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Second generation reforms

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The first phase of reforms, in the early 1990s, took place in an environment where there was a well-developed consensus among economists about the first-order problems which then afflicted Indian economic policy. Today, as we contemplate the second phase of reforms, it is important to place the economic policy problems in the context of the problems and opportunities for economic growth of India in the coming decade.

The revolution in information technology is transforming the global economic structure, especially considering the post-industrial service orientation of modern economies. Economic concentration and the role of trans-national corporation are increasing. Financial integration into the unprecedentedly sophisticated global financial system offers new opportunities. Globalisation is no longer an option; it is a fact.

1 The decline of traditional industrial mass production

The bulk of income in post-industrial societies is generated in the services sector. While this seems perverse or peculiar to many people, it actually makes perfect sense. Once one has enough food, one wants it cooked by the best cooks. Once one has enough cloth one wants designer clothes.

This gives an appeal to brand names. Brand names add tremendous value to a product. A silk tie may cost only \$5 to make, but the “P” (Pierre Cardin) on it allows it to sell for \$150! Going beyond this, the super-rich go for designer clothes - one of a kind, or limited edition clothes.

Modern information technology makes it possible to provide “mass-produced personalized products”: MPPPs. The advantage of MPPPs are that they satisfy the urge for individuality, and do it at affordable costs to the masses. Thus, the future will belong to mass-produced personalized products where a great deal of value addition is done in the service sector. The MPPPs will supersede the branded products of today.

At the same time, growing global prosperity gives people more leisure and increases the demand for entertainment. Entertainment is the ultimate “superior good”, in the sense that all marginal income, beyond a point, is spent on it. The creativity of our writers, artists and entertainers is a resource which has a potentially vast global market.

2 Increasing economic concentration

The main assumption behind a modern industrial economy is that it is possible to provide a high standard of living to every individual. Such an economy is sustained by mass consumption and is geared to meet mass consumption. To sustain growth of such an economy one needs growing demand, which is ensured by the growing variety and improving quality of goods and services. When economies of scale exist, in production or innovation, this gives advantages to large firms. Two important characteristics of a modern economy is that it is mass market driven and it is technology dominated.

How long can demand keep growing? Since the large bulk of global population has a level of consumption that is way below that in industrialized nations, the scope for demand growth is very large. But even in industrialized countries, demand keeps growing, for human wants are insatiable. One consequence of ever increasing demand is that manufacturers build in obsolescence in their products.

The insatiability of wants is not just confined to material goods. It is also for power and dominance. Firms want to be ever bigger, not just because economies of scale dominate, but also because the chief executives want to be number one. Another important characteristic of present development patterns is the dominance by a few large firms with monopoly power. While a large firm with economies of scale has the potential to supply goods cheaply, a monopoly has little incentive to do so.

Investors in stock markets who gather more information about firms can make a better investment decision and earn a higher rate of return. However, the cost of collection of information does not depend on how much one has to invest. It is the same for one who wants to invest 10,000 rupees or a million rupees. Naturally, one who has a million rupees to invest would collect more information and could obtain a higher percentage return. Thus the fixed costs of information gathering generate increasing returns to scale.

These factors combine in giving us large, global firms. We have seen how, even in software production, which is dominated by artisans chipping away at code instead of assembly lines, a few large firms play a very large role.

3 Accelerating technological progress - more power for the powerful?

Technical knowledge has become the central factor of production. A firm's competitiveness depends on its command over technology. In the traditional world of economist, with only capital and labour as factors of production, every country has a comparative advantage in some products, no matter how inefficient its production system is (in a technical sense). In this world, a country with relatively more labour would export more labour-intensive products and import more capital intensive products. Even if a country has an absolute advantage in the production of both goods, i.e., it uses less labour and less capital in producing both goods compared to the other country, it would still be advantageous for the country to trade with the other country. Of course, the exchange rate would adjust so that mutually beneficial trade takes place.

Technical knowledge and innovation change the comparative advantage of a country. It can compete with other exporters when innovations reduce the domestic cost of production. The more other countries demand a country's products, the stronger its currency can become. A country's competitive advantage thus, rests on its ability to create an environment in which productivity growth is rapid.

Knowledge accumulates. Innovations depend on the stock of knowledge. The stock of knowledge is growing rapidly and it is accessible to ever more people. The number of scientists doing research today exceeds the sum total of the number of scientists who ever existed in the history of the earth. Consequently new ideas, new products, new processes, new innovations and new inventions are coming out at an unprecedented rate.

As a consequence of the increasing pace of technical innovations, products become obsolete long before they are worn out. The product cycle has become shorter and shorter. Firms have to recover their investment in research and re-tooling in a shorter and shorter period. This in turn requires a large market. Globalisation is the way through which the massive global market - rather than any subset of it - is harnessed for this rapid recouping of investments.

The information technology that has swept through the world in the last decade is changing the world in profound ways. It affects production processes. Automation is now ubiquitous. Computer chips are everywhere, from refrigerators to washing machines to cars. The computer chips embedded by General Motors in their cars makes them the largest buyer of computer chips in the world.

These changes have made information a vital input into economic activities. Information provides a competitive edge to firms. A firm that knows more about customers is able to come up with products which better cater to their interests. With better information about suppliers and availability, a firm can cut the cost of inputs. Good information technology can reduce the capital blocked in holding inventories to a fifth of traditional Indian norms for inventory.

With greater analysis about future possibilities, a firm can take more effective hedging actions using derivatives to reduce its risk. This is particularly important given the high price volatility that is seen on modern financial markets.

Unequal access to information and analysis will lead to growing inequality in the world. At the same time the information revolution and explosion is greatly stimulated by private initiatives with much beneficial impact. The challenge is to use it in a way that would benefit the poor and help reduce the inequity rather than accentuate it.

The information revolution provides an opportunity to developing countries to leapfrog and catch up with the developed world. To leapfrog, however, the frog has to come out of the well. A koop-mandook cannot leapfrog. We have to not only embrace this technology but make it universally accessible. This calls for cheap telecommunication facilities.

4 The advantages of an open society

Consider the largest economy in the world today, the US. It has a great advantage in developing new technologies. It is a society that encourages individuality. It has an educational system that is superb and widespread. It has a large pool of science and technology personnel. It has a

system that provides research support on merit. Government and industry spend a lot of money on research and development. Property rights are associated with knowledge, and creators of knowledge obtain large monetary benefits.

The US attracts the best and the brightest from all over the world. Culturally, the US cherishes diversity and avoids sectarian or ethnic discrimination. Finally it has a unique financial system, which is able to award resources to good projects, is willing to take risks, and offers the means (derivatives) through which risks can be shared and transferred. Venture capitalists play an important role in the knowledge-based economy: they help finance the process of bringing new ideas to commercial success, provide managerial support, take the risk of failure, and often make a killing. All this has produced many innovator millionaires, and some billionaires, a record unmatched by any other country.

In India, today, we have many of these ingredients needed for becoming a knowledge-driven society, and a major source of innovations. This is in contrast with many third world countries, which suffer from authoritarian or religious societies. We have a free and democratic society where individualism can flourish. Barring some exceptions, we are a liberal democracy, and modern workplaces are blind to the differences between people of diverse ethnic, religious, caste or national backgrounds. Women are not barred from public spaces in India. We have a tradition of respect for learning. We have many educated and trained people, and the top 0.1% of these have proven themselves on a global scale: they have demonstrated their ability for creativity and enterprise around the world, including in 'Silicon Valley'.

Hence, we need not only aspire to become the clerks and accountants of the world; we can also be their designers, their thinkers and their artists.

5 Globalisation - a fact, not an option

The communications technology which beams the same programmes all over the world can reach a large part of the world's population. The World Cup final was watched by billions of people around the world. This integration brings awareness about what is possible and what is available, and people learn to aspire for new products and pleasures. A global market has developed.

Globalisation is now a fact, not an option. Globalisation is now inescapable for any country. The communications revolution has turned the world into a global village. Just as everyone knows what is going on and what is available in a village, so is the case in this global village.

Trade in goods as a percentage of GDP generated in goods production has increased from 64% to 94% over the decade 1986-96. For high income countries, this ratio has grown from 70 to 179%, which illustrates how globally integrated these economies have become. The emergence of a global market and multi-national firms have also led to a deeper integration of production. Parts and components are sourced from different countries. Intra-firm trade has become a large part of the global trade. A modern car or a computer would generally have components coming from scores of countries. The ease of communication and ubiquitous large computing power have made possible such deep integration. Computers have also made it possible to manage larger and larger firms with efficiency. The diseconomies of scale have been pushed back, as IT has made it possible to manage larger firms efficiently. This has accelerated the growth of large

Trans-national corporations (TNCs).

The telecommunication and IT revolution has opened up a new set of opportunities. Till now, only global manufacturing had shown deep integration and the links in the production chain of a single product spans many countries. The same is now possible for the service sector which as noted earlier, is much larger and growing faster. The size and scope of trade in services is much larger than is commonly perceived (see Box). Free trade in services will help us export skilled white collar labour services, just as free trade in manufactured goods permits us to export blue collar labour services.

The benefits of free trade go beyond the volumes of goods and services traded. The opportunity to trade freely imposes a strong discipline on local producers. Competition from imported goods improves the quality and lowers the cost of domestic products. This disciplinary impact is a function of the prices at which trade is possible and not the volumes traded. As long as the international markets are competitive, free trade benefits a country, but with the growing power of TNCs, countries may need to impose "optimal tariffs". However, just because tariff may be optimal in some cases does not justify any and all tariff. The case for each particular tariff must be clearly made. This requires refined skills in policy analysis.

6 Financial sector integration

The globalisation has become most visible in the financial markets. Today, the flow of financial capital across countries is mind-boggling. Private capital flows for direct investment and portfolio investment to developing countries have grown rapidly from \$25 billion in 1990 to \$150 billion in 1997. For low income countries, net private inflows have reached 4% of GDP. With a reasonable capital output ratio, this should mean an additional growth rate of 1 percentage point.

Foreign exchange trading has seen a dramatic growth of \$10 billion to \$20 billion a day in 1973, to an average of \$1260 billion a day in 1995, which is 70 times larger than world trade per day. These flows, which helped countries develop rapidly, can cause a meltdown if domestic financial institutions are not properly supervised or if short term borrowings are used for long term investments. Integration with the global economy provides the country opportunities for efficiency and growth. However, it entails its own risks. The country gets exposed to international shocks and even policy mistakes of other countries. Does global integration improve human welfare? Are the gains of growth more than the pains of added volatility? Are there ways in which a country can globalize while shielding itself against the ill-effects? We don't have clear, generally accepted answers as yet.

The process of globalisation is a central source of change in the world today. It can lead to a widely shared inclusive prosperity or a highly uneven development from which significant number of countries and people are excluded. To benefit fully from it, to turn it into an opportunity, India has to adapt its policies. We have to carry out the second generation of reforms.

Box 5.1 The export of services using modern telecommunications

Low price telecommunications opens up a new breed of opportunities through which firms located in India can export services.

- The most famous export in the service sector, of course, is computer software, where the work of hundreds of thousands of people in India, today, is exported. It is not an accident that the software boom in India really took off after Internet services - no matter how clumsy and how expensive - first became available in India.
- Scientific research and development is cheaper in India. This has motivated a great deal of work of multinational firms to come to India, especially in the areas of computer software, integrated circuits and pharmaceuticals.
- Doctors outside India need a secretary to dictate notes for a minute or two for each patient. Secretarial services are cheap in India. An arrangement is made through which the doctor in Canada dials a special number which instantly connects him to a pool of secretaries in India. These secretaries are trained in the jargon used in medicine. The doctor dictates a log about the patient for two minutes while the secretary takes notes. These notes are typed into a computer, and beamed up to the doctor's computer in Canada (using the Internet), within fifteen minutes. In this fashion, the secretary in India works for a doctor in Canada.
- Database and information services working in India can create products for international consumption.
- Many financial sector activities are location independent. Firms such as GE Capital and AIG have commenced moving some of their international operations to India. Indians excel in finance worldwide; hence we can aspire to become an international centre of finance in the manner of Singapore or Hong Kong.
- There are already companies in the US where "technical support" for highly skill-intensive technology products is done out of India. A customer in the US dials a toll-free 1-800 number in the US as usual. His call is shunted to a customer support centre which is physically located in India where he is helped by highly skilled staff. The customer in the US is not even aware that his call has been fielded by someone across the globe.

Each of these illustrates the "labour arbitrage" which is possible by employing highly skilled workers in India, who can earn international wages once adequate telecommunications facilities exist.

The size and scope of these activities is enormous. Some observers have expressed the view that service exports cannot be large when compared with India's macroeconomy. We may observe that even though we have some of the worst telecom in the world today, software companies *today* account for a remarkable one-sixth of the market capitalisation of India's corporate sector. (The bulk of the revenues of India's software industry are derived from exports.) This calculation ignores all other kinds of service exports. This is a remarkable outcome - most of these companies are less than a decade old, and require miniscule amounts of capital when compared with the rest of India's corporate sector.

7 Outward orientation – II

In the 1960s and the 1970s, a debate was played out amongst economists about the importance of an ‘outward orientation’. Economies which emphasised exports of manufactured goods have often fared better than inward-oriented economies, for a wide variety of reasons. India chose to walk along a inward-looking path, and missed out on the enormous expansion of global trade.

Today, the growth of manufacturing exports from India faces three basic hurdles: poor infrastructure, a high cost of capital and high barriers to imports. While these problems should be attacked, it may be years before they are fully addressed.

In contrast, the area of service exports is a remarkable one in requiring limited infrastructure and not being capital-intensive. Telecommunications infrastructure is central to these opportunities, and it is the cheapest kind of infrastructure to build. High interest rates do not deter investments in India’s service sector (where India’s comparative advantage is higher) as much as they deter investments in manufacturing in India.

Hence, an accent on the export of knowledge-oriented services could be a remarkable niche for India to exploit. This will be particularly appropriate if the expansion of global trade in services in the coming decade proves to be something like the growth of world merchandise trade in preceding decades.

If India is able to obtain an outward orientation with an accent on service exports, all the benefits of outward orientation would accrue to us. Individuals in India would earn high-wage jobs, leading to “factor price equalisation”. Competing in global markets would push competitiveness and drive the pace of knowledge acquisition. Exports growth would generate confidence, reduce the archaic fears of “shortage of foreign exchange”, and pave the way for import liberalisation.

8 Facing the New Millennium - The Second Generation of Reforms

The reforms initiated in June 1991 sought to make the Indian economy a fast-growing economy. Rapid growth was desired to deal better with the problems of poor human development. Rapid growth was to be realized through a more efficient use of resources. For efficiency, both domestic and international competition were considered essential. What are the major accomplishments so far?

- The most rapid progress has been made in domestic deregulation of industry. The system of industrial licensing and production controls has been dismantled. Indian firms are now free to decide what, how much, where and how to produce except for eight strategic or environmentally critical industries. Foreign manufacturers now compete on Indian soil. Thus, domestic competition has been greatly enhanced.
- Trade has been liberalized considerably. Many goods can now be imported on “open general license”, i.e. without a license. Partial convertibility on current account is now in

place. Tariff rates have dropped significantly. The maximum rate is now 40%, as compared with levels like 250% earlier. The variation of tariff rates across goods is also reduced. These rates will be brought down further as part of our commitment to the World Trade Organization (WTO).

- A government must impose taxes to provide many social services that it can provide best. Yet, taxes distort relative prices and incentives. An efficient tax structure is thus critical for an efficient economy. Income-tax reforms have been more or less accomplished and the maximum marginal tax rate at 30% (with a “temporary” 10% surcharge) is comparable to international levels. Significant simplifications have been made in excise rates in the budget of February, 1999.
- Many steps have been taken in financial sector liberalization. Interest rates have been partially freed. Private entry in banking has taken place. Banks are required to satisfy prudential norms to reduce the chances of bank failure.

Dramatic institutional change has taken place in securities markets, in the form of electronic trading, clearing corporation and depository. The open electronic market which we see in India’s equity market is the most transparent form of market organisation in the world. These changes, put together, have yielded some of the lowest transactions costs on India’s equity market, by world standards. These reforms make the financial markets more efficient, reduce the cost of capital, and serve to direct it to most productive uses.

What has been accomplished is significant. Yet, much more needs to be done to get the full benefit out of what is done. The new millennium offers us a world of opportunity to partake fully in the global trade of mass produced personalised products (MPPPs) and of white collar services, to sell designer services, to entertain the leisure class with creative output. The second generation reforms should provide full freedom to all Indian citizens to develop to their fullest potential, facilitate Indian firms to grow and become multi-nationals, to let the creativity of our people flourish to acquire a technological pre-eminence in selected areas and to encourage them to exploit to the full potential the opportunities provided by a global world of knowledge industries, and turn India not only into a fast growing economy, but also a humane society with highest levels of sustainable human development.

What reforms are needed for this?

8.1 Exploiting the knowledge based global economy

A. Telecom The first and foremost area for progress towards the knowledge-based economy is telecommunications. As highlighted above, integration into the world economy, and export of services, hinges on low price and high quality telecom services being available. India’s telecom sector has dismally failed in producing these services. Some telecom services in India cost between 10 to 100 times more than the prices seen abroad. We have talked about reforms of telecom since the early 1990s and made very little progress in it. Box 8.1 summarises the vital inputs that should go into telecom reforms.

Box 8.1 The agenda for telecom reforms

- The DOT's draconian "Closed User Group" policy, which is incompatible with sensible economics, and with the basic idea of a liberal democracy, should be abolished. All interconnections by the citizens of India should be permissible, and free of censorship or snooping.
 - VSNL's monopoly on international telecommunications needs to be replaced by unrestricted competition, without requiring license fees.
 - Domestic long-distance telecom should similarly be a market with unrestricted competition where private and foreign firms face no entry barriers.
 - License fees for basic services and mobile telecom should be abolished, and unrestricted competition should come about. New technologies, such as cable vendors, should be able to offer telecom services, such as Internet access, without requiring permissions or license fees.
 - The electromagnetic spectrum is a vital resource which enables many telecom services. The defence services have appropriated an inordinately large fraction of this scarce resource. These frequencies should be freed up for civilian use. Frequencies should be auctioned off by the government, once and for all, to the private sector where they would become private property. Frequencies should trade on an exchange, just like shares. The Government should enforce property rights of the owner of a frequency, just like a usurper is prevented from misappropriating a piece of land.
 - The TRAI should be strengthened, and it should address the problems of interconnectivity and minimum standards of service quality. All discriminatory pricing, where prices of telecom services are higher for "profit making entities" such as Internet service providers, should be stopped.
 - The State should embark upon building public infrastructure for high-speed data networking. This should be a wholesale facility through which anyone can obtain a 2 Mb/s leased line for domestic networking, for a total price like Rs.30,000 per month.
 - The institutional landscape, which presently consists of DOT, TRAI, MTNL and VSNL should be altered. The bulk of DOT, which is a telecom services company, should be converted into a limited liability company. The TRAI should be a strong regulator. A small "Department of Telecommunications" should continue to work on policy questions, with no operational involvement in the telecom industry.
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B. Higher education The modern economy, certainly the knowledge economy, requires highly educated people. Primary education is a critical factor and cannot be overemphasized. But going beyond elementary education, for running a technology-intensive economy, we need a renewed effort to build higher education of the highest quality. Our experience of recent years has shown that even a few high quality engineers and managers have a disproportionate impact through the firms that they play a leading role in. It is not an exaggeration to give major credit for India's software revolution to seven institutions: the five IITs, NCST and the IISc.

These institutions today face enormous constraints in terms of finance and operational autonomy. Their student intake is pitifully small when compared with the size of India's economy. A large increase in the number of institutions *of this quality* would have a powerful impact upon our economic growth. Such 'elitist' institutions are consistent with democracy as long as admissions are open to people of all classes. In fact, they provide a way for bright persons from poor and backward classes to advance themselves. The government should fund the capital expenditure of such institutions and give annual support only to needy students.

C. Intellectual Property Rights If Indian creativity is to flourish, it has to be rewarded. A system of intellectual property rights (IPR) will open up possibilities of huge rewards for innovators. We should establish a good IPR regime.

D. Venture Capital The traditional culture of banks and bank-like institutions in India is oriented towards capital-intensive industrial projects, and they are ill-equipped to take risks in knowledge-intensive projects. New methods of operation in the financial sector, such as venture capital and "private equity funds", are better suited towards the risky projects of the knowledge-based economy.

8.2 Growing giant Indian trans-national corporations

E. Flexibility If Indian firms are to compete with global TNCs, they have to be flexible in entry and in exit. They must be able to start new activities, and also to close down unsuccessful ones. They need the freedom to redeploy resources and exit from unprofitable activities. This requires:

- Amending the Industrial Relations Act. The inability to retrench workers reduces efficiency by reducing the motivation of workers, and slows down the process of re-allocation of resources in the economy. The law should establish a due process for the retrenchment of staff.
- Eliminating small-scale sector reservations.

F. Trade Trade reforms are essential to directing resources in India to their most productive uses. Tariff levels should be brought down to internationally comparable levels. All quantitative restrictions, except for environmental and health safety reasons, should be eliminated. What is important is to realize that ability to import freely is critical for many

Box 8.2 The agenda for financial sector reforms

The financial sector has to support the growth of firms with low-cost access to debt and equity capital. It has to be a discerning source of capital, supporting strong projects while avoiding others; offering capital at a low price to low-risk projects and demanding a high price when faced with high-risk projects. The agenda for reforms on India's financial sector, today, may be summarised as follows.

- On the equity spot market, a conversion to “rolling settlement” is the last major step required in having a world class equity market.
- A liquid debt market does not yet exist in India. The institution-building that has taken place on the equity market in recent years can be rapidly applied towards this goal.
- The introduction of options and futures on the equity index has been delayed for three years now. These should rapidly come about. In addition, options and futures markets should come about for interest rates, the dollar-rupee and for commodities.
- The banking system presents severe challenges in terms of coping with the risk of bankruptcy, and with the bank failures which are impending. We should greatly improve the viability of all banks by permitting less risk-taking. In addition, we should start planning for the bank failures of the next few years, today, so as to have a fully scripted plan which can put into place when the next failure takes place.
- Venture capital funds and private equity funds are the most effective means for financing innovative firms in the new knowledge-based economy. Their growth should be strongly encouraged.
- Progress toward capital account convertibility will reduce the cost of capital for projects in India on both debt and equity markets.

export business. The ingenuity of Indian entrepreneurs will find myriad ways to exploit these opportunities.

G. Barriers to intra-India commerce As important as freer international trade is free domestic trade. Anything that obstructs it should be eliminated. Thus, all restrictions on movement, storage and trade of agricultural commodities should be removed. Both farmers and consumers will benefit if they don't have to bear the cost of inefficiency of monopolistic public sector trading organizations. Equally important for free domestic trade is the removal of indirect barriers imposed by octroi and differential state taxes.

Elimination of octroi and harmonization of state taxes should be high on the agenda. Octroi should be replaced by a property tax. This, however, is not workable if property prices are artificially depressed due to rent control. Measures to rationalize rent act are needed. Rents should be adjusted with inflation. Unearned gains in property values should be largely captured by the Municipal authorities. Till property tax can replace octroi, a surcharge on diesel should replace octroi. Since truck operators claim that the total efficiency costs of octroi are much more than collections, this can even reduce transport cost and increase municipal revenue, a truly win-win outcome.

H. Risk taking The knowledge based economy is a fast-paced environment with rapidly changing prices. Firms and individuals would find it difficult to operate in this environment without tools to hedge against these risks. This is especially true for technically skilled

first-generation entrepreneurs, who do not have a well-diversified conglomerate of family businesses to cushion them from risk. When an entrepreneur risks his everything on one project, he takes enormous risks. Markets for risk – derivatives markets – will give people an opportunity to take greater control of their risks. We should build options and futures markets which permit everyone in India to hedge their risks.

In addition, a proliferation of index funds will provide small investors with a less risky way to supply risk capital on the stock market.

I. Capital account convertibility Indian investors should have a level playing field with foreign firms. They should have the same access to international capital markets. We should liberalize and move towards capital account convertibility. While the East Asian crisis has put convertibility on the back burner, we should learn our lessons from their mistakes and move towards it, albeit with caution (see box).

J. Equity and debt markets India's equity market has made enormous progress. Only one element (rolling settlement) stands between India's equity market and the best international standards. At the same time, the debt market remains hobbled by archaic market institutions. A liquid, long-term debt market would greatly enable the growth of firms, and the financing of infrastructure.

8.3 High growth of agriculture

K. Liberalisation in Agriculture Indian farmers are no different from other entrepreneurs. They adopt new technologies enthusiastically, respond to price signals and grab opportunities to increase their own well-being. The main reform needed is to free farmers from all domestic restrictions on storage, transport and sale of agricultural products. The present policy of low output prices and subsidised (low) input prices puts a net tax on farmers; we should change to a system of internationally competitive prices on both inputs and outputs. To protect poor consumers, it is much better to provide an effective targeted safety net, than to distort food prices which helps the poor so little when compared with the cost.

L. The role of the state The responsibility of the government is to ensure that adequate public investments are made in irrigation, agricultural research, and infrastructure: that ensure well-functioning markets and facilitate exports. For providing food security, government should follow a mixed strategy of modest buffer stocks supplemented by occasional trade on the world market.

8.4 Empowering the poor

M. A safety net that works We can eliminate poverty by consolidating our various anti-poverty measures – of indifferent effectiveness – into a coherent targeted safety net for the poor. Employment programs are the most effective kind of anti-poverty program. If wages are kept below the minimum wage, such programs are self-targeting, self-liquidating and

Box 8.3 Is the case for capital account convertibility sound?

In the aftermath of the East Asian Crisis, many economists have voiced concerns about the capital account convertibility (CAC). Is the case for CAC still sound, and what do we need to do in order to avoid the crises that have engulfed Thailand, Indonesia and Korea? From India's point of view, the relevant question is "Can India augment its resources by opening up to international capital flows?" The answer to this must be yes.

East Asian economies – Malaysia, Thailand, Indonesia, Philippines and China – have seen large inflows of foreign capital which have surely boosted their growth rates. Even with partial liberalisation in 1997–98, India got FDI and portfolio investments amounting to 1.7% of its GDP. We could attract much more. The potential gain can be very large. An inflow of US\$ 20 billion, if it results in additional investment of that magnitude, could raise India's GDP by 2%.

Does CAC help in attracting more FDI? By itself, financial liberalisation is not adequate to do so. One needs other complementary policies to go with it. India is an attractive place to invest, and with appropriate policies, we could benefit a lot. But what are the dangers? Financial markets have been characterised by "manias, panics and crashes". How can a country get the benefits of CAC, while protecting itself against these manias and panics of the over-reacting herd mentality of financial traders?

This is a problem only for financial trades, because these are now almost instantaneous, and not so much for commodity trades which still take time. Foreign financial flows come in three forms: loans or borrowings, portfolio investment and direct investment. Each of these can create its own problems.

The most obvious way a crisis can develop is when domestic banks borrow internationally and lend domestically for unproductive activities. Specifically, Indonesia and Malaysia are accused of "crony capitalism". But this had provided years of high growth and cannot be called dubious lending by itself. A bank may be lending to cronies and yet may be meeting prudential norms. The danger of lending to cronies is that one becomes lax in assessing the risks, thus leading domestic banks to make poor loans, which can result in crises in any situation.

Similarly, when bank loans finance a real estate boom or a stock market boom, there are risks. If the boom is a bubble, with valuations far out of reach of the real underlying values, a collapse is inevitable. Banks loaning against real estate or stocks as collateral in such a situation, get into trouble when the bubble bursts.

Another way a liquidity crisis can develop is in a manner similar to the way a run on a bank develops. If domestic banks of a country borrow from international markets on short term and loan domestically on long term, a term structure mismatch develops between borrowing and lending. Even with credit worthy projects, if a rumour induces panic and herd behaviour leads to a stampede for exit, it may lead to a liquidity crisis and, eventually, to devaluation if domestic reserves are not adequate.

Portfolio investments can increase volatility in domestic stock markets. But it also has the potential to be self stabilising. If foreign investors all want to pull out at the same time, it would lead to a fall in stock prices, that would discourage them from going out. If they still decide to withdraw despite their losses, a country with inadequate reserves might have an exchange crisis leading to devaluation.

Box 8.4 Capital account convertibility (continued)

Finally, even direct foreign investment can lead to an exchange crisis, depending on the terms on which the investment is made. For instance, consider a power plant. If a foreign investor in the project is given a guaranteed rate of return that is greater than the social rate of return, then the investment can be immiserising. As an example, the first agreement signed by the Maharashtra government with the Enron corporation guaranteed an internal rate of return exceeding 30% on its claimed equity (provided it generated electricity as promised – something that involved little risk), which itself may have been inflated.

In all these scenarios, crisis leads to devaluation, disruption in the growth process and much social pain. The country's productive assets are sold dirt cheap in a distress sale. This is particularly troublesome when the real values of the assets are higher than the nominal value because of distorted prices and unrealistically low exchange rates.

In these possibilities, the common thread is that herd behaviour can turn a crisis into a catastrophe, if a country does not have adequate reserves. Since we cannot do anything about herd behaviour, we need measures to withstand it. The obvious way is to limit short term borrowing and ensure "adequate" reserves. If the RBI holds reserves to protect against a crisis associated with short-dated capital inflows, then these reserves are effectively a form of free insurance against short-term currency volatility, and serve to encourage short-term inflows. Such a subsidy is inappropriate, and can be countered using a tax on short-term inflows.

It is worth noting that the CAC committee of the RBI had, along with stringent fiscal discipline, banking sector reforms and/or a flexible exchange rate policy, recommended that the foreign exchange reserves should account for import needs in addition to short term debt and possible changes in the lead-lag relationship between import payments and export realisations. These preconditions would be even more beneficial than CAC. Albeit cautiously, India should move towards CAC.

self-adjusting. The government has made a good beginning by announcing its intention to combine the various programs into one, and giving the power to implement these to village panchayats.

While eliminating poverty is an important goal in its own right, an effective safety net would additionally help enable other reforms which might temporarily worsen poverty.

N. Old age security We need to set up a system for old age income security. The increase in life expectancy, the breakdown of the joint family system and the desire for modern medical care, have made old age income security a real problem. The present system of provident funds, even for those few who have that facility, is grossly inadequate largely because of excessive early withdrawals and low rates of returns. The PF system has earned an abysmal real return of 2% in the last decade. The long run average real return on the equity index has been 12%.

We need to set up effective system of saving with high rates of return, which can also reach the unorganized sector. In addition, poverty alleviation programmes for the elderly are also needed; these would need to be distinct from the employment programs mentioned above. Yet, to the extent that our approach to old age income security is based on empowering people through a lifetime of saving, it is preferable when compared with one that emphasises receiving a dole in old age.

8.5 Human development

O. Elementary Education The new age of knowledge industries requires an educated population. Public policy should put a great accent upon expanding the quality and quantity of educational services that are produced in the country. Universal and compulsory primary education is but the first step. Empowerment of parents and local government is the key through which expenditures on primary education can yield the best results.

- Primary schools should be put under the full control of Panchayats to ensure effective functioning of schools.
- Private sector initiatives in the *production* of educational services would fit well with the desire on the part of the government to *fund* education. The best way to achieve this is to empower parents. Instead of the Rs.3,000 per child per year which is spent by the State in running a poor quality primary school system, parents should be given a voucher of Rs.3,000 per child which they can use to pay to a school *of their choice*. This would spur private sector initiatives in offering educational services, and provide competition to government-run schools, who would need to improve their functioning in order to obtain students and hence vouchers.

8.6 A clean environment

P. Environmental damage Environmental sustainability is not a luxury for the rich. It is doubtful if economic growth along with environmental degradation increases social welfare at all. We need to institute effective policies to preserve and regenerate environmental resources. Use of economic instruments, a system of public hearings and public pressure backed up by right to information and full liability laws can clean up our air and water. At the same time, degraded land and forests can be regenerated through participatory programmes.

Effective policies for cleaning up air requires controlling industrial, vehicular and household emissions. The state pollution control boards are unable to enforce the present standards for industry emissions for want of effective measurement and monitoring facilities. Once such facilities are available, a more effective policy to target appropriate economic incentives to industry, would be a pollution tax related to the amount of pollutants discharged. If the measurements are made public, popular pressures would induce firms to clean up their emissions. These monitoring and measurement services could be outsourced to chartered environmental auditors. These environmental audits could then be made compulsory.

For transport sector emissions, the most effective solution is expansion of public transport. Emission standards for private vehicles must be enforced and stricter emission standards for new vehicles should be stipulated.

The use of dirty bio-fuels leads to half a million premature deaths a year. We should provide cleaner fuels to all households.

Box 8.5 The agenda for reforms in public finance

- Completion of the tax reforms that have been begun: reduce tariffs, change to VAT, harmonize state taxes, abolish octroi, amend rent control acts and impose pollution taxes.
 - Widen the tax net; introduce agricultural income-tax.
 - Sell PSUs and retire public debt.
 - Remove non-merit subsidies and price appropriately economic services provided by the government. Such pricing reforms are critical in electricity, water and fertilizer for agricultural sector. Farmers should be compensated by higher output prices and more public investment in agricultural infrastructure. The poor consumers whose real incomes would go down when food prices increase, should be compensated by self-targeting programmes of income support such as employment guarantee schemes.
 - We need to take a comprehensive look at government spending today, with an objective of eliminating projects and schemes which fare poorly in a cost–benefit sense. The potential for expenditure reduction in this fashion could be as large as 50% of expenditure.
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8.7 Improvements to Governance

Q. Public Finance Public finance reforms should get a high priority in the second generation reforms. Only that can provide the needed funds to the government which has to recover its freedom to expand social services best provided by it, and to avoid the distortions of interest rates and of the financial sector which come about when the State pre-emptively obtains these resources.

The first-order issues in public finance have, so far, been the *aggregate* expenditure, tax revenue and fiscal deficit. However, it is equally important to take stock of expenditure patterns and measure the cost-benefit ratios of the myriad schemes and projects which have been accumulated over the years. We are suffering from very low quantity and quality of *outcomes* in the creation of public goods, given the levels of *expenditures* on them. One after another, governments have initiated schemes but not closed down enough of the failures. The myriad poorly run government programs are symptomatic of the poor governance which we have in India today.

R. Power Sector Reforms The unfinished agenda of rationalising electricity prices and eliminating subsidies to farmers and domestic consumers should be high on the reforms agenda. Without it, even private power will not become available. We are in a fragile situation today, where if industry goes massively for captive power plants, the present power systems will go into a state of near-breakdown.

S. Legal reforms Accountability and the enforcement of contracts requires that we have a legal system that dispenses justice quickly, inexpensively and sensibly. Reforms of our legal system to make it so is vital for economic progress as well as social justice. These should work at two levels: the administrative problem of how courts work, and the basic problem of redrafting fossilised legislation.

9 In conclusion

These reforms are feasible. There is also a large political consensus on them. Lobbies of vested interests, and vocal minorities, would object to some of them. Yet, if we show courage and carry them out, India's development can accelerate dramatically.