial activities of non-residents in India, will (all things being equal) induce a reduced level of activity in domestic financial markets, and favour overseas market venues. Source based taxation would result in reduced market liquidity and thus reduced market efficiency. Source based taxation would also reduce the revenues of the full array of financial firms involved in handling this non-resident order flow, and thus adversely affect the Indian tax base: it would thus adversely impact upon both Indian GDP and Indian tax revenues.

As India further integrates into the world economy, the country will need to review present policies of source-based taxation. If transaction taxes such as stamp duty or the securities transaction tax are used domestically (even though they violate basic principles of public finance), IT systems through which these proceeds are refunded to non-residents are required, as is done with zero-rating of exports under the VAT and trade policy.

While the Mauritius tax treaty is in place, in effect, foreign investors have residence based treatment as long as their activities in India are routed through Mauritius. The only source-based taxes which apply here are India's transaction taxes. The transactions costs of going through Mauritius would be eliminated if Indian tax treaties with OECD countries shifted to a residence principle. If, on the other hand, the Mauritius treaty is modified to tax these capital inflows, then this could have important adverse effects for onshore financial intermediation.

5.7 Legal reform

The design of India's governance regime in finance is rooted in a set of laws. Critical pillars of this legal framework were established in the period from 1914, when the Chamberlain Commission was formed, to 1956. These include:

- The RBI Act of 1934
- The Insurance Act of 1938
- The Banking Regulation Act of 1949
- The Companies Act of 1956
- The Securities Contracts Regulation Act of 1956.

Much has changed by 2010, when compared with the thinking of the 1914–1956 period. Contemporary strategic thinking in financial policy has moved a considerable distance. In addition, the financial system has evolved greatly. The markets, products and regulatory concerns of 2010 are almost unrecognisably different from those prevalent in 1956.

In the last 20 years, some major achievements of financial reforms involved fundamental changes of laws, such as the creation of SEBI, IRDA and the bill which will create PFRDA. At the same time, the bulk of the work in financial sector reforms has focused on issues where legislative changes are not required, and has involved repeated peephole modifications of laws. As an example, even though the SEBI Act of 1992 is one of the newer laws, it has been amended 12 times in 18 years. While these efforts have yielded substantial progress, this approach has three inherent constraints:

1. The ever-evolving palimpsest of Indian financial law that is the outcome of such incremental reforms is becoming increasingly complex, through a stream of small modifications which often interact in unanticipated ways.
2. The room for progress through these incremental channels has largely petered out.
3. Limiting the reforms process to problems which are amenable to peephole modifications of laws inherently avoids challenges in reform which

require deeper changes to the law. Today, these are the most important questions in Indian financial reform.

Global and Indian best practices on public administration and law have evolved considerably after 1956, which is the date where the bulk of existing Indian financial legislation fell into place. As an example, there is now a much greater understanding of, and focus upon, the rule of law in India today. Newer laws and government agencies – in the field of finance and in the field of infrastructure – have a rather different legal foundation, and organisational ethos, when compared with the older laws and agencies.

In Section 5.4, four areas of work were listed where the challenge is one of institution building and of execution. In most other areas of financial reform, the existing laws are an impediment. The process of peephole modification of laws has run its course. There is, hence, a need for a larger scale of fresh thinking on the role and function of government agencies, and on issues of rule of law, so as to rewrite important financial laws. Two drafts for new laws are in hand: the draft PFRDA Bill and the draft Bill for the National Treasury Management Agency (Aziz, 2008). These were relatively standalone problems which could be faced in isolation without significant changes to the existing laws. However, fundamental modifications to the main pillars of financial legislation now need to be undertaken.

In recognition of these difficulties in financial reform, in February 2010, the Ministry of Finance announced the establishment of the *Financial Sector Law Reforms Commission* (FSLRC), which is expected to do drafting of fundamental modifications of many financial laws.

6 Conclusion

One of the most important areas of economic reform lies in the financial system. On one hand, finance is the 'brain' of the economy, and the skills of the financial system shape the efficiency of translation of gross capital formation into GDP growth. In addition, a sophisticated financial system gives resilience to shocks, particularly in an increasingly internationalised India. As an example, the extent to which monetary policy can stabilise the economy critically relies on a competitive banking system and a well functioning Bond-Currency-Derivatives Nexus: until financial policy puts these in order, monetary policy will remain relatively ineffectual.

In some respects, Indian finance has made major progress. Policy makers over the last 20 years made important progress with revolutionary reforms of the equity market (including sophisticated thinking on institution building for SEBI, NSE and NSDL), the limited entry of private banks, and the limited liberalisation of the capital account. But these three areas of greater success have not been adequate in obtaining a financial system that is commensurate with India's needs, for intermediating $390 billion of savings and investment a year for an increasingly complex and internationalised economy.

Key elements of the *ancien* regime that remain intact are financial repression, protectionism, public sector ownership of financial firms, central planning, an archaic financial regulatory architecture and weaknesses of the rule of law. The reforms program now needs to frontally confront these elements.

Some of the ideas emphasised in this paper have been accepted by policy makers and are under various stages of implementation. These five areas are:

- Establishment of the National Treasury Management Agency (NTMA)
- Establishment of the New Pension System (NPS) and the Pension Fund Regulatory and Development Authority (PFRDA)
- Establishment of the Financial Stability and Development Council (FSDC)
- Drafting rules for ownership and governance of critical financial infrastructure (presently underway with SEBI's Bimal Jalan committee)
- Drafting effort for financial law at the Financial Sector Law Reforms Commission (FSLRC).

In these areas, the challenge is one of implementation. Thirteen issues remain the agenda for policy for the future:

- Roadmap for removal of financial repression.
- Unification of regulation of organised financial trading.
- Separation of banking regulation and supervision from RBI.
- Establishment of a meaningful deposit insurance corporation.
- Establishment of the Financial Services Appellate Tribunal (FSAT).
- Modifying FEMA to emphasise the rule of law, which would also remove the gap between *de facto* and *de jure* openness.
- Modifying capital controls so as to scale down protectionism.
- A fresh effort at building IRDA.

- A fresh effort at building a payments system.
- A reduced willingness to inject equity capital into public sector financial firms.
- Removal of entry barriers against banks and banking.
- Removal of transaction taxes, i.e. the stamp duty and the securities transaction tax.
- Shift towards residence-based taxation of global financial income.

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