

**CHINA'S SOCIALIST MARKET ECONOMY:
Lessons for Democratic Developing Countries!**

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* Any views expressed in the paper are those of the author and should not be attributed to the organization for which he works.

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Abstract

The focus of the paper is on past economic growth, its determinants and the identification of policies that can be adopted by other countries to accelerate economic growth. There are of course negative lessons that can be learned from China, things to avoid doing. Several of these are mentioned as potential weaknesses or as negative side of positive policies, but they are *not* presented explicitly as (negative) lessons. The paper's focus is on successful Chinese policies that can be emulated by others to an extent (within certain bounds) that are mentioned by the author. The author is *not* trying to draw lessons for China itself on what policies it should correct or how China can do better in future, though some of these emerge as by products.

Issues relating to non-economic factors such as human rights and democratic empowerment are outside the scope of this paper.

1 INTRODUCTION

Through the 1990s China was widely and often held up as a paragon of economic policy reform driven growth and an example for others to follow. We in India were not immune to the temptation to do the same. There is no doubt that China has lessons that India and many other countries can learn, lessons that will help improve their growth rate. Some of these lessons have been correctly learned, for instance those related to the export led growth model adopted by many S. E. Asian and E Asian countries. There is however a great danger of learning wrong lessons, This danger arises from the fact that information can and is controlled much more easily in a communist party ruled State than it is in a democracy, even a flawed one. China has also gone out of the way to make economic interaction with it (e.g. FDI, outsourcing of manufacturing) profitable for foreigners (non-Chinese), so their interests are best served by publicising information that ensures that profitable interaction with the Chinese Communist Party (CCP) and the State continue.

The present paper is an attempt to derive a more balanced picture of China's past success so that better and more fruitful lessons can be drawn for the use of other non-communist countries. In this context the economic history of India, characterised as it is by 30 years of Indian Socialism can be quite beneficial as it comes closest to the market based "Socialism with Chinese Characteristics". In contrast comparisons of China with Soviet socialism (USSR) can be very misleading and those with Cuba or North Korea are deliberate red herrings. With the exception of the degree of external openness (FDI & foreign trade), China's economy in 2005 is still much more 'socialist' than India's was in the heyday of the Indian Version of socialism.

2 OVERVIEW

In the late 1930s Oskar Lange put forward the idea of “Market Socialism,” an economy in which assets (means of production) were owned socially (by the communist party or State), but which mimicked the supply-demand price adjustment of the competitive market economy. Aba Lerner, Lange and others then debated this issue during the 1930s. The key element that is common to ‘market socialism’ a la Lange and Lerner and ‘Socialism’ (a la Lenin and Stalin) is socialist (i.e. party) ownership and (managerial) control of assets. The key difference is market based allocation of goods and services versus centrally planned allocation of goods and services.

In China, the ‘market’ element has expanded gradually since the start of the agricultural reforms in 1979¹ and the introduction of Urban reforms in 1984. In 1992 China publicly stated that its goal is a “socialist market economy with Chinese Characteristics.” Though China has successfully expanded the scope of the market, “socialist” (communist) control of factors remains very important. An understanding of these elements is essential to an understanding of the economic performance of China.² The paper starts by giving a stylised version of China’s economy in terms of the mix of socialist and market elements. This leads to an explanation of the growth performance of the Chinese economy and appropriate lessons for other countries, particularly non-socialist ones.

The primary “market” economy is in products (goods & non-infrastructure services) where even CCP controlled enterprises compete to maximise growth, as in a private corporate economy. The other market elements are external capital (100% foreign invested enterprises and Joint Ventures) and external trade. Exports and FDI have played such an important role in China’s economy that its growth has been characterised as ‘Export-led growth,’ and could since 1990 be characterised as ‘FDI-export led growth.’ The extent to which import trade is now free is not entirely clear, though on balance this could be put into the market category. There is also a competitive fringe of individual capitalists/private capital that operates in export production.

¹ After the third plenum in December 1978.

² The reforms that China is currently undertaking or plans in future, have no relevance to past performance. The focus of the paper is on industry so early agriculture reforms are not discussed.

The socialist planning system still operates, however, in factor markets (land, labour, capital) and infrastructure and the pricing of these inputs is used to provide (indirect) subsidies to foreign investors and domestic exporters. Cities/Provinces can and do price land to any buyer at any price. The labour responsibility system determines where person can work legally and where it cannot. The banking system has evolved little from a government department where loans are decided on the basis of provincial/national objectives and ability to repay is irrelevant (variable cost of capital).³ Infrastructure pricing and supply (particularly to foreign invested enterprises) is similarly decided on the basis of national/ provincial/ city objectives and can vary with enterprise. This is also true to some extent for the output of the State Owned Enterprises (SOEs) which remain subject to central department (their bosses) orders and directions.

In moving from the “Socialist” to the “Socialist Market” Economy, China has borrowed aspects from the “Nationalist Market Economies” of developing Japan, S. Korea and Singapore. The primary objective of the latter government’s was to catch-up with the advanced countries through fast growth of average income. They therefore developed a national consensus to maximise GDP growth. The whole nation was mobilised to achieve this goal. The simplicity of this objective (growth, investment, production) made it much easier to decentralise it and ensure accountability at every level including that of the private corporate sector (Zaibatsu, Chaebol). Democratic accountability was however stronger in these countries, so that much greater attention had to be paid to democratisation of the gains from growth, and the welfare of all citizens.⁴

Both types of economies contrast with ‘democratic market’ economies like India that are driven primarily by democratic concerns in which the multidimensional nature of Welfare maps into multiple, often contradictory, objectives. The means adopted to achieve one objective often contradict those required to achieve another resulting in cross-cutting actions. Multiple objectives lead to diffusion of accountability and provide

³ For SOEs it varies downward from the formal rate to zero. The implicit interest rate could be negative if partial repayment is expected. For non-SOEs it varies upward from the formal rate for SOEs plus 20%.

⁴ Even though in theory we can always devise a set of assumptions that shows Welfare maximisation and growth maximisation as equivalent, we are talking about the effect of adopting and trying to implement the two approaches in the real world (outcome).

liberal scope for pursuing ones personal goals (agency problems) as failure to achieve any one objective can always be blamed on the need to ensure another.

3 SOCILIST ELEMENTS

3.1 LENINIST PARTY

The standard Marxist-Leninist description of the Communist ruled State is the “Dictatorship of the Proletariat.” In China as in other communist/socialist states this means the dictatorship of the Chinese Communist Party (CCP).⁵ To paraphrase Perkins (1994), ‘All political power in China is monopolised by the Chinese Communist party, a party that is organised along Leninist lines. Power is centralised at the top and not easily challenged from below.’ The party is a hierarchy stretching from the party general secretary at the top to the party honcho in the smallest settlement/village. The objectives, broad approach to achievement of these objectives and the parameters within which lower levels can take initiatives, is decided at the top. Within this framework there is a multilevel decision making process from the national to provincial, Metro cities and Town & Village level.

3.1.1 Decentralisation of Socialist Production⁶

This decentralisation is not a post-1978 development but has evolved since the 1960s, with the decentralisation of planning authority first to the provinces and then to the county. To paraphrase Perkins (1988), “By the 1970’s a large proportion of Chinese enterprises were under the authority of the provinces rather than Beijing. In most cases, particularly with large enterprises and strategic sectors, Beijing retained effective control even if planning formally was at the provincial level.”⁷ ‘The Collectively owned and the Township and Village Enterprises (which were then called the Commune and Brigade Enterprises) accounted for 22% of industrial production in 1978, where the ownership

⁵ The only reasonable political benchmark is the former USSR/Soviet Union. North Korea is a personal dictatorship, not a party (proletariat) dictatorship. Similarly Cuba is better described as a kind of Feudal or virtual dictatorship. Even though Castro is the unchallenged dictator of Cuba, his stature in the party, rather than use of terror, ensures that nobody challenges him (i.e. he is a virtual dictator). Therefore to say that China is far removed from North Korea and cannot therefore be called a ‘dictatorship’ is a red herring.

⁶ The discussion also draws on Shirk (1985), Jin and Qian (1998), Che and Qian (1998), Smyth (1998), Oi (1995), Putterman (1995), and Mood (2005).

rights over such enterprises resided not with the community but with the local government' (Walder (1995)).

Evidence is provided in Wong (1985) that local governments (provincial levels and below) in addition to having gained greater autonomy over allocation of materials from the Center during the Cultural Revolution, were also to a large extent able to bypass the material allocations of the central plans by setting up local enterprises with local funds. The level of Central government control fluctuated from then onwards, but decreased during the Cultural Revolution. Some materials which had been under direct allocation by the State Planning Commission or by the Central ministries were now allowed to be locally allocated. In 1966, "almost all output from local small scale industries" came to be under local allocation. These small scale industries included iron and steel, cement, chemical fertilizers, coal and farm machinery and therefore, this decentralization was not trivial to increasing local government's ability in making and implementing investment decisions. Each level of local government invested in its own enterprises decentralized to their control even if the profits from these enterprises was not formally available to them.

The immediate effect of Chinese Communist Party campaigns such as the "Great Leap Forward" and the "Cultural Revolution" were clearly highly destructive in many ways. These campaigns were however a training ground for a unique communist party structure that was highly centralised in that the party at all levels had to implement the policy orders emanating from the leadership of the party (and anybody who dared oppose the Mao set objectives of these campaigns came to a horrible end). It was also highly decentralised in its implementation and operation in that party cadres had to use their own initiative in finding (reallocating) financial resources, obtaining the capital goods for setting up furnaces and finding the raw materials for producing steel. Even the red guards had a lot of freedom in defining the 'Capitalist Roaders' and inventing re-education campaigns and punishments for them. The Maoist period of socialist experimentation, though harsh and destructive, established an experimental approach to Party and State action. In our view this experimentation and experience has been an

⁷ In fact decentralization of industry was carried to an unsustainable extreme under Mao, with the setting up of thousands of steel furnaces in the villages of China.

important foundation for converting party cadres and State employees (often indistinguishable) into public entrepreneurs.

3.1.2 The Party Core

The party has undoubtedly changed and evolved over the last 25 years and is different from what it was under Chairman Mao. But it is also very different from any ruling party in a genuine democracy or 'quasi-democratic' State. For instance one of the most important departments of the party is the personal department. This department (at different levels) vets and selects all official appointees to positions with decision-making authority⁸ and every CEO of every government owned/controlled company/ firm/ organisation. These appointees are therefore not just state officials or company /co-operative CEOs, but part of the network of the Chinese Communist party. Even if the CEO is not a party member there will be a party member (or group of members) ostensibly junior(s) in the organisation who can over rule him on 'ideological' grounds.⁹

Other vital departments of the Chinese Communist Party are the ideology and propaganda departments. The management of information is one of the important responsibilities of the party and its senior leadership. Democratic country citizens' too readily forget that the communist state has to ensure that its citizens believe, decade after decade, that every thing the party does is for their good. Good chits from foreign business partners are also helpful in this endeavour, so it is important to ensure that foreigners believe the party line. In any case, positive expectations among foreigners is essential for maximising FDI, exports and investment all of which are critical to the attainment of Party (CCP) objectives.

China is not immune to the deterioration in governance that is seen in many non-OECD countries, particularly those that try to control economic activity. The systems of government and party are therefore fraying as in these countries, leading to increased corruption. The lack of control arising from the general deterioration in governance can easily be confused with a deliberate decision to reduce, dismantle or eliminate the control

⁸ Equivalent to our Joint secretary and above.

⁹ The Chairman of one of the policy banks in China, complained in an interview in the Financial times that all his decisions were reviewed every month by a committee whose members included party officials with little or no expertise in financial matters.

network, given the level of transparency regarding internal working of Chinese Communist Party.

3.1.3 Post-1980 Financial Incentives

The degree of operational freedom and flexibility within the designed and designated sphere of operation of the lower levels has however, increased since 1980. The most important impact of the post-Mao period reforms was to increase the financial incentives of the local governments to promote investment in their regions - as not only the means to hedge against shortages under planned quotas, but as a means to increase local revenue (and hence the bonuses and perks they could award themselves), local employment and incomes (including those of their family and friends, through control over local enterprises). The three reforms that are considered in the literature to have been the most important in this change of incentives were:

- a) Enterprises were now to be taxed at fixed rates, leaving all residual profits with them
- b) Each level of government now had to pay a fixed amount out of taxes collected from enterprises under its jurisdiction to the next higher level.
- c) The introduction of Household responsibility system gave the households the right to income from sale of above-quota produce, making it necessary for the township and village governments to look for other sources of income.

Within the overall structure of decentralisation the degree of autonomy and nature of accountability for managers of organizations and enterprises can vary from province to province, from township (village) to township (village) within the same province. Thus appointment of the CEO by the party/govt can go along with a relatively high degree of operational autonomy for the CEO in a production firm.¹⁰ For instance, the town or village CCP boss who appoints the T&V enterprise CEO could leave him free to maximise the growth of the firm subject to specified obligations to the village/town administration (e.g. local purchase or hiring) and/or the local party boss. Similarly the CEO of a joint Venture may be free to pursue a growth/sales maximisation strategy subject to either promoting exports (with any losses covered by State loans i.e. disguised as NPAs) or below cost supply of intermediates to an FDI investor to attract it to that area. On the other hand, the professional CEO of an investment company or bank, may

¹⁰ But not in the financial sector where the party/govt still controls capital flows.

have limited market autonomy, with most of his decisions vetted or reviewed by a committee of party members (formally junior to him in his and other organisations).¹¹

China's governance system is therefore a mix of centralised and decentralised elements, bearing little resemblance to Stalinist USSR.

3.2 FACTOR MARKETS

The socialist control over factor markets is pervasive, compared to any 'democratic market economy,' though it may appear liberal relative to the former USSR or Mao's China. This includes the Land, Labour and Capital Markets.

3.2.1 LAND

All land is owned and controlled by the State. Because of the historical legacy of cooperative ownership of farmland, the system is slightly different in the rural areas. In many provinces farming households ostensibly have an ownership share in village and farm land, but lose this right if they move to the urban areas to work. Brandt et. al. (2002) examine the realities of land rights and tenure security, over a decade after China introduced reforms and de-collectivized agriculture. They find that although the allocations were supposed to be for 15 years, which was increased to 30 years in late 1990's, only 28% of the villages in the survey had seen no reallocation of land since 1983 and in the rest of the cases the reallocation decision was *never* made by the households concerned. Most of the reallocation decisions were made at the village level, and a small percentage at the township level, and in almost half of the villages, the date of reallocation hadn't been announced in advance. Not only are the household not entitled to own land they cultivate or to have a say in the change of their holdings, they also do not get any compensation for investments in land improvement that they might have made on the land transferred away. Although 71.6% of the villages reported that their households were free to transfer land use rights to other households, which is a short term contract in the nature of land rental, called Zhuanbao, only 3% of the land was actually rented out in 1995.

Many Urban municipalities in Market economies own urban land that is normally acquired rural land on the outskirts of a city for conversion into urban land. They have,

¹¹ Indian public sector managers have always enjoyed this type of freedom. This does not mean that we can

however, to operate within a system of zoning laws, rules and procedures. In a socialist economy land use can be changed overnight at the stroke of a pen. To whom, at what price and for what purpose the land is given, can vary with category of the person/firm. For instance, the acquisition of new land for industry involved complex negotiations with suburban communities or townships in which it gives up part of its land in exchange for guaranteed jobs for some of its members (Perkins(1988)). Buying and selling of long term leases was allowed in urban areas in the 1990s, but the process of acquisition of rural land for factory purposes remained unchanged. It is however very important to remember the positive discrimination in favour of foreign invested enterprises. The fact that such enterprises have been legally allowed to trade leased land does not mean that domestic private enterprises or individuals (as against 'socialist owned/ controlled enterprises) have the same rights. Further even if formal legal rights have been given the situation in practice may be quite different (worse) for the (genuine) domestic private sector than it is for FD investors.

Citizens can be evicted from the land if the CCP/government decides to rebuild an urban area or build a new township on rural land.¹² Till mid-2005 there was no formal system of government registration of the ownership rights of households over apartments. Thus the second owner of an apartment does not have the legal right to mortgage it to a commercial bank and get a loan, despite the fact that the original/first owner of the apartment may have had mortgaged the apartment to get a loan. The latter is the result of a cosy deal between the urban authorities, the developer and the bank, that cannot be repeated for the resale because the urban authorities are no longer involved and have nothing to gain from winking at the 'law' (the so called owner has no legal right to sell i.e. has only usufruct rights)

The urban authorities can also price the land to suit their purpose. It can therefore be reduced to a fraction or nil for a 100% foreign invested firm that brings in skills technology or products that are thought desirable or one that commits to export part or

arbitrarily classify the Indian Public sector or the TVEs as private.

¹² 30 million people have had their land taken over by property developers since 1994. According to Gao Zhi Sheng a public interest lawyer, a majority of Chinese judges are members of the CCP and therefore ensure that its objectives are fulfilled.

whole of its output. It can similarly be reduced for a real-estate developer who shares part of the profit with the urban authorities.

The rapid development of coastal cities and their absorption of such villages has left an interesting anomaly in places such as Shenzhen. There is a rich ‘village’ in the middle of Shenzhen that is owned collectively by the households that lived there and farmed the land more than three decades ago when it was a real village collective. Currently it looks more like an ‘urban jungle’ than a ‘village,’ but is still called a village.¹³

3.2.2 LABOUR¹⁴

In every Communist country the party controlled the labour unions and therefore the terms and conditions of work. This is also true in China and therefore the overall policy approach to terms & conditions of employment, work hours and wages is decided by the CCP (at an appropriate geographical level or level of government). If the CCP decides to apply different work and pay rules in a particular province, sector, industry or type of enterprise (e.g. foreign invested) from those applied to general domestic enterprises, neither the (so called) labour unions nor the employees can do anything about it. They can either like it or lump it.

In addition, in China the labour market is also controlled through the Hukou system that determines where a person is entitled to live and work and receive State provided social benefits. If people move without formal CCP permission they are in effect illegal migrants with no rights. Chinese government’s restrictions on rural-urban mobility primarily operate through the Hukou system – a system of household registration, which establishes a person’s place of legal residence (where a child’s residence is established initially at the mother’s place of legal residence). Legal residence in an area entitles one to access public schooling and healthcare, housing and job opportunities and/or land for farming. Legal change of residence is possible if either a person succeeds in getting a place at a senior middle school and then at a city college by clearing competitive exams for the same, or if the state allows it, say allowing firms in a city to hire permanent workers from nearby rural areas. A worker may live legally in an urban area, without

¹³ Presumably because that is the only way in which urban land can be owned by these citizens. It is therefore a show case of the “private ownership” and development of land in urban areas.

¹⁴ The discussion also draws on World Bank (2005), Au and Henderson (2002), Whally and Zhang (2004) and Hertel and Zhai (2004).

acquiring an urban hukou as a permanent resident on a long term permit or as a contract worker. Permits for legal residence are neither easy nor cheap to come by, and illegal migration has been increasing throughout the reform period.

Surplus labour in rural areas (due to underemployment) was estimated to be about 100 mi of which the ‘floating population’ of illegal migrants from rural to urban areas constituted ‘tens of millions’ (Perkins (1994)). Total rural to urban migrants in China were estimated to be about 76 million in 2000 and total number of migrants around 131 million. In 1999, 16.87 million migrants were legally allowed to migrate to counties other than their home counties. Though the figures aren’t directly comparable, being for different years and the 16.87 million includes both rural urban and other migration, but they give a rough idea about the extent of illegal migration. A variety of factors ensure that illegal migrants find it extremely difficult to get employment in better paying industries, among them local governments’ pressure on enterprises to give employment to local residents. And there is always the risk of deportation.

When the special economic zones were first opened, all labour contracts were with a Chinese labour bureau (CCP controlled) that effectively controlled terms and conditions of employment. Later when the demand for unskilled labour exceeded the local labour pool, people were brought in from neighbouring areas and by this act given (temporary) legal right to live and work in that Special Economic Zone. If every unskilled labourer was expected to work 100 hours a week 52 weeks a year in the SEZ, the new migrants would “voluntarily” even “happily” do so. There was no other option to earn that kind of annual wage in their own place of legal residence and the legal right to work/live in the SEZ could and was easily revoked if (s)he was not willing to accept the rules decreed by the CCP. If FDI investors were willing to produce and export labour intensive goods if a docile pool of unskilled labour willing to work day and night, was available, this was ensured by the local party bosses. The extreme restrictions on labour have undoubtedly eased over time, but likely remain stricter than in any market economy (or one that claims to be a “market” economy).

Formally labour is allowed to work for 76 hours a week of which 40 is normal and 36 overtime. Reports suggest that 100 hours a week (at normal wages or piece rates) is

not uncommon in labour intensive units producing for export.¹⁵ This ironically results in a reduction in per hour productivity below what it would be if working hours were the same as in State Owned Enterprises.

Some steps towards reform of the hukou system have been taken in recent years. In 2001, the Ministry of Public Security reduced the minimum requirements to be eligible for hukou in small towns and cities to the applicant having a permanent source of income and legal housing in the locality. And in some medium and large cities, such requirements have been reduced to having a work contract of specified duration, say more than 2 years. It is now illegal to charge migrants' children extra school fees and in early 2004, fees for temporary resident permits in urban areas were eliminated. Nevertheless, legal migration remains difficult, Central directives are subject to local implementation or the lack thereof.

In a survey by the World Bank and the Development Research Center (DRC) of the State Council in 2003 of 3156 enterprises in all 31 provinces, 60 to 70 percent of enterprises considered labour market distortions arising out of hukou status - whether due to direct pressure on enterprises to employ local residents and not to employ migrants for certain jobs and positions (Beijing specified 100 such occupations in 2000) or due to inability of local governments to provide pension, medical, unemployment benefits to migrants and education to their children – as *serious or very serious protectionist practices* affecting their region or industry.¹⁶

3.2.3 CAPITAL

3.2.3.1 Socialist Enterprises

In 1980 100% of capital assets were owned and controlled by the State/CCP. The management of these assets was (is) distributed to different levels of government, which in turn was (is) controlled by different levels of the party. Some were (are) controlled at the National level through the departments of the central government and their CCP bosses. Others are managed/ controlled at the provincial, City and Village level (village

¹⁵ As an increasing number of western companies have made commitments to stake holders to enforce labor standards in their overseas production units and suppliers, records are falsified and labor coached to provide the 'right' answers to visiting social auditors.

¹⁶ Apparently illegal migrants are henceforth to be allowed to use certain urban social services like schools for enrolling their children.

co-operatives, T&V enterprises). All industrial enterprises (now SOEs) were what in Indian parlance would be called Departmental Public enterprise. Some of these industrial enterprises have been converted into (what in India we call) Public Sector Units (PSUs), i.e. companies that may or may not be listed on the stock exchange. In China the listing could also be (solely) on the Hong Kong stock exchange or even a foreign exchange. This does not convert them into private enterprises as management control remains with the same CCP boss or his nominee/appointee.¹⁷

Similarly, Town and Village Enterprises (TVEs), though (in theory) collectively owned by the workers, are subject to local govt. direction (Perkins(1988, 1994)).¹⁸ This would in practice mean that the CEO is appointed by the local party boss/ government and works under his supervision / direction within the operational autonomy given by the latter. It would be an extremely foolhardy T&V manager who could ignore the objectives and guidelines set down by the local party boss/govt! However, party appointed managers have a sphere of autonomy assigned by the CCP/govt within which they run the firm and compete in a market environment. Thus managers of county firms may maximise value added, so that they can increase the benefits (wages, perks, employment of children) to enterprise employees. This would result in competitive behaviour in input/ output markets.¹⁹ As long term value added maximisation is the same as growth maximisation, the conflict between local and national goals is minimised. Fierce competition in product markets (both inputs and output side) is also consistent with party appointed management, given the growth objective.

China's State Owned Enterprises (SOEs) can be formally owned/ managed by the national, provincial or municipal governments. Listed companies are largely national or provincial SOEs as even collective enterprises were not allowed to raise capital on these exchanges till 1997.²⁰ TVEs are classified as non-state sector, but often this is mistaken as private sector.²¹ TVEs are SOEs controlled by the lowest level of government with a

¹⁷ In India, the Tata's exercised absolute control over TELCO & TISCO with 6-8% of the share holding till the mid-nineties.

¹⁸ The township was basically the old commune which carried out both production and government functions. Even in (so called) 'individual private' enterprises started by workers or managers, the local govt would invariably play a role and have a share in their earnings.

¹⁹ Competition can however be thwarted by local/ provincial protective barriers to trade.

²⁰ Regional stock exchange on which the latter raised capital were abolished in 1995. Listing quotas were abolished in 2000.

²¹ The correct picture as painted for instance by Gelb and Byrd(1990) and Perkins (1988, 1994) seems to have been lost along the way.

greater degree of autonomy in terms of market operation.²² However, Township governments own and operate township enterprises and Village enterprises have substantial and numerous ties to village government. Village committees perform govt. functions but village officials are not civil servants.

Urban collective enterprises can be wholly owned subsidiaries of SOEs or township promoted or hived off units.²³ Thus they have organic links to government. By way of comparison, co-operatives in India, operate under explicit rules and regulations and can be termed as private, even in those cases in which their dependence on government funds, makes them vulnerable to government interference.²⁴

We call these corporate enterprises together as **socialist enterprises**. Kuijs (2005) has shown that these enterprises are not required to pay any dividends to the government and consequently have 100% reinvestment of profits. Kuijs (2005) also shows that the exceptionally high saving rate of China is due solely to the high saving and investment by the enterprise sector, while the household and government saving rate and the latter's investment rate is in line with other Asian economies.

Institutional Reform

Limited reforms in ownership and operational flexibility led to remarkable improvements in output and productivity was SOEs. Xu (1997) estimates that that the labour productivity of these enterprises grew at the rate of 2.6% per annum during the period 1980-89. Among the reforms were:

- a) Increasing marginal profit retention rates, on average from 11% in 1980 to 27% in 1989 (though these retained profits were subject to many constraints over use).
- b) Granting firms greater autonomy over 6 main productions decisions – value and quantity of output, type of product, technology and scheduling of production, and exports.
- c) Contract responsibility system, which granted managers the legal right and some discretion to operate the firm for the contracted period. 88% of the firms in the sample had a CRS contract in 1989, while almost none did in the beginning of the sample period.
- d) Granting managers some discretion over exact wages paid to the employees.

²² According to Huang(2003), the revenue objectives of the local officials are much more closely aligned with the profit maximisation objectives of the enterprise as both depend on income maximisation, in contrast to higher levels where many macro objectives come into play and dilute autonomy and accountability (pp 140, 127, 106).

²³ With the township contributing old machinery from existing township production unit but legally owning the entire enterprise even it is subsequently nurtured/built-up by the managers with their own funds.

²⁴ They have a choice not to get funds from the govt. If they choose to become dependent on govt funds then they have to abide by the conditions imposed on provision of these funds.

- e) Increasing management turnover, though any arbitrary increase in management turnover cannot per se be considered a reform, but in so far as it might have made managers more accountable, this may influence firm performance.

Li (1997) finds a marked improvement in the marginal products of labour and capital in the 1980's, with the former increasing by 54% between the pre and post 1985 periods. There were also efficiency gains due to reallocation of labour – though how this might have come about is uncertain, as labour allocations continued to be controlled by local governments and layoffs were virtually prohibited. One possible explanation is that the ownership rights that the local governments won over SOEs in the 1980's could have induced them to allocate labour more efficiently. Another lies in the rights given to enterprises to set up collectives to place their redundant workers.

3.2.3.2 Banks

The household savings rate has fluctuated between 16% and 22% of GDP during the nineties. Because the share of household income in GDP is very low in China, household saving rates out of disposable income were quite high in the mid-nineties. They are now (2000) around 24% of disposable income or 15.5% of GDP (Kuijs (2005)). Investment by households, largely residential, is estimated by Kuijs at 5-6% in 2003. The remaining household savings ranging from 9% to 12% of GDP are transferred to the banking system.

The Policy Banks and Commercial Banks are 100% owned by the national government while the Regional banks are owned by local governments, State owned enterprises or Business Federations (govt controlled).²⁵ Till 1998 there was a formal lending quota system operated by the central bank for SOEs. The only financial intermediary that could be called private, the Urban Credit Cooperatives (UCC) was compelled to hand over a majority of shares to the municipal governments in 1995.²⁶ Up to 1998 only the Urban and Rural credit cooperatives, whose deposit base was limited to the non-state firms were allowed to lend to private firms.

In the Communist State, capital has no price or cost. Even in Socialist China, banks are not intermediaries but instruments of the State (departments) for channelling

²⁵ Minsheng Bank is owned by the All-China Federation of Industry and Commerce a govt organization overseeing private firms.

²⁶ Huang(2003), pp118.

capital into desirable activities. According to Perkins (1994), “Though formally commercial banks were separated from the Central bank early in the reform period, in reality they follow the direction of the central bank and of the government policy makers in general.” Below market interest rates are standard (Perkins (1988, 1994)). More important, capital costs can vary by borrower (in the same category) among borrowers of different categories in the same industry, place and time. Interest rates on loans to non-state firms (ie non-SOEs) have to be equal to or greater than the rate of interest to SOEs plus 20%.

According to official figures non-performing assets (NPA) for the four commercial Banks were 25% in 1998 of which 20% were loss assets. NPA’s constituted 30% of GDP.²⁷ NPA has no meaning for loans to SOEs, because credit is given if it is needed to maintain an activity or organisation that has an assigned role in the economy. In other words if partial or no repayment is expected when the loan is made it is a misnomer to call it an NPA later when the expected happens (in this situation full repayment is a low probability event and therefore unexpected). The repeated capitalisation of China’s “banks” shows that this description is not far from the truth, for a large share of loans.²⁸ Such bailouts since the Asian crises aggregate to between 50% and 100% of GDP.

This stylised picture for the entire period till 2004 should not be taken to mean that there are is no liberalisation/market reform over time or that truly market oriented lending based on technical criterion is nil in 2004. The extent of such lending is however, very hard to know accurately and is likely be a much smaller fraction of the total than is assumed by CV (conventional wisdom). Further sale of some shares to foreign banks or the public will not dilute CCP (management) control of these commercial banks in any way.²⁹ It will merely result in transfer of technology and skills to the bank for them to use within the circumscribed autonomy authorised by the CCP, perhaps with a gradually expanded scope for market lending over the next few decades.

²⁷ See Lardy (1998) for a detailed discussion of NPAs.

²⁸ A Mckinzie journal volume on China (2004) gives just of hint of this.

²⁹ A recent (2005) report in the Financial Times quoted the Chairman of one of the Commercial Banks complaining about how all his decisions were subject to review (and were reviewed monthly) by a committee consisting of party cadres holding mid-level positions in the financial system.

3.2.4 TECHNOLOGY & IPR

Realising the extent of its industrial backwardness in 1979, China did not hesitate to send thousands of students to the US and the West to close the gap in education and skills. Most of these early students were the children and kin of party officials who could be trusted to collect as much information and knowledge and bring it back for socialist dissemination. Even later a large fraction of students was connected to CCP.

Technology as a factor is largely part of the socialist system (collective ownership). There is no genuine market for technology in socialist China in the sense that individual buyers and sellers of technology can transact among themselves. In the socialist system, if any government firm acquires technology from abroad either through purchase or through a joint venture with a foreign firm, that technology could be disseminated to every government firm that needs it.³⁰ Reverse engineering where feasible would also be viewed as part of the natural right. Even in the case of ostensibly private firms such acquired technology may be transferred to others.

China has partly avoided the pitfalls of stagnating commercial technology that was one of the factors in the falling behind/collapse of the USSR, by allowing relatively free import of capital goods (embodied technology) and welcoming FDI. FDI helps avoid stagnant or negative technical change in the civil economy (i.e all non-strategic areas) that characterised the last decade of the USSR. China has also tried to undertake research in new scientific areas with some success. The output of Chinese scientists as measured by the citation index increased rapidly to respectable levels.

Increased pressure on China not to allow the widespread use of Western registered brand names and openly violate copyright and patent rights is likely to increase over time. In our view, this will have the effect of reducing the violation of IPRs on consumer goods where the violation is blatant and visible. It will have little effect (for decades) on the way IPRs on capital goods and intermediate products are regarded/treated within the socialist owned enterprises.

³⁰ A research oriented company in each industry may be selected to import, adapt, modify and develop technology for that industry and then disseminate it to all SOEs in that industry. This perhaps includes reverse engineering of imported capital goods.

3.3 INFRASTRUCTURE

As in many developing countries a large part of China's basic physical infrastructure is owned by the State. Other countries also control prices and implicitly cross-subsidise certain categories of users such as low and lower middle-income consumers. Some do the opposite by setting lower rates for industry. China, however, has the ability to tailor supply, including the supply price, to the individual user to meet other objectives such as exports or FDI. Thus for instance a distribution line could be laid or a road constructed to a new FDI investor's location if this is necessary to attract it. Utility prices could be similarly changed to suit any requirement if that helps meet an objective. There is no incentive for the receiver of this munificence to disclose or publicise such hidden subsidies, because they could just as easily be withdrawn.

4 MARKET ELEMENTS

4.1 PRODUCT MARKET

The most important market innovation that China introduced into its socialist economy was the product market. In 1979 it started with agriculture output markets. Initially agriculture markets were partially liberalised in a manner similar to that used in India for sugar and other markets in the sixties. This was a 'Dual pricing and distribution' system in which part of the produce continued to be handed over to the government at a controlled price, while the rest could be sold freely at the market price.

Many of the rules circumscribing small-scale service activities were also abolished or ignored, resulting in a boom in collectively and individually owned restaurants and shops. Labour contracting services also developed in the interior provinces to supply construction workers to urban areas.

Dual pricing in industrial goods was introduced by China in 1985-86, with prices on the market channel allowed to fluctuate according to market conditions.³¹ At this point, more than half of all industrial goods were still distributed at administered prices. Product liberalisation was gradually extended to the entire manufacturing sector. It has also been selectively extended to the real estate sector and retail trade.

³¹ 'low level government officials did extract informal payments of various kinds' Perkins(1994).

Domestic markets are however far from perfect, particularly for goods and services that were produced and traded at the county level and at the province level (to a smaller extent). As the county/province owns the local/provincial firms there is a tendency to modify regulations to favour local production and create protective barriers against import of competitive goods from other counties/provinces. This tendency will be least in cities and provinces whose CCP bosses are part of the central party leadership and therefore more interested in national growth. Further the collective enterprises that constitute the most competitive firms are limited in their physical reach by capital, transport and other constraints. Inter-provincial market integration has increased from very low to moderate levels.

4.2 INTERNATIONAL MARKETS

4.2.1 FOREIGN TRADE

In the early years external trade was carried out largely by State trading companies and Provincial trading companies and by 1993 there were 4000 such government controlled foreign trade companies. External trade can now be taken as largely market based even though the system retains a strong bias against imports; Though policy biases against imports by domestic firms have been gradually removed government and managers have an asymmetric attitude to exports and imports. In 1979, reforms were introduced to facilitate exports of manufactures and (for the first time) to allow for foreign investment (Lardy 1992). Special Economic Zones (export processing zones) were set up to free foreign investors and other exporters from red tape. Input tax offsets and export subsidies were introduced. The currency was devalued from 1.7 yuan per US dollar in 1981 to 2.9 yuan per USD in 1985. Though exports grew rapidly from 1977 onwards, imports remained tightly controlled till the mid-1980s (Perkins(1988)).

The World share of a country also measures the potential size of the market for other countries exports. The current market size is most accurately measured by the current share of World imports(\$ 10753.1 billion). In this age of globalisation the size of the market a country offers for other countries' exports is a measure of the (actual or potential) influence you have over them. It is easier to switch most imports from one

country to another than to switch exports from an established buyer/country to others.³² Thus paradoxically the size of a country's imports is a better measure of its economic power over others than the size of its exports. In some cases the latter can even be a source of dependence and weakness in terms of power relations.

In 2005 China at 6.1% of World Imports was the third largest importer after the USA and Germany, with less than 40% of the import share that of the USA. The next three largest importers, Japan (4.8%), UK (4.7%) and France (4.6%), import 30% or less of that of the USA. They are followed by another group of importers with a group of countries with around 20% of the imports of the USA (Italy (3.5%), Netherlands, Belgium, and Canada (3%)). Thus for the World, these countries would be ranked high as destination for their exports.

Germany (9.3%), USA (8.7%) and China (7.3%) are also the three largest exporters in the World.³³ The USA is however least dependent on exports while Germany and China are much more dependent on exports for their growth than the USA is. Fourth ranked Japan (5.7%) falls in the former category, while fifth ranked France (4.4%) falls in the latter category. Similarly, 13th ranked Russia (2.4%) and 29th ranked India (0.9%) fall in the former and latter category respectively. Though world exports of commercial services are 23% of merchandise exports, India with 2.8% of World exports is ranked 10th in both.

4.2.2 EXCHANGE RATE

In early 1980s foreign exchange was tightly controlled by the Bank of China even for foreign investors who needed to repatriate profit or import inputs for export. To attract export oriented FDI from Hong Kong and other overseas Chinese, government created 'foreign exchange adjustment centers' or swap markets on which those with surplus foreign exchange (e.g. joint venture hotels) could sell their surplus FE to foreign firms at market determined rates. The establishment of these centers effectively freed imports for FDI producers. The currency was devalued further to 4.8 Yuan per USD in 1990, the dual exchange rate integrated in 1994 and current account convertibility

³² Perhaps the only exception is oil imports, where there is an monopoly/oligopoly (OPEC cartel) with a small competitive fringe. It is highly misleading to treat the highly volatile spot and futures markets where most of these small competitive suppliers operate as the market for oil.

³³ Numbers in brackets are shares of World exports.

formally introduced in 1995. External trade was therefore effectively freed for foreign producers between mid-1980s and mid-1990s.

China's \$265bi holding of US government debt constituting 12% of total (the second highest holding after Japan with \$673.1 bi. at end-February 2006.) was the result of an overvalued exchange rate coupled with large US fiscal deficits.³⁴

4.2.3 FDI

The third important market element is foreign capital in the form of Foreign direct investment (FDI). Compared to the control exercised over domestic capital, FDI is attracted through the application of market principles. Normally FDI will only come if the expectation of profit is high. Conditions have therefore been created using every socialist control (indirect subsidy) at its command to attract FDI to China and to ensure that it finds it profitable to keep expanding exports. Policy has been liberalised whenever it was necessary to keep inflows of FDI and outflows of exports from faltering. This has included fairly early opening of both the real estate sector and of retail trade.

The first FDI investors to take advantage of the freeing of trade were producers from Hong Kong and Macao who shifted their export production to Guangdong SEZs in China starting in the mid-1980s.³⁵ In 1990 55% of all (realised) foreign investment came from Hong Kong and Macao and by 1992 Hong Kong's share in total Chinese exports had risen to 44%. Producer-exporters from Taiwan (to Fujian) and other overseas Chinese followed with the shift from their home countries to China accelerating in the early 1990s.

FDI inflows into an economy also measure the relative attractiveness of an economy. Though the stock of FDI, equity and debt owned by foreigners in an economy denote a mutual dependence of the host and the source country, to the extent they are difficult to disinvest, the balance of advantage shifts to the host country. Thus the share of a country in World FDI is an indicator of its economic power over the rest of the world. China with 9.3% of World FDI flows was the second largest recipient in 2003, followed by France in third place with 8.3% and USA in fourth place with 7%. Germany

³⁴ Source: www.ustreas.gov/tic/mfh.txt

³⁵ In 1979 22.6% of China's total exports were to Hong Kong, of which only 21% were exported. By 1987 the shares had increased to 31.1% and 62%. Hong Kong's share in China's manufactured exports was even higher ranging from 46% in textiles to 62% in clothing to 87% in machinery (Sung(1991)).

(2%), Russia (1.4%), Japan (1.1%) and India (0.7%) were ranked at 14th, 17th, 22nd and 23rd.

Foreign invested enterprises (FIE's) constitute most of the genuine private sector in China, particularly in manufacturing. Whalley and Xin(2006) have estimated that GDP from the FIE sector constituted about 22.5% of total GDP in 2004, up from 10% in 1995.³⁶ As cumulative FDI in *manufacturing* constituted roughly 62.5% of total FDI and manufacturing value added constitutes 37% of total GDP this would suggest that FIEs may constitute as much as 38% of GDP from manufacturing.³⁷ They show that, “the FIE sub-economy is currently growing at around 18%/year, while the non-FIE portion is only growing at 5-6%/year,” and conclude that, “this, in turn, suggests that if FDI inflows plateau, the sustainability of future Chinese growth in the 7%-10% range may be questionable.”

4.2.4 PRIVATE FRINGE

There is also a small proportion of the domestic (i.e. non-FDI) manufacturing sector that could be classified as a genuinely private sector. This consists mostly of individual (atomistic) producers who supply labour intensive goods to exporters and FDI producers. Though there is no direct management control by the CCP, the latter always has the residual power to destroy anyone who steps too much outside the limits acceptable to higher party authorities.

Genuinely private enterprises consist of two types: Individual (e.g. push carts) and those with one or more employees. In 1998 the former constituted 99.8% of the 6 mi such enterprises. Further out of the total 56% were in the service sector (mainly food & retail). Thus there were probably as little as 6000 (1/2 of 0.2% of 6 mi) private manufacturing enterprises in 1998. Some progressive Provinces/cities such as Guangdong (Shunde) and Wenzhou (Zhejiang) did try to promote private entrepreneurship and privatisation (Huang(2003) pp 110, 129). Given existing laws this required innovative steps like joint govt-private structure and labelling of firms as collective enterprises.

³⁶ Figure 5 page 9.

³⁷ $0.38 = 0.225 * 0.625 / 0.37$. The 62.5% estimate is based on figures 1 and 3 of Whalley and Xin (2006). Their own conclusions relate to **industrial output**: They state that industrial FIE's account for over 30% of China's industrial output (p1).

According to Huang (2003) there is a systematic bias against domestic private entrepreneurship, arising from the need to minimise any potential threat to the CCP's monopoly of political power. FDI investors cannot pose a political threat to the CCPs rule so the party has been quite willing to provide a playing field that is heavily tilted in their favour. In contrast, a strong independent group of private domestic entrepreneurs could at some time in the future become an alternative source of political power. Thus the capital and other markets under government control are heavily biased against genuine private domestic entrepreneurs, if not completely closed to them.

5 GROWTH MODEL

China is a nationalist State with a clear vision of national power through economic growth and technological catch-up. The Chinese Communist party translates this vision into explicit objectives suitable for different levels (nation, province, city, firm) that are broadly coherent but far from perfect (not devoid of contradictions). Among the sub-goals that this translates into are increased sales/production, value added, investment and technology transfer from the advanced countries. The growth strategy for achieving these objectives has evolved over time. Starting from the mid-1970s it first became an export-led growth strategy and then from the mid-1980s an FDI-export led growth strategy. Underlying these has been the development of domestic product markets and the evolution of the management structures of government enterprises to meet the challenges of competition in domestic and global markets.

5.1 OBJECTIVES

In general terms the objective of the CCP is to increase China's global power subject to itself retaining power internally and indefinitely. In the process of achieving the primary objective, the people should be reasonably content and no significant sub-group should become so unhappy as to revolt against CCP rule. More formally the objective is the maximisation of economic growth subject to the maintenance of existing welfare of all groups. The objective is differs from that adopted by "Nationalist Market Economies," or "Corporate States," such as Japan and S. Korea prior to their becoming high-income countries, where growth maximisation was subject to the constraint that welfare of all groups of citizens must be rising. Both approaches however contrast with

the Social Welfare maximisation objective of the governments of most “democratic market economies.”³⁸

The growth maximisation objective percolates down the CCP network and becomes the major, if not primary objective of every level of government (Province, City, Town, village) as well as of the managers of firms appointed by them. There is enough flexibility in the system to adapt the objectives to the particular circumstances and constraints of each level and the area in which it operates. At the level of the firm, the growth maximisation objective could be translated either into a market share objective similar to Corporate Capitalism or a value added maximisation objective that combines the interests of labour/managers and capital. Thus even CCP appointed managers compete in product markets. Unlike managers in corporate capitalism, however, they are subject to the guidelines and constraints arising from national/provincial/city objectives set (& conveyed) by the CCP (boss). They therefore often have to balance (trade-off) firm against national or provincial objectives (e.g. employment).

5.2 MEANS

The primary means of achieving high growth is a high investment rate. This has two prongs. One socialist/public sector investment and the second is Foreign Direct Investment (FDI). This is combined with an unprecedented degree of export orientation. Thus public investment, FDI and exports are the three pillars of China’s successful growth maximisation strategy.³⁹ The policy framework and the CCP network has been moulded to maximise these three critical elements of the growth strategy. Everything else has a secondary or marginal role in explaining non-agricultural growth to date, though it may become more relevant in future. FDI-Export led growth has earlier been an important part of the growth strategy of Singapore, Thailand, Malaysia and Indonesia, but China has taken this to a new level and scale. China has (so far) successfully combined this with levels of public investment not seen since the collapse of the USSR.

³⁸ Though a model can always be constructed in which the two objectives result in identical policies, we are talking about the real world of layers of government servants working on dozens of sectors and 100s of sub-sectors.

³⁹ Econometric evidence is presented in the section 4.5.

5.3 FOUNDATION: Public Investment

The public ownership of assets has been an important contributor to the fast growth of China's economy as it allows a motivated government to use these profits either for public investment or to provide subsidies to FDI or exporters and thus indirectly boost investment. Unlike a democratic market economy like India, China did not need to generate funds for public investment (or subsidies) through taxes that distort markets and reduce efficiency and productivity. Government appointed/controlled managers cannot however match the innovativeness of private entrepreneurs or the efficiency of growth maximising private firms (e.g. Zaibatsu, Chaebols). Though public ownership of assets has driven growth so far it can become the greatest source of weakness as public profits decline and disappear reducing public investment and stalling the entire economy. Past strength and future weakness are two sides of the same coin.

A very large fraction of assets are still owned and controlled by the State/CCP network, which appoints the top management in listed companies, co-operatives, T&V enterprises and State owned enterprises ("Socialist enterprises"). Kuijis has shown that enterprise investment has ranged between 27% and 35% since 1990. Though Government /State saving is between 4.8% and 8.1% of GDP (low government consumption on social services) it is in line with those of other countries. The govt has been investing about 2.2% to 4.3% of GDP and transferring the rest to socialist enterprises for investment. The public sector (state + socialist enterprises) therefore has a high share of national profits and consequently China can have both low tax rates and very high investment rates.

As an illustration consider the situation when the State owned 100% of the capital assets. A capital-output ratio of 4 along with an 8% rate of return on assets would have resulted in non-tax revenues of 32% of GDP.⁴⁰ Thus reinvestment of public returns to capital along with FDI inflows of 8% of GDP (7.4% in 1993, 5% in 2002) would result in a 40% investment rate without recourse to any taxes. **Gross fixed investment was less than 31% of GDP till 1992 and reached 40% in 2002.** Any tax revenues could therefore be used to subsidise certain types of exports/FDI.

⁴⁰ According to Prof Xianon Xue of the China Europe International Business School, Shanghai, the earning before interest and tax (EBIT) has fallen from 12% of assets in 1992 to 4% in 2003. He also indicated that FDI was 7% of total investment and that the bulk of investment was still made by government firms.

As the table (below) shows Chinese government’s direct investment (including in infrastructure) was the same in China as in India during 1993 to 2000. It rose sharply in China during 2001 and 2002 but has returned to earlier levels in 2003.

Table 1: Gross Investment of Government as a percent of GDP

	Average		1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
	93-00	93-02								
India										
AdminDep+DPE	3.1%	3.0%	3.6%	3.7%	3.5%	3.2%	3.0%	3.0%	3.2%	1.8%
Admin Depts	1.7%	1.7%	1.7%	1.9%	1.8%	1.7%	1.4%	1.6%	1.7%	1.7%
China										
Govt Invest	3.1%	3.3%	2.8%	2.9%	2.7%	2.7%	3.1%	3.5%	3.4%	3.5%

Source: China Data from Kuijs (2005); India data from NAS.

High rates of investment in infrastructure since the mid-1990s may have reflected a change in the allocation of public expenditure, initially driven by the unemployment created by SOE closure and weaker export demand during the Asian crises.⁴¹ This investment was not however, carried out directly by the government. The government however, ‘financed investment via capital transfers to state-owned enterprises in the power, electricity, water, transport and other infrastructure sectors [Kuijs(2005)].’ The transfers were 6.2% of GDP in 2001 (op cit) and the excess of govt saving over investment was only 3.7% of GDP. This implies that 2.5% of GDP must have gone as subsidy from government to SOEs. In any case a substantial part of China’s infrastructure investment seems to be through enterprises (socialist and foreign JVs).⁴² Table 2 shows the very high rates of investment by enterprises ranging from 24.7% of GDP to 35.5% of GDP during the 1990s. It is consistent with the hypothesis of this paper that investment by ‘socialist owned’ enterprises (‘public sector’) has played an important role in China’s growth.

⁴¹ Around 1994-95 many SOEs were shut resulting in large pockets of unemployment. The Asian crises added to this by weakening of global demand for China’s exports, thus increasing the losses from exports by government owned firms. Infrastructure spending was therefore increased in the second half of the nineties so as to increase job creation (Keynesian aspect). The positive effect on China’s image were soon recognised and publicised effectively to attract more FDI, including export oriented FDI.

⁴² See Virmani (2004d) for an analysis of the policy approach needed for development of infrastructure in India.

Table 2: Enterprise Investment and Saving

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Enterprises												
Investment	24.7%	25.3%	28.5%	35.5%	33.2%	32.9%	30.6%	29.1%	28.6%	28.4%	27.3%	29.0%
Saving	11.5%	13.0%	13.4%	16.2%	16.0%	16.4%	13.4%	14.2%	14.1%	14.1%	15.5%	15.0%
Invest-Saving	13.2%	12.3%	15.1%	19.3%	17.2%	16.5%	17.2%	14.9%	14.5%	14.3%	11.8%	14.0%
Source: Kuijs (2005)												

The USSR's early growth was also founded on high levels of government investment. Growth however stalled after the economy reached middle-income, because the USSR was largely cut-off from the global economy and the global technology pool. This lack of concern for social benefit-cost means that the marginal product of public capital may fall to zero or even become negative because of excess capacity. We know from the USSR experience that this can lead to un-saleable inventory stock, falling capacity utilisation and collapse. Though inventory investment in China reached a peak of 10.4% of GDP in 1989 it had declined 0.2% of GDP by 2002.⁴³ China therefore appears to have successfully dealt with this problem so far by liberalising output/product markets and orienting its system to push exports. The former helps avoid obvious mismatches between consumer/user demand and public sector output. Despite this, exports are an important channel for utilising excess capacity in tradable goods, a version of the old '*vent for surplus*,' with marginal cost pricing and indirect subsidies aiding this effort. Such exports can (also) help in exploiting scale economies by building plants with capacity larger than domestic demand. The unabashed promotion of export-oriented FDI has proved to be a vital means for achieving efficient and sustainable export growth. Because global export shares have to be raised at such a frenetic pace a fall in unit values is inevitable in some goods and markets.⁴⁴

Rising implicit subsidies and declining returns to public capital will eventually make it difficult to maintain such high rates of public investment. Listing of govt owned companies and banks on foreign and domestic stock exchanges is a clever way to get foreign equity capital to finance public investment. This suggests return on capital may already be so low as to create a shortage of funds for investment and implicit subsidy. Lardy (1999) estimates that the rate of return on capital in State owned enterprises has

⁴³ The previous peak was 8.4% of GDP in 1978.

fallen from 25% at the start of reform to 6% in 1997.⁴⁵ Lardy also estimates that the consequent decline in public saving from 30% of GDP to 20% has been more than offset by a rise in household saving from 0% to 20% of GDP (overwhelmingly in banks or currency).⁴⁶ It would not surprise if international capital markets readily provide these funds on the illusion that this means privatisation of Govt companies or banks.⁴⁷ If these funds are not forthcoming or when they run out China will have to alter its development strategy more fundamentally.

The exceptionally high aggregate growth rates of the past two years have made even normally loss making units temporarily profitable. This is however unlikely to be maintained when growth rates return to normal levels (historical averages).

5.4 ENGINE: FDI and Exports

Foreign direct investment is the second pillar of China's growth. China has learnt from and built upon the experience of Singapore, Thailand and Malaysia, the pioneers of FDI-export led growth. It has aggressively pursued FDI by identifying potential FDI investors across the globe, including in other successful low and middle-income countries. It has then laid out a red carpet for every FD investor that can help raise China's technological levels, skills and expertise or can directly or indirectly raise the level of exports on a sustainable basis. The welcome mat included all inducements needed to ensure that they set up base in China (including capital subsidies). Since 1997 FDI has been between 3.2% and 4.9% of GDP. According to Kuijs (2005) Net external financing of enterprise investment – from the banking sector and via net foreign direct investment (FDI) – is high compared to other countries and contributes 1/3rd of investment finance.

FDI and exports have been the engine of efficient economic growth since 1985. Adoption of an FDI-export led growth strategy converted China from an autarchy into an essential link in the global production chain developed between 1965 and 1985 by the Newly Industrialising Economies and the ASEAN 4. China created conditions (suspension of labour rights, capital subsidies to counter every negative) for a wholesale

⁴⁴ This is happening for instance in textile exports to the USA.

⁴⁵ If ROC has fallen over a decade by 8% points in (show piece) publicly listed companies (Prof Xue, foot note 10), then the ROC in other gov't firms is likely to average between 0%-4%.

⁴⁶ Profitability of SOEs has however jumped up sharply in the last two years of phenomenally high growth.

⁴⁷ As Abraham Lincoln said, "You can fool all the people some of the time," perhaps in China a lot more time than he imagined.

shift of labour intensive (LI) production by Chinese entrepreneurs from Hong Kong, Taiwan and other countries in S. E. Asia to the Special Export Zones and Regions. 59.3% of FDI between 1978 and 1999 came from Hong Kong, Taiwan and Macao.⁴⁸ The share was much higher in the initial years and has declined over time. It was 68.2% in 1994 and 40.2% in 2003 (Prasad & Wei(2005)). Detailed data for 1995 shows that the share of foreign invested enterprises (foreign equity share \geq 25%) in manufactured exports was 51.2%. FIE's share in exports of electronics and telecommunications was 94.5%, in instruments 71.8%, in plastic products 77.2%, in printing and record pressing 79.4%, in furniture 79.4%, in leather products 73.2%, in metal products 61.1% and in Garments and footwear 60.5% (Huang(2003), table 1.4). Another 17% of manufactured exports take place through export processing where the buyer supplies the inputs, detailed designs & specifications and quality inspection & control personnel and gets back the output for export.⁴⁹ Thus these labour intensive (LI) export goods are now highly competitive. Along with the support system provided by the socialist-corporate state, this gives China a comparative advantage in organised labour intensive mass manufacturing.

The conventional wisdom is that China's phenomenal success in LI exports is due to the superior productivity of Chinese workers. In reality the per-hour worker productivity is not much different from that in any other country at a similar level of income (perhaps lower). The output per man-month is however much higher because hours worked per week/month are up to 100% higher than in equivalent democratic market economies, being unconstrained by (implementation of) bourgeois labour laws. Now that China has developed a comparative advantage in mass manufacturing and construction, it is likely to persist even if hours worked gradually decline from 'socialist' to 'democratic' levels.

Non-labour intensive exports (even those produced by FDI) are not necessarily competitive. The banking system provides loans to State enterprises (e.g. SOEs) and provincial/city governments producing intermediate goods and infrastructure services respectively at zero or negative effective capital cost. These implicit subsidies are then transformed through below cost prices, into explicit subsidies to the FDI-export complex

⁴⁸ Almost 50% was from Hong Kong during 1979 to 1999(Huang(2003) pp 36, 48)

⁴⁹ Huang(2003) p15. The share of HK & Taiwan in FDI was 61.8% in 1995, and another 4.9% was from Singapore.

and to hi-tech industry.⁵⁰ This is a significant factor in attracting hi-tech/skill intensive FDI and capital-intensive exports. Through this process some competitive items are undoubtedly discovered or created and these, along with less than competitive items, are part of the set of capital intensive (KI) and skill-intensive (SI) exports.

The banking losses arising from these implicit subsidies have been repeatedly capitalised by the government budget during the last five years. If this is a real rather than a paper transaction, the enterprise profits available for re-investment will be reduced. In this case either taxes on the FDI-export sector have to increase or the supply of free public services has to be reduced.⁵¹ The former either undermines the usefulness and sustainability of the high public investment that is the foundation of China's growth maximisation strategy or offsets the subsidies given to the FDI export sector (increasing inefficiency).

In the last five years, the first class infrastructure in and around the FDI-export hubs is advertised as an important factor in the high share/growth of KI and SI exports from China. The building of showpiece infrastructure well ahead of demand certainly helps in attracting attention and approbation from investors and adds to the attractiveness of China as an FDI location. Further, even if infrastructure is highly under utilised it is a permanent asset that will become useful at some time. However, if its marginal social return is zero or negative, the sustainability of the public reinvestment strategy becomes doubtful as returns dwindle making it necessary to raise distorting taxes. It should also not be forgotten that poor infrastructure in Jakarta, Indonesia and Bangkok, Thailand did not prevent these two countries from growing fast for decades.

Tseng and Zebregs (2002) estimate that FDI contributed 2.5% per annum to TFP growth and about 3% per annum to overall GDP growth. Whalley & Xin take a sector approach to estimate the contribution of Foreign Invested enterprises (FIEs) to value added growth.⁵² According to their estimates for 2003 and 2004, FDI contributed 3.4% points to China's GDP growth rate. This suggests that a substantial part of the difference

⁵⁰ The prices of intermediate goods in China are reportedly less than their price on the high seas outside India – i.e before taxes, delays or red tape.

⁵¹ The latter is related to the income distribution point discussed below.

⁵² The FIEs are treated as a separate sector and their contribution to TFP and growth estimated relative to the rest of the economy (i.e. non-FIE su-sector).

between China's and India's growth rate since 1980 can be explained by the difference in FDI inflows (including export-oriented FDI).

5.5 Empirical Analysis

The following OLS growth regressions for China for the period 1982 to 2002 based on data available in World Development Indicators 2002, support the analysis presented above. All variables are in growth rates (represented by the preface Gr). The independent variable is Growth rate of per capita GDP. Dependent variables are the rates of growth (Gr) of Gross Fixed Capital Formation (GFCF), World GDP (Gwrld) and FDI gross in US \$ (FDIg\$):

$$\text{GrPcGdp} = 0.54 + 0.24*\text{GrGfcf} + 0.12*\text{GrGfcf}(-1) + 1.03 \text{GrGwrld} + 0.017*\text{GrFDIg\$}$$

(1.0) (3.6)*** (3.9)*** (4.6)*** (2.5)***

$R^2 = 0.96$, R^2 (adjusted) = 0.95, DW = 2.1. Numbers in bracket are t values. *** is significant at 1% level.

Similar results are obtained using TSLS.⁵³ The export dependency of the Chinese economy is suggested by the fact that a 1% increase (decrease) in the rate of growth of the world economy raises (lowers) China's growth rate by 1%.

If we replace gross FDI by net FDI (FDIn\$ is in US \$) the equation becomes;

$$\text{GrPcGdp} = 132 - 0.07*\text{Year} + 0.26*\text{GrGfcf} + 0.1*\text{GrGfcf}(-1) + 0.78*\text{GrGwrld} - 0.54*\text{GrFDIn\$}$$

(1.8)* (-1.8)* (7.6)*** (4.0)*** (3.6)*** (-2.1)*

$R^2 = 0.94$, R^2 (adjusted) = 0.92, DW = 2.1. Numbers in bracket are t values. * is significant at 10% level, *** is significant at 1% level.⁵⁴

Thus a 1% increase (decrease) in net FDI inflow increases the per capita GDP growth rate by 0.5%.

These regressions show the strong investment led nature of China's growth and the role of World demand GDP on China's growth. The latter represents the opportunity for exports at unsubsidised rates or without lowering unit values. FDI plays an important role in China's growth. These results are consistent with an FDI-export led growth.

⁵³ Instruments include growth rates of world imports, China's population & labor force and exports(lagged).

⁵⁴ If the same equation is run with TSLS, year and FDIn\$ become non-significant. If year is dropped from the equation, FDIn\$ is significant at the 10% level.

The importance of FDI is also brought out by the following sources of growth equation (estimated for 1966 onwards) in which the prefix Gr represents the growth rate, Gdp_L represents GDP per unit of labour and Kf_L is fixed capital per unit of labour:⁵⁵

$$\text{GrGdp_L} = 1.47 + 0.832 * \text{GrKf_L} + 0.283 * \text{AR}(1)$$

(1.9) (2.9)*** (1.9)*

$$R^2 = 0.29, R^2 \text{ (adjusted)} = 0.24, DW = 1.79.^{56}$$

Using the parameters of this equation we can calculate TFPG as,

$$\text{TFPGa} = \text{GrGdp_L} - 0.832 * \text{GrKf_L} \text{ or } \text{TFPG} = \text{TFPGa} - 1.47.$$

Then by OLS,

$$\text{TFPG} = 478 - 0.24 * \text{year} + 0.04 * \text{FDIg\$z}$$

(4.4)*** (-4.4)*** (5.9)***

$$R^2 = 0.83, R^2 \text{ (adjusted)} = 0.81, DW = 1.88.$$

This equation shows that,

- (a) FDI is a driver of productivity growth.
- (b) There is a secular down trend in productivity growth.

We hypothesise that this is the result of excessive investment by socialist enterprises and the consequent decline in marginal productivity of capital in these enterprises. The high investment is the counterpart of the party encouraged/sanctioned objective of growth (value added) maximisation, low or zero dividend payment requirement, transfer of saving from the government budget and subsidies provided through the controlled banking system (so called NPAs).

⁵⁵ The capital stock series is built using perpetual inventory method using GFCF and assuming a 5% depreciation rate.

⁵⁶ Capital's share is much lower (0.54) and DW very low if we estimate from 1977 onwards.

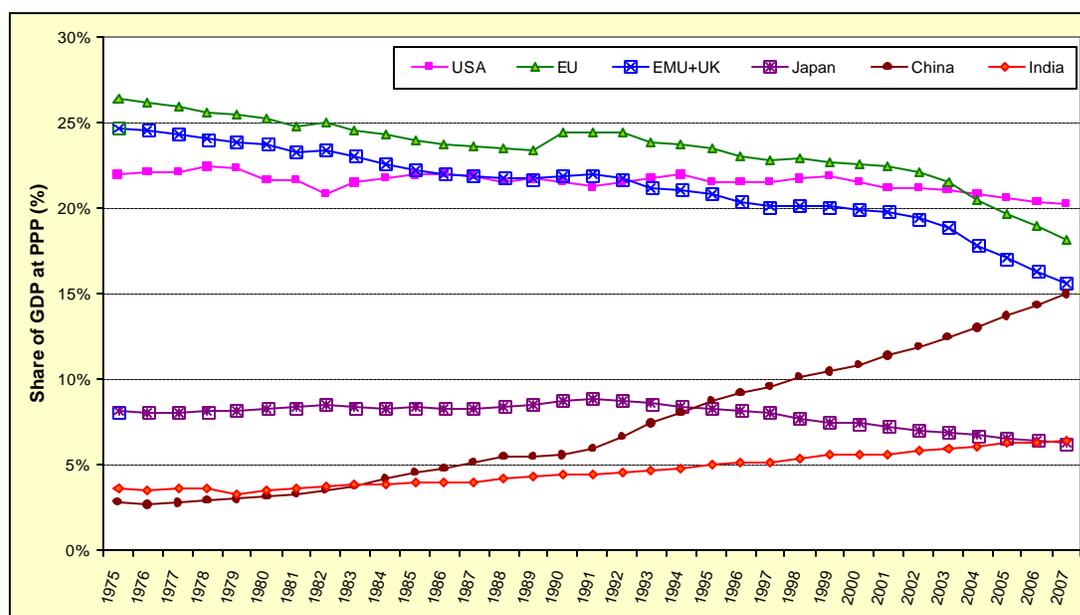
6 OUTCOME

6.1 INCOME GROWTH

If we go by the official statistics, China's economy grew at an average rate of 9.5% per annum during 1980 to 2003, the fastest in the World. During this period the World share of China in Merchandise Trade saw the largest expansion and China became the largest recipient of FDI.

An increasing amount of incremental global growth has been coming from China. China's share has consequently risen from less than 3% to almost 14% of World GDP at PPP (figure 1). From 1975 to 1999 the USA's share of World GDP at PPP hovered around 22%. Since then it has declined to around 20.7%. The EU's share of World GDP at PPP has declined from 26.4% to 19.6% despite the expansion of the EU over this period, with the addition of several new members. Japan's share was on a rising trend since the sixties and rose by a little less than 1% point between 1975 and 1991 to reach a peak of 8.9% of World GDP at PPP. Since then it has declined to 6.6%. India's share has also been rising steadily since 1980 and is now 6.2%, marginally below that of Japan.

Figure 1: Country's Share of World GDP at Purchasing Power Parity



Collins and Bosworth (1996), corroborated later by the World Bank and IMF, have shown that China's growth from 1980 to end-nineties was overestimated by 1% to 2%. Young (2000) shows that non-agricultural growth is over-estimated by 2.5%. If we make an adjustment of 2%, China has demonstrated its ability to sustain growth at about 7.5% per annum over 25 years. This is still the fastest in the World, but only 30% higher than India's the 9th fastest growing economy.⁵⁷ The IMF (2004) has, however, shown that China's growth so far (as measured by official statistics) is on a trajectory similar to that of Japan and the NIEs in a similar period of their development, though it is faster than that of the ASEAN-4.

In the last few decades, China's growth has benefited from the demographic dividend. As the demographic transition is coming to an end this dividend will soon be reduced to zero.⁵⁸ The 1990s were a period of above average international trade growth and the current decade could see a slower growth in goods trade. As China's share of the World's goods exports rises to US levels its export growth will slow. China has also benefited from the large gap between its per capita income and its manufacturing wage relative to India and other labour intensive exporters. The gap is likely to be eliminated as its per capita income rises to upper-middle income levels and then to high-income levels. The closing and inversion of the wage gap will contribute to the slowdown in export growth and FDI inflows. Most observers have been forecasting a slow down in China's growth rate and a few have even predicted a dramatic slowdown.⁵⁹ On balance, China's growth rate is likely to decline gradually to more normal levels from the stratospheric rate of 9.5%, despite the sharp increase in this rate in the last two years.

6.2 INCOME DISTRIBUTION

The distribution of income has worsened dramatically since 1979. Part of this deterioration is the reversal of unsustainable levels of equality reached during the Maoist years. The rest of the deterioration was a conscious decision to accelerate growth by focussing subsidies and infrastructure development into the FDI-export areas in the coastal regions during 1985 to 2000. Given the restrictions on internal movement of

⁵⁷ About 60% higher in terms of per capita growth.

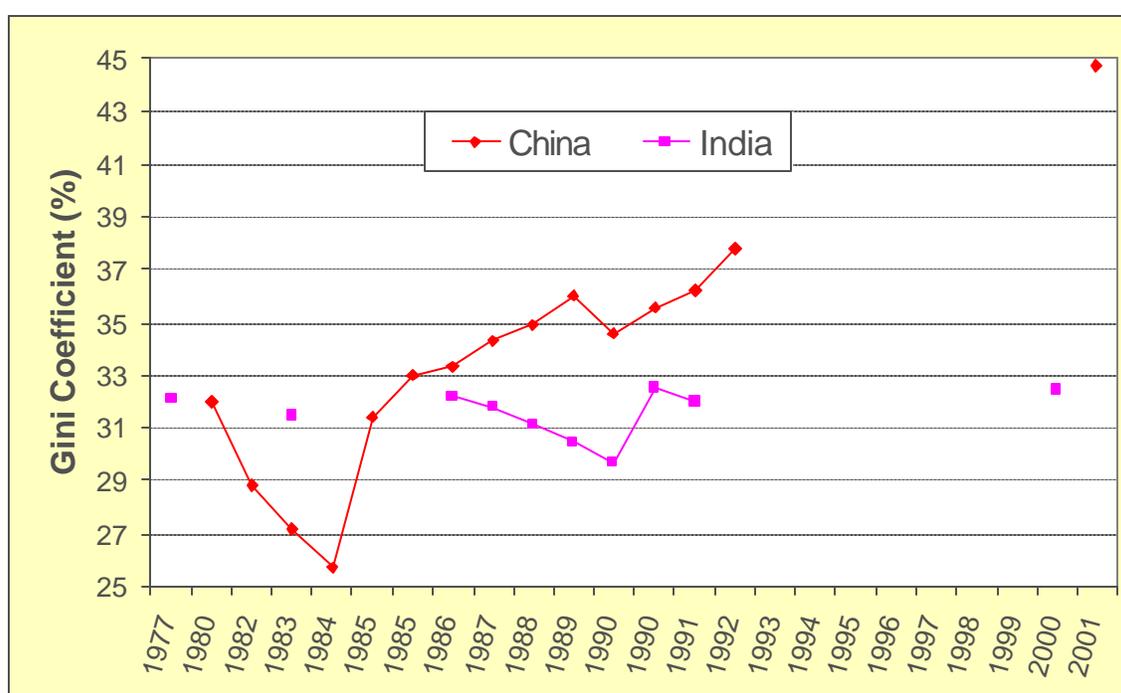
⁵⁸ After a decade or two it will become negative because of the rapid aging of its population.

⁵⁹ See IMF, World Bank and ADB reports on China and Chang (2001). See also Virmani (1999).

workers (the labour responsibility system) this translated into growing income inequality (figure 2).

According to latest available data, China (now) ranks 91st in terms of the Gini coefficient of inequality, and 94th in terms of the consumption share of the poorest 20% of the population, out of total of 127 countries. Further, the retreat of the state from provision of social goods has also translated into greater inequality in the receipt of public and quasi-public goods. Rising inequality and declining public social services have a potential for socio-political upheaval and counter repression that could disrupt growth.

Figure 2: Income Distribution - Gini



Source: Deininger-Squire and WDI, World Bank.

6.3 POVERTY

China's poverty level based on an income survey is estimated by the World Bank to be 16.5% using a \$ a day poverty line and 46.7% using a \$2 a day poverty line. It is useful to compare this poverty level with that of India. As India's poverty rate is based on a consumption survey, we have to either assume that the consumption share of China are the same as its income shares (estimate 1) or that its consumption shares in the two lowest (10% each) brackets are higher than its income shares in these brackets (estimate 2). In the latter case we assume further that in China the consumption share of the

bottom 10% is 50% higher than the income share and of the next lowest 10% is 25% higher.⁶⁰ From the data we also see that the China's per capita GDP at PPP in current international dollars was 1.6 times India's (average ratio for 1999 to 2001). As the share of private consumption in GDP in China is 71% of that in India,⁶¹ China's per capita private consumption was only 1.1 times India's (average for 1999 to 2001). Using the consumption distribution along with the per capita private consumption we can calculate the per capita consumption of the bottom 10% 20% and 40% of the population in each country (table 3).

The per capita consumption of China's poorest 10% to 20% is calculated to be between 52% and 80% of India's poorest 10% to 20% in real terms. Thus the 1\$ a day poverty rate in India must be lower than in China (16.5%). Similarly the \$2 a day poverty rate in China (46.7%) is unlikely to be lower than India's because the per capita consumption of the bottom 40% in China is 80% to 100% of that of the lowest 40% in India. According to Bhalla (2003) the poverty rate is about 12%. This is the correct rate for comparison with that of China as shown by the above simple exercise.

Table 3: Per Capita Consumption of the Poor in China Relative To India

	<u>Estimate 1</u>	<u>Estimate 2</u>	
Lowest 10%	0.52		0.78
Lowest 20%	0.59		0.79
Lowest 40%	0.82		0.97
<u>China Share</u>		<u>Adj factor</u>	
Lowest 10%	1.8	1.5	2.7
Lowest 20%	4.7	1.35	6.3
Lowest 40%	9.0	1.18	10.6
<u>India Share</u>			
Lowest 10%	3.9	1	3.9
Lowest 20%	8.9	1	8.9
Lowest 40%	12.3	1	12.3
Note: Estimate 1 assumes that China's consumption distribution is same as its income distribution Estimate 2: Obtains China's consumption share by increasing its income share of lowest 10% by 50% and increasing that of next 10% by 25%			

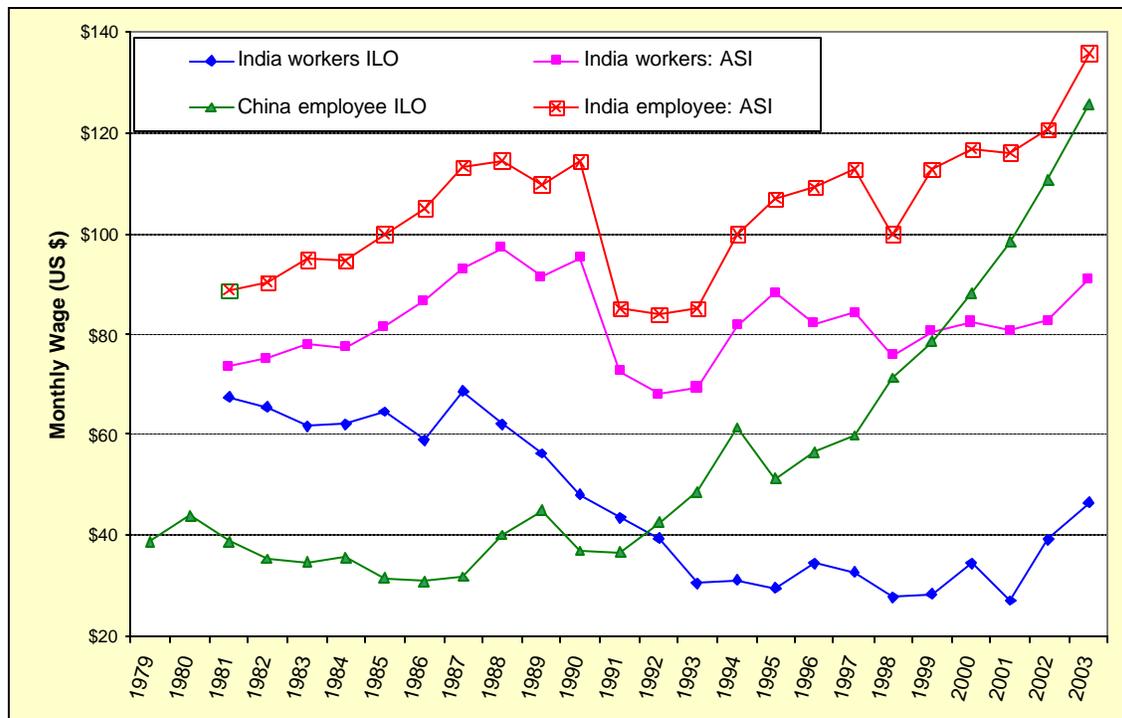
⁶⁰ As the rich are widely accepted to save a larger share of their income than the poor, the consumption distribution is expected to be better than the income distribution.

⁶¹ China's private consumption (Total consumption – Government final consumption) is 46.8% and India's 65.5% of GDP (LCU). All data is from WDI, World Bank.

6.4 RISKS

The FDI-export drive is critically dependent on building and sustaining optimistic expectations about the economy and the Asian crises demonstrated the vulnerability of this model. The obverse of high social ownership of domestic assets and consequent high investment rates is a low share of private consumption in GDP. The rate of capacity build up is much faster than the growth of private consumption, leaving exports as the only means for balancing supply and demand. China's membership of WTO and rising job fears in OECD countries will result in increased scrutiny of and resistance to subsidised exports. Its socially regressive labour rules for export oriented manufacturing, may also be questioned more seriously, if not by governments then by Western Labour unions and NGOs. As its manufacturing wage is already higher than that of India (figure 3), India is likely to become a more attractive destination for foreign investment in LI exports despite poorer infrastructure, so as to reduce risk through diversification.

Figure 3: Monthly Manufacturing Wage – China vs. India



Source: ILO and Annual Survey of Industries (ASI), India and author's calculations.

Given the continuing generation of non-performing assets, China is somewhat more vulnerable on these issues than the Asian crises countries.⁶² Its income distribution is also worse than in other successful Asian economies. On the other hand China's large economy has domestic strengths and bargaining power that were absent in the smaller Asian countries. These will result (in our judgement) in a slowing of growth and not a sudden collapse if the CCP/Government continues to adapt its policy to the changing circumstances and imperatives as it has repeatedly done since 1980.

One of the ironic effects of China's export led growth is the recreation of *Centre-Periphery relationship* that Latin American economist talked about 50 years ago. Instead of the USA of the fifties, China of the 21st century is the manufacturing workshop of the world, diverting FDI in manufacturing (including export oriented FDI) out of other developing countries, while sucking in mineral and agricultural imports from them. Thus the resource rich countries of Asia, Africa and Latin America are the (new) periphery, supplying primary commodities to China the new manufacturing centre of the World. Just as in the case of 20th century America, a reaction may build up against 21st century China.

6.5 POLITICAL ECONOMY

There are political arguments for a sharp slowdown in economic growth arising from rising inequalities and social tensions. Some have gone further to argue that there is an inherent contradiction between the market economy whose success requires competition and plurality and the centralised political system that suppresses independent democratic thinking and impulses.⁶³ If the contradiction cannot be managed it has within it the seeds of a socio-political explosion that will bring growth to a halt for a substantial period of time (after which it could resume at a much slower rate). This contradiction is much more than it was in S Korea (say) and the latter eventually succumbed to the democratic impulse. The counter argument is that dictators can and have maintained highly repressive regime for decades after upheaval. Whether growth rate can be maintained along with repression depends on the response of the rest of the world.

⁶² Which have resulted in a (World Bank estimated) national debt of 50% to 100% of GDP. See Jia Kang & Zhao (2001).

⁶³ K Subrahmanyam et al.

7 THE FUTURE

7.1 Demography

Demographic changes were an important driver of growth in East and S.E. Asia and are likely to be an important factor in the growth of China and India. The rate of growth of China's working age population (WAP: 15 to 64 year old) will decelerate sharply over the next few decades (table 4). Thus the pool of potential labour for its labour intensive export oriented manufacturing industry will stop growing within a decade. Consequently its share of the World's working age population will decline from a peak of 23.8% in 1990 to 19.1% in 2025 and 14.6% in 2050. Its dependency ratio will reach a trough of 0.39 in 2010 and then rise rapidly to 0.65 by 2050. Both these factors, which have contributed to growth between 1980 and 2005, will be absent or turn negative after 2015. In particular, China's World share of working age population will become less than that of India by 2030. Similarly its dependency ratio will exceed that of India's by 2030 (table 4).

Table 4: Working Age Population (15 to 64)

5 yrs to	Growth Rate		WorldShr	Dependency	Gr Rt	WrldShr	Depndncy	Growth Rate		WrldShr	Depndncy
	WAP	wap/tot						WAP	wap/tot		
1980			22.8%	0.67						15.1%	0.74
1985	2.9%	1.5%	23.5%	0.55	1.3%	1.51	0.77	2.4%	0.2%	15.2%	0.72
1990	2.2%	0.7%	23.8%	0.50	0.4%	1.54	0.72	2.4%	0.3%	15.5%	0.69
1995	1.3%	0.2%	23.3%	0.48	0.0%	1.47	0.72	2.2%	0.2%	15.8%	0.68
2000	1.2%	0.3%	22.7%	0.46	-0.1%	1.40	0.72	2.2%	0.4%	16.2%	0.64
2005	1.4%	0.7%	22.4%	0.41	0.2%	1.35	0.68	2.1%	0.5%	16.6%	0.60
2010	0.9%	0.3%	21.9%	0.39	-0.2%	1.28	0.70	2.0%	0.6%	17.0%	0.55
2015	0.5%	-0.1%	21.1%	0.39	-0.5%	1.21	0.75	1.7%	0.4%	17.5%	0.52
2020	-0.2%	-0.6%	20.0%	0.43	-0.9%	1.12	0.87	1.4%	0.3%	17.9%	0.50
2025	-0.1%	-0.4%	19.1%	0.46	-0.6%	1.05	0.96	1.2%	0.2%	18.2%	0.48
2030	-0.4%	-0.5%	18.1%	0.50	-0.6%	0.98	1.06	0.9%	0.2%	18.5%	0.47
2035	-0.8%	-0.8%	16.9%	0.56	-0.9%	0.91	1.21	0.7%	0.1%	18.7%	0.46
2040	-0.8%	-0.7%	15.9%	0.61	-0.6%	0.85	1.31	0.5%	-0.1%	18.7%	0.46
2045	-0.5%	-0.2%	15.2%	0.63	-0.1%	0.82	1.33	0.3%	-0.1%	18.6%	0.47
2050	-0.6%	-0.2%	14.6%	0.65	0.1%	0.79	1.31	0.0%	-0.3%	18.4%	0.49

Note: Dependency Ratio is defined as the ratio of non-working age to working age population.

Source: UN Population projections (mean forecast) 2004 revision and authors calculations.

Bloom and Canning (2004) have shown that the impact co-efficient of the growth of the ratio of working age population to total population (WAP/Tot) on per capita GDP growth is 1.4. If openness is included, the impact depends on the degree of openness of

the economy. In a completely open economy (index 1) its impact co-efficient is 2.5.⁶⁴ China's ratio of working age to total population increased at an average rate of 0.7% per annum during 1980 to 2005. Thus this demographic factor contributed between 1.0% to 1.7% per annum to China's average per capita GDP growth rate of 8.3% per annum during the period 1980 to 2005. Given the projections in table 4 its contribution during 2005 to 2025 will be -0.3% to -0.5% per annum, a swing of 1.3% to 2.2%. The impact of this factor would therefore be to reduce China's per capita GDP growth rate from 8.3% per annum during 1980 to 2005 to 6.1% to 7.3% per annum during 2005 to 2025.

7.2 Historical Growth Patterns

We have also analysed the growth performance of high growth economies in the decades following the year on which they attained the per capita GDP at PPP (2000 international \$) of about \$ 4750. These include Thailand, Malaysia, S. Korea, Singapore, Hong Kong, Hungary, Portugal, Greece, Japan and Spain. The subsequent growth rates ranged from an average of 3.4% per annum for Thailand (12 years to 2003) to 6.1% per annum for Japan (table 5). Three countries had an average growth rate around 4%.

Table 5 : Per Capita GDP at PPP (2000 international \$)

	Year	PCGDP	Year	PCGDP	Gr rate
China	2003	\$4,726			
Thailand	1991	\$4,791	2003	\$7,175	3.4%
Korea S.	1981	\$4,798	2003	\$16,977	5.9%
Malaysia	1987	\$4,706	2003	\$8,986	4.1%
Singapore	1970	\$4,574	1992	\$15,615	5.7%
Hong Kong	1965	\$4,889	1987	\$17,921	6.1%
Hungary	1965	\$4,789	1987	\$11,318	4.0%
Portugal	1964	\$4,564	1986	\$10,859	4.0%
Greece	1960	\$4,867	1982	\$13,141	4.6%
Japan	1960	\$4,991	1981	\$17,196	6.1%
Spain	1960	\$5,192	1981	\$12,334	4.2%

Source: WDI 2006 and authors calculations

Historically, China's economy has outperformed the best performing country at the corresponding level of per capita GDP at PPP by about 13% (table 6).⁶⁵ If we assume the same level of over-performance this would yield an upper bound of 6.9%. The

⁶⁴ Openness is a (0 1) variable. An economy with intermediate openness 0.55 would have an impact of 1.4.

⁶⁵ This result is different from that obtained by the IMF because they focus on the start of the high growth period. We have tried to align the high growth economies with respect to their per capita GDP (PPP) so as to introduce the concept of catch-up growth.

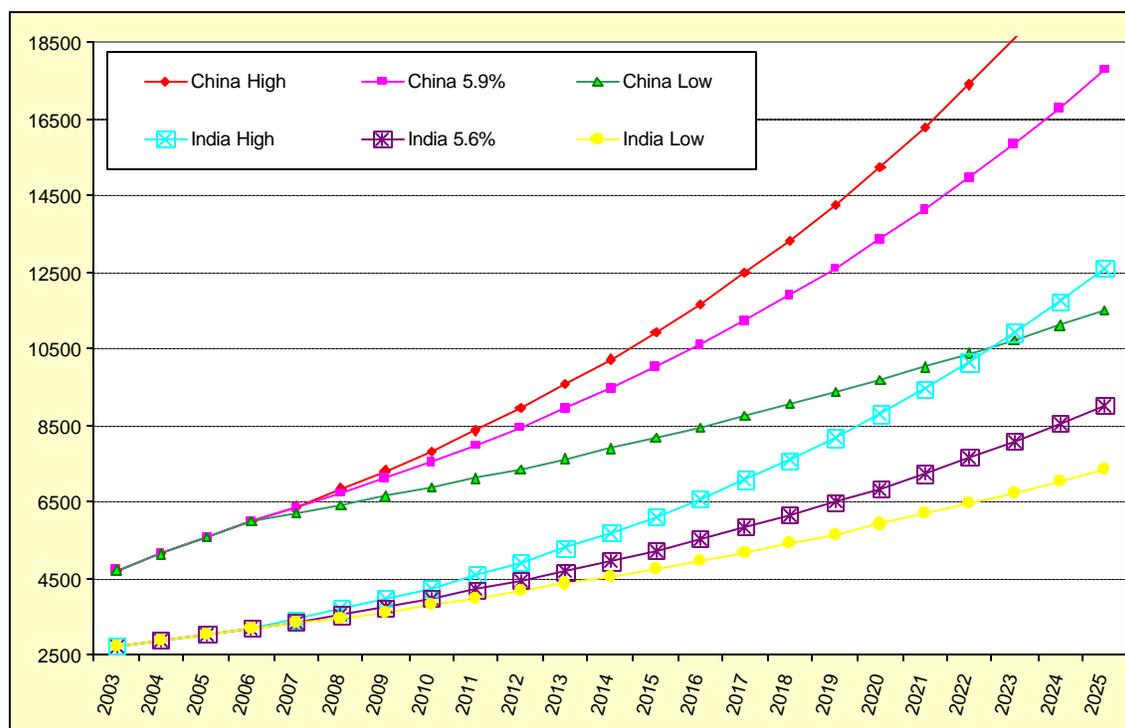
demographic calculation suggested a decline in per capita growth to 6.1% to 7.3%, where the former coincides with growth seen in Japan and Hong Kong. We therefore assume that the average per capita GDP growth of China till 2025 will be bounded on the lower side by 3.5% and the higher side by 6.9%. A similar exercise was done for India, yielding a range of 4.5% (Malaysia) to 7.5% (China), with Singapore a little lower at 7.1%. These bounds are shown in the figure 4 along with an intermediate scenario of 5.9% growth rate for China and 5.6% growth rate for India.⁶⁶

Table 6: Per Capita GDP PPP in Constant 2000 \$

	Year	PCGDP	Year	PCGDP	Gr rate
China	1984	\$1,052	2003	\$4,726	8.2%
Thailand	1961	\$1,052	1980	\$2,488	4.6%
Korea S.	1960	\$1,560	1979	\$4,652	5.9%
Malaysia	1960	\$1,707	1979	\$3,891	4.4%
Singapore	1960	\$2,273	1979	\$8,611	7.3%
Hong Kong	1960	\$3,194	1979	\$10,993	6.7%

Source: WDI 2006 and authors calculations.

Figure 4: Per Capita GDP at PPP (constant 2000 international \$)



⁶⁶ The reason for the choice of these specific numbers will be clear below.

7.3 Forecast Path

Virmani (2005d) had projected the growth rates based on the analysis of the fast growing economies and taking account of catch-up phenomenon (observed among the high growth rate economies), including the decline in the real growth rate as an economy reaches the frontier. According to this projection China's GDP PPP growth rate would become lower than that of India around the middle of the next decade (period averages in table below).⁶⁷ These projections yield a per capita GDP at PPP in 2025 that is almost identical to that obtained using the intermediate average growth assumptions of 5.9% per annum for China and 5.6% per annum for India.⁶⁸ The projected growth rates (underlying table 7) were used along with those for the USA to obtain the size of China's and India's economy relative to the USA (figure 5) and relative to each other (figure 6).⁶⁹

Table 7: Rate of Growth of GDPppp (%)

Period	India	China
2006 to 2010	6.4	7.3
2011 to 2020	7.0	6.5
2021 to 2030	6.9	5.5
2031 to 2040	6.0	4.4
2041 to 2050	5.0	3.5

Figure 5 shows that the Indian economy is likely to become larger than Japan's (GDP at Purchasing Power Parity) in the next few years. It also shows that both the Chinese economy and the Indian economy will become larger than that of the USA in about 10 years and 30 years respectively. Figure 6 shows the size of India's economy relative to China's. India's economy which was equal in size to that of China in 1983 was already down to 80% by 1990. It is currently about 45% of China's and will decline further before starting to recover sometime in the next decade. According to our mean projections, however, the catch-up process will take decades. By 2050 India's economy will be only 70% the size of China's.

⁶⁷ See Virmani (2005a) for the assumptions and more detailed discussion.

⁶⁸ This was a deliberate choice to offset any hidden bias arising from nationality.

⁶⁹ The starting point for projections in this case is the GDP at PPP in 2003 international \$ s.

Figure 5: Projected Size of China and India Relative to The USA

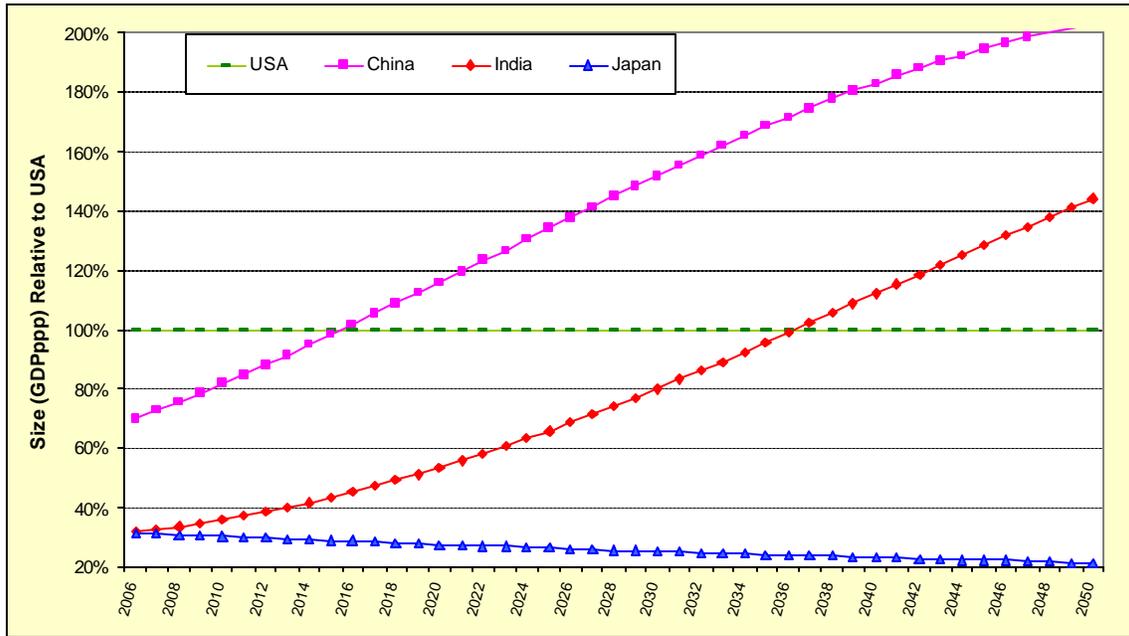
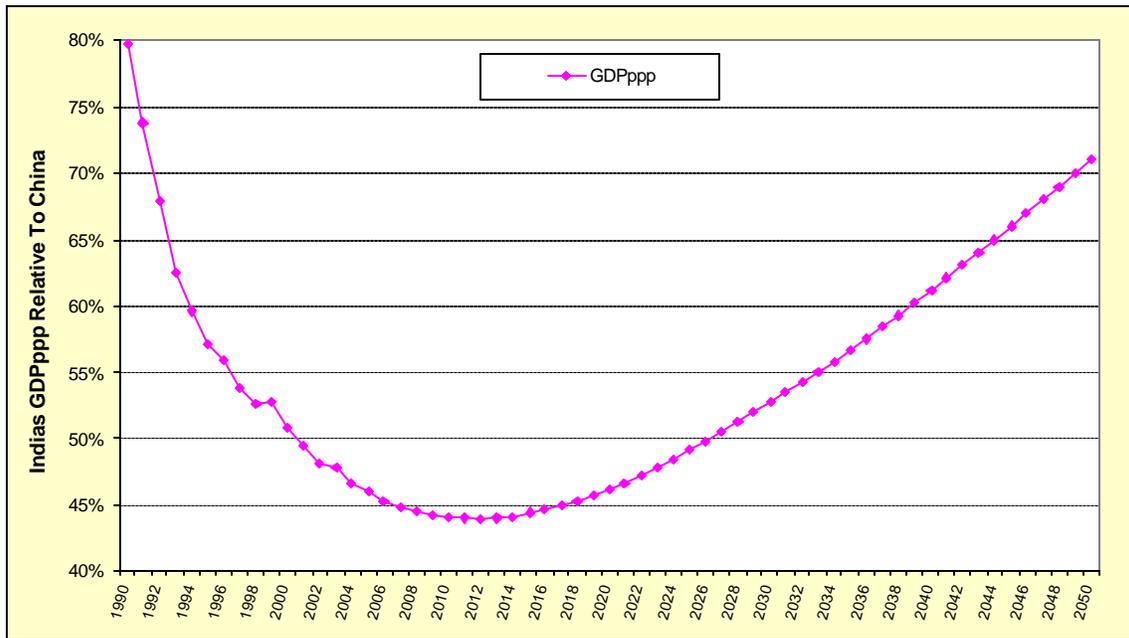


Figure 6: Projected Size of Indian Economy Relative To China



8 LESSONS

In this section we summarise some of the lessons arising from the above analysis of the Chinese economy, viewed from the perspective of a democratic market economy like India.⁷⁰

8.1 *Welfare or Growth Maximisation*

In theory, we can always construct a set of assumptions in which growth maximisation is identical to Social Welfare maximisation. The issue here is about the outcome of one or the other strategy in practice, particularly in a large country.

A growth maximisation strategy is clear, focussed, easy to understand and implement. Growth maximisation is related to maximisation of value added, sales/production, and long term employment at the firm and local government level. It can therefore be relatively easily decentralised down to the lowest levels of government and implemented more efficiently even with low quality of governance. The public sector can also be integrated into this objective without creating dissonance.

A Welfare maximisation strategy leads to multiple, often contradictory, objectives. Though rational trade-offs are possible in theory they are not made in practice and confusion and cross cutting actions are common. This in turn leads to, (a) Detailed rules regulations and procedures for making choices – red tape and bureaucratic functioning. (b) Lack of accountability. It is easy to use one or more objectives (those that are hardest to measure) as an excuse for non-achievement of all others. It also becomes easier to substitute ones personal objectives for the official ones by disguising the former as the latter. (c) Given serious agency problems in governance, particularly in democratic systems, this provides an incentive for inefficiency and corruption.

A growth maximisation strategy subject to reasonable social welfare constraints is superior to a welfare maximisation strategy implemented through subsidiary growth objectives. The former is much more likely to take the largest number of citizens from low income to high-income category in the shortest possible time. The latter provides greater opportunity to those charged with implementation to increase their own welfare in

⁷⁰ For detailed analysis of India's Growth performance see, Virmani (2004b c; 2005c; 2006).

the name of the poor, consequently resulting in faster deterioration of governance ipso facto (other things equal).

8.2 Institutions: Micro-Structures

The importance of Institutions, defined as laws, rules and social conventions in long run growth is now widely accepted. There are also studies showing the importance of Social capital. Institutional micro-foundations or micro-structures, the organisations that implement these laws, rules and conventions have a critical role in economic growth (Virmani(2004a)). One of the lessons that we draw from our study of China and India's growth is, "Do not destroy institutions, modify and adapt them to your development objectives." It is very easy to destroy institutions very difficult and time consuming to build them.

The communist party government that came to power in China in the middle of the last century systematically destroyed what it considered 'capitalist' institutions and organisations. But they also built communist party run organisations during the next fifty years. The post Mao reformers have adapted the latter to fill the gap left by the former. China has shown that, (a) Even a communist/socialist institution the CCP can be used to nurture and support capitalist growth (b) That communist controlled and managed co-operatives, which in the Maoist period undertook a combination of governing and production functions at the local level can be converted into competitive production organisations (Town & village enterprises).⁷¹

The destruction of centuries old social and market institutions (e.g. private entrepreneurs) under Chairman Mao will, however, prove costly in the long run. Such institutions are particularly important at high income levels, when investors from countries at the same (high income) level are unlikely to find it as advantageous as it is today to set up either export oriented or high tech operations in a "Socialist market economy" like China relative to a "Democratic market economy" like India.

⁷¹ Even ostensibly negative social institutions such as Caste organisations could have been used by India for productive purpose e.g. for promoting literacy or group credit.

8.3 FDI & Trade Liberalisation

FDI bundles capital, ‘technology’ and entrepreneurship, where ‘technology’ is defined broadly to include information, knowledge, and skills relating to management, marketing and production. The technology part of the bundle is much more important than capital for countries like India and China. For China the entrepreneurial role of FDI has also been very important.

FDI can be an extremely effective instrument for growth if it helps a country enter the global supply chain. A successful diaspora in a more advanced country is even more effective if it still has a connection to and an interest in the development of the country of origin. The effectiveness of trade liberalisation in promoting growth is enhanced if it can be coupled with attraction of export oriented FDI. FDI-export led growth has clearly worked in Asia, even if there are both positive and negative examples from other part of the World. Democratic market economies are unlikely however, to be able to replicate the breakneck expansion of exports and FDI seen in China’s socialist market economy (and perhaps even in some “Nationalist Market economies”).

Technological change (embodied in capital goods or intermediates or disembodied) is greatly facilitated by free imports and therefore import restrictions on these have added costs. When bureaucrats decide what and from where capital goods and intermediate goods should be imported by entrepreneurs (QRs), innovation inevitably suffers.

8.4 Labour Laws and Rules

The special labour laws and rules for Foreign invested enterprises and export producers in China has undoubtedly played a role in attracting export oriented FDI and increasing labour intensive exports. India is at the other extreme with very socially advanced labour laws and rules since 1950s (similar at that time to those in the richest countries). These were implemented in a manner that introduced extreme rigidity and restriction in the organised labour market. Rigid rules and bureaucratic procedures, have limited the inflow of export oriented FDI, discouraged the mass production of labour intensive exports (e.g. garments, toys and consumer electronics) and resulted in slower employment growth in the modern manufacturing sector. India’s workers could obtain the full benefits of an open economy if these laws and rules provided for greater

flexibility. There is no need for India (or any other country) to go to the other extreme typified by China.

8.5 Competition and Public Monopoly

Artificial monopolies, created by reserving industries for the government/public sector i.e. exclusion of private investment, have the most negative effect on efficiency and growth (as they have no redeeming merit). Setting up of government production companies per say is not obviously bad, creation of Government monopolies & oligopolies clearly is. A competitive market structure is much more important than private ownership for efficient economic growth. Growth maximising and profit maximising monopolies, whether private or public can theoretically be equally (in) efficient initially, but eventually succumb to X-inefficiency. Highly motivated political and administrative leadership (as in post-independence India or post Mao CCP rule) can even be more effective initially, but this level of motivation and honesty is seldom sustained over long-periods.

The Public sector is, however, more likely to be characterised by multiple and incompatible objectives and agency problems. This is primarily responsible for the negative effect of public ownership. Soft budget constraints, poor selection of managers and lack of incentives arise in a context in which everyone and no one owns the firm. Public monopoly multiplies these problems. A monopoly/oligopoly structure coupled with social objectives (even secondary ones) and agency problems distort incentives for managers and can be disastrous for efficient growth. This applies in banking as much as in manufacturing.

The threat of imports (even where imports are low) is the greatest competitive force. In general free access to imports (i.e. no bans or QRs) is the simplest way to ensure competition, a method that is available to economies of all sizes. Only large economies have the luxury of limiting themselves to domestic competition, but even in their case there will always be some products for which market size and minimum economic scale do not permit much competition.

8.6 High-Risk, High Return Policies

India invested well ahead of demand in higher education in the 1960s just as China is doing in infrastructure since mid 1990. In India's case there was a clear imbalance between investment in basic education relative to higher education. In China's case there is an imbalance between private and public consumption relative to public investment. In hindsight India's higher education strategy appears to have been highly successful (vide IT and other service exports).

The supply of infrastructure in ASEAN high growth economies generally lagged demand for it, in complete contrast to China, which is building well ahead of demand (8 lane highways where 4 lanes would be sufficient). China's infrastructure investment strategy appears, so far, to be equally successful. India's investment could have been totally wasted if globalisation did not provide a channel of migration and utilisation of skills for which there was no demand in India. China's investment in rich country style infrastructure could still be wasted if growth slows dramatically. Both are therefore high-risk high-return policies. Large countries like India and China can have diversified portfolio of policies, including a few high risk, high return ones. Small, poor countries should be extremely cautious in adopting any such strategy.

8.7 Democracy vs. Dictatorship

Oligarchies such as Communist party ruled China or dictatorial democracies such as Singapore, post-war Japan and S. Korea, appear to have been more successful in organising a country to develop from low-income to high-income category. They also have an advantage in mass production and large-scale organised activity including construction. The disadvantages of dictatorship include the stamping out of diversity (language, culture, religion) and dissent.

“Democratic market economies” like India appear to be more successful at generating entrepreneurship, independent thinking and individual responsibility, that is an advantage in the service sector. Even the humblest service provider has greater scope for individual initiative than an assembly line worker and these characteristics are more important in services than in modern manufacturing. These skills are also advantageous in moving from the bottom to the top of the high-income category. India, with its great diversity, coupled with English language facility has an additional advantage in the

globalised 21st century. Most managers & professionals have worked with others of different Ethnicity, religion, native language etc. and can therefore work easily with people of any nationality or background.

There is however a simultaneity problem in comparing dictatorship with democracy. The former group seem to have adopted a growth maximising strategy and the latter group a Welfare maximising one. Would a swapping of objectives make the latter more successful even in the low & middle income range?

8.8 Governance and Corruption

The Problem of Governance is not the same as the problem of financial corruption. Even though the latter is associated with the former it is a very small sub-set of the governance problem. With a few exceptions, low to middle income, high growth, Asian economies have been characterised by fairly high levels of (perceived) corruption. In 1995 when the high growth phase of many of these economies was coming to an end, they were fairly high in the Transparency International's corruption perception index (CPI) ranking (table 8). The worst Indonesia was in the 100th percentile (most corrupt country) while the best Malaysia was in the 56th percentile, with well over half the countries in the sample of 41 countries perceived to be less corrupt. In the CPI for 2005 based on a much larger sample of 159 countries, India and China are similarly placed with the former in the 55th percentile and the latter in the 49th.

Table 8: Corruption Rank Percentile
(% of countries with higher/better CPI)

	<u>1995</u>	<u>1997</u>	<u>2000</u>	<u>2005</u>
Indonesia	100.0%	88.5%	94.4%	86.2%
Vietnam		82.7%	84.4%	67.3%
India	85.4%	86.5%	76.7%	55.3%
China	97.6%	78.8%	70.0%	49.1%
Thailand	82.9%	75.0%	66.7%	37.1%
Korea, S.	65.9%	65.4%	53.3%	25.2%
Malaysia	56.1%	61.5%	40.0%	24.5%
Taiwan	61.0%	59.6%	31.1%	20.1%
HongKong	41.5%	34.6%	16.7%	9.4%
Sample size:	41	52	90	159
Source: Transparency International's Corruption Index CPI				

We hypothesise that mental corruption (intentions, objectives and motivation) is much more important than financial corruption (bribery) in low and middle income countries. The governance problem is at its core a problem of motivation and performance. Does the government (its leaders, bureaucrats) perform the functions that are its reasons for existence or are these secondary/ tertiary to the objective of self aggrandisement. For instance in Urban areas does the government carry out effective urban planning, provide clean drinking water, sewage and sanitation, roads, street lights and parks so that it grows in an efficient and organic manner. Does the government build the national and intra-state highways necessary for commerce to flourish?

One of the lessons from China is that this is the most critical issue, not whether the government is spotlessly clean. The different levels of government in China are not less corrupt than in India (2005 CPI of 3.2 and 2.9 respectively), but China's government(s) supplies Public Goods and Quasi-public goods and services, while the Indian government (s) has (have) failed to do so to the level and quality that can reasonably be expected in a low income country. The second related lesson is that the Chinese government(s) have their eyes firmly focussed on the goal, the production and supply of these public goods (appropriate to each level of government). The means are of secondary importance. Pragmatism is essential for achieving fast supply growth; all necessary means (privatisation, private-public partnership), are adopted to fulfil the goals and objectives. In India the goals can be forgotten for years in debates of the best means for achieving them as it is often more important to win elections/get power than to fulfil the goals and objectives of the entity over which you have power.

9 CONCLUSION: FDI-EXPORT LED GROWTH

Many eminent scholars have studied China's phenomenal growth rate and come to the conclusion that it has basically adopted the 'East Asian model of growth.' An essential element of this model is "export led growth." Though the approach to growth among these countries has common elements there is also a great deal of variation. Singapore for instance lacked domestic capitalists and initially depended heavily on FDI as a source of capital, technology and entrepreneurship. Though the role of the State in investment gradually expanded, the importance of FDI is still very high, perhaps the highest among Asian countries. Singapore therefore followed an FDI-export led growth

model rather than an export-led one. China, for its own political reasons and socio-economic dynamics, shares with Singapore this significantly greater emphasis and dependence on FDI as a source of entrepreneurship, technology and competitive growth. During the eighties and early nineties it moved gradually from an export-led growth strategy to an FDI-export led growth one. This strategy and the associated policies (whatever their short term costs and long term risks), have been a very important engine of growth in China during the last 25 years.

The greatest difference between China and the other countries of E Asia that followed the East Asian Model was that at the start of reforms China was a Marxist 'Socialist' State ruled by a Leninist Communist Party. Most of the East Asian States in their early years of reform/growth could perhaps be classified as Authoritarian (one man or one party) Democracies. There is a fundamental difference between the two. The socialist state (communist party) owns all the means of production, controls all factors and manages all production and sale of goods and services. China's reforms have moved the economy from Socialist economy to a "Socialist Market" economy with a mix of old 'socialist' and new 'market' elements. The 'socialist' control of China's domestic assets (i.e. excluding FDI) was perhaps still around 80 to 90%, at the beginning of the century.

As is well known, the market has two key elements: Individuals and organisations that supply and demand a good and a mechanism for determining prices by matching total supply and demand that good. The efficiency and productivity depends on the behaviour of the supplier (objectives, incentives and skills) and the structure of the market (competition). The external elements of the market are well understood technically and relatively easy to institute. For instance 'Dual' pricing and distribution systems were used as an intermediates step in moving agricultural goods from a rationed/controlled rationed controlled system to a market based one in India during the mid-sixties. In the 1970s such transitional arrangements were applied in India to controlled manufactured goods well before the reforms in China. It is much more difficult to design, introduce and operationalise systems of management in which government owns and controls virtually all the capital/assets.

At the start of reforms in late 1970s China had an administrative system that combined a high level of centralisation of policy making with a relatively decentralised

system of governance and production. The lowest level of government the township and villages had a level of autonomy that was greater than in democratic India with a free and competitive agriculture sector. Similarly the level of production decentralisation was much greater than in the USSR or Eastern Europe, partly due the disastrous Maoist experiments in decentralising manufacturing of steel and other capital intensive goods to the local level. These experiments facilitated the creation of (party controlled) organisations and managers with experience of producing goods and services at the local level. With the creation of output markets these organisation formed the nucleus of the Town and Village enterprises, which played a vital role in the success of market reforms during the 1980s. Governance decentralisation also facilitated the closer matching of the objectives and incentives of local Governments and Town and Village enterprises than was possible at the provincial and national levels.

China's economic growth has been driven by a highly motivated communist party (CCP) leadership that had fast growth and income catch-up with richer/ advanced countries as its primary objective. This objective was successfully diffused and decentralised to the lowest level of government the towns and villages, to a degree that was perhaps unmatched even by Japan and S. Korea that had similar objectives in the corresponding point in their development.⁷² This objective did not necessarily exist from the beginning of the reforms in 1977 or 1978, when the focus was on correcting the abysmal policies of the past decade that had put the economy well below its 'normal' trajectory. In 1975 China's GDP at PPP was about 81% of India's and its per capita GDP at PPP 54% of India's. Market reforms in agriculture led to a growth spurt in this sector. Renewed interest in exports to generate foreign exchange for imports helped support this growth and helped spread growth to the other sectors. The growth spurt between the mid-1970s and early 1980s represented normalisation of agriculture and foreign trade (export thrust) policy from a self-destructive Maoist extreme. As a consequence, the GDP gap with India had been closed by 1984.

Product market and managerial reforms shifted in the mid 1980s to the manufacturing sector and the policy focus shifted to an Export led growth strategy, resulting in the closing of the per capita income (GDP) gap with India by 1991. This

⁷² Singapore also had similar objectives, but decentralization is not an issue in a city state.

evolved during the 1990s into an FDI-export led strategy. The policy could be described as a combination of attracting FDI at any cost and promoting exports at any cost. The public ownership of capital assets and land has provided the profits that were used to push up public investment and provide the indirect subsidies needed to maintain incredibly high rates of export and FDI growth. The output of this investment was absorbed by further investment, consumer demand expressed through output markets and exports.

Though economic policy has constantly evolved to expand the scope of the market and to develop market institutions a large area of socialist inefficiency remains. The strengths and weakness of socialist ownership are two sides of the same coin. Government ownership of most domestic assets eliminates the need for high taxes that create distortions and disincentives for private entrepreneurs. In combination with absolute control of individual saving it allows high rates of public investment and high levels of subsidies to attract FDI and push capital intensive exports. The other side of the coin is that rates of return to public capital have progressively declined and will continue to decline as long as centralised social ownership and control (of national and large provincial SOEs) is maintained. At some point therefore both the amount of subsidy and the rate of public investment must fall, leading to a lower growth rate. Though in principle policy reform that expands the scope of the (genuine & more efficient) private sector (domestic and foreign) can help maintain growth, this appears unlikely to happen at a speed that will keep the rate of growth from declining albeit gradually.

10 References

- Au Chun-Chung and Vernon Henderson (2002). "How Migration Restrictions limit Agglomeration and Productivity in China" NBER Working Paper No. 8707, January 2002
- Bhalla, Surjit S.(2003), "Recounting the Poor: Poverty in India, 1983-99, Economic and Political Weekly, Vol. XXXVIII, No. 4, January 25-31, 2003.
- Bloom, David E. and David Canning, "Global Demographic Change: Dimensions and Economic Significance," NBER Working Paper No. 10817, September 2004
- Bloom, David E, David Canning and Jaypee Sevilla, "Economic Growth and the Demographic Transition," NBER Working Paper No. 8685, December 2001.
- Brandt, Loren, J. Huang, Guo Li and Scott rozelle (2002). "Land Rights in Rural China: Facts, Fictions and Issues" *China Journal*, 47 (Jan 2002) 67-97
- Chang, Gordon G. (2001), *The Coming Collapse of China*, Random House, New York

Che, Jiahua and Yingyi Qian (1998). "Insecure Property Rights and Government Ownership of Firms" *Quarterly Journal of Economics* 113(2), 467-496

Collins, Susan and Bosworth, Barry (1996), "Total Factor Productivity," *Brookings Papers on Economic Activity*, 1996:2.

Cornea, Giovanni A and Julius Court (2001), "Inequality, Growth and Poverty in an Era of Liberalisation and Globalisation," Policy Brief No. 4, UN University, WIDER.

Deininger, K. and Squire, L. (1996). 'A New Data Set Measuring Income Inequality'. *World Bank Economic Review*, 10(3): 565-591.

Dooley, Michael, David Folkerts-Landau, Shunming Zhang, "Inequality Change in China and (Hokou) Labour Mobility Restrictions," NBER Working Paper No. W10649, July 2004.

Eichengreen, Barry, Yeongseop Rhee, Hui Tong, "The Impact of China on The Exports of Other Asian Countries," NBER Working Paper No. W10727, September 2004.

Gelb, Alan; Byrd, William, "Township, village, and private industry in China's economic reform," Policy Research Working Paper, World Bank, April 1990.

Hertel, Thomas and Fan Zhai (2004). "Labour Market Distortions, Rural-Urban Inequality and the Opening of China's Economy" World Bank Policy Research Working Paper 3455, November 2004

Huang, Yasheng, *Selling China: Foreign Direct Investment during the Reform Era*, Cambridge University Press, 2003.

International Monetary Fund (2004), "Advancing Structural Reform," *World Economic Outlook*, April 2004.

Jia Kang and Zhao Quan-hou, "The Size of China's National Debt," *World Economy and China*, 2001. http://www.iwep.org/en/wec/english/article/2001_01/jiakang.htm.

Jin, Hehui and Yingyi Qian (1998). "Public versus Private Ownership of Firms: Evidence from Rural China" *Quarterly Journal of Economics*, Vol 113, No.3 Aug 1998, 773-808

Khanna, T and Y Huang (2003), "Can India Overtake China," *Foreign Policy* July/August 2003.

Kuijs, Louis (2005), "Investment and Saving in China," World Bank Policy research Paper 3633, June 2005.

Lange, Oscar, "On The Economic Theory of Socialism," in Goldman, M. I. (ed.) *Comparative Economic Systems*, New York, 1971.

Lardy, Nicholas R., *Foreign Trade and Economic Reform in China, 1978-1990*, Cambridge University Press, Cambridge, 1992.

Lardy, Nicholas R., *China's Unfinished Economic Revolution*. Washington DC, Brookings, 1998.

Lardy, Nicholas R., "The Macro-economic Context: The Challenge of Bank Restructuring in China," *Strengthening the Banking System in China: Issues and Experience*, BIS Policy Papers No. 7, October 1999.

- Lerner, Abba, P, "Economic Theory and Socialist Economy," Review of Economic Studies 1934. (Rejoinder in RES 1935).
- Li, Wei (1997). "The Impact of Economic Reforms on the Performance of Chinese State-Owned Enterprises," Journal of Political Economy, 105:5, 1080--1106, (October 1997).
- Mood, Michelle S. (2005). "Opportunists, Predators and Rogues: The Role of Local State Relations in Shaping Chinese Rural Development" Journal of Agrarian Change, 5(2) April 2005, 217-250
- Oi, Jean C. (1995). "The Role of the Local State in China's Transitional Economy" The China Quarterly, 144, Special Issue, Dec 1995, 1132-1149
- Perkins, Dwight, "Reforming China's Economic System," Journal of Economic Literature, Vol. 26, No. 2, June 1988, pp 601-645.
- Perkins, Dwight, "Completing China's Move to Market," Journal of Economic Perspectives, Vol. 8, No. 2, Spring 1994, pp 23-46.
- Prasad, Eswar and Shang-Jin Wei, "The Chinese Approach to Capital Inflows: Patterns and Possible Explanations," NBER Working Paper No. 11306, April 2005.
- Putterman, Louis (1995). "Role of Ownership and Property Rights in China's Economic Transition" China Quarterly, 144 Special Issue (Dec 1995) 1047-1064
- Rodrik, Dani and Subramanian, Arvind (2004) "Why India Can Grow at 7 Percent a Year or More: Projections and Reflections" IMF Working Paper No. 04/118 , July 2004.
- Sheng-Jin Wei, "Pitfalls of a State Dominated Financial System: The Case of China, NBER Workin Paper No. W11181, March 2005.
- Smyth, Russel (1998). "Recent Developmetns in rural Enterprise Reform in China: achievements, Problems and Prospects" Asian Survey, 38 (8), Aug 1998, 748-800
- Sung, Yun-Wang, The China-Hong Kong Connection: The Key to China's Open Door Policy, Cambridge University Press, Cambridge, 1991.
- Tseng, Wanda and Harm Zebergs, "Foreign Direct Investment in China: Some Lessons for Other Countries." IMF Policy Discussion Paper, February 2002.
- Virmani, Arvind (1999a), "Star Performers of the 20th (21st) Century: Asian Tigers, Dragons or Elephants," Occasional Paper, Chintan, September 1999, www.icrier.org/avpapers.html.
- Virmani, Arvind (1999b), "Potential Growth Stars of the 21st Century: India, China and The Asian Century", Occasional Paper, Chintan, October 1999. www.icrier.org/avpapers.html.
- Virmani, Arvind (2004a), Accelerating Growth and Poverty Reduction – A Policy Framework for India's Development, Academic Foundation, New Delhi, January 2004.
- Virmani, Arvind (2004b), "India's Economic Growth: From Socialist Rate of Growth to Bharatiya Rate of Growth," Working Paper No. 122, ICRIER, February 2004. www.icrier.org/wp122.pdf
- Virmani, Arvind (2004c), "Sources of India's Economic Growth: Trends in Total Factor Productivity," Working Paper No. 131, ICRIER, May 2004. www.icrier.org/wp131.pdf.

Virmani, Arvind (2004d), "Forex for Infrastructure," Economic and Political Weekly, Vol. XXXIX No. 52, December 25-31, 2004, pp. 5559-5562.

Virmani, Arvind (2005a), "A Tripolar Century: USA, China and India," Working Paper No. 160, ICRIER, March, 2005. www.icrier.org/wp160.pdf.

Virmani, Arvind (2005b), "Institutions, Governance and Policy Reform: A Framework for Analysis," Economic and Political Weekly, Vol. XL Nos. 22 & 23, May 28-June 03/June 04-June 10, 2005, pp. 2341-2350.

Virmani, Arvind (2005c), "Policy Regimes, Growth and Poverty in India: Lessons of Government Failure and Entrepreneurial Success!," Working Paper No. 170, ICRIER, October 2005. <http://www.icrier.org/WP170GrPov9.pdf>

Virmani, Arvind (2005d), "Global Power From The 18th To 21st Century: Power Potential (VIP²), Strategic Assets & Actual Power (VIP), Working Paper No. 175, ICRIER, November 2005. <http://www.icrier.org/WP175VIPP8.pdf>.

Virmani, Arvind(2006), "Propelling India from Socialist Stagnation to Global Power: Growth Process, Vol. I (Policy Reform, Vol. II), Academic Foundation, New Delhi, 2006.

Walder, Andrew G. (1995). "China's Transitional Economy: Interpreting its Significance" *The China Quarterly*, 144, Special Issue Dec. 1995, 963-979

Walder, Andrew G. (1995). "Local Governments as Industrial Firms: An Organizational Analysis of China's Transitional Economy" *American Journal of Sociology*, 101(2), Sept. 1995, 263-301

Whalley, John and Shunming Zhang (2004). "Inequality Change in China and (hukou) Labour Mobility Restrictions."

Whalley, John and Xian Xin, "China's FDI and Non-FDI Economies and the Sustainability of Future High Chinese Growth", NBER Working Paper No. 12249, May 2006.

Wong, Christine (1985). "Material Allocation and Decentralization: Impact of the local sector on Industrial Reform" in Perry, E.J. and Wong, C. (eds) "The Political Economy of Reform in Post-Mao China" *Harvard Contemporary Economic Series: 2*, The Council on East Asian Studies/Harvard University, Cambridge, MA & London, 1985

World Bank (2005). "China: Integration of National Product and Factor Markets. Economic Benefits and Policy Recommendations." World Bank, June 13, 2005.

World Bank, World Development Indicators, 2005 CD ROM and Website.

Xu, Lixin Colin (1997). "The Productivity Effects of Decentralized Reforms: An analysis of the Chinese industrial Reforms" World Bank Policy Research Working Paper 1723, Feb 1997.

Young, Alwyn, "Gold into Base Metals: Productivity Growth in The People's Republic of China During the Reform Period," NBER, Working Paper 7856, August 2000.