

OCCASIONAL POLICY PAPER

CHINA'S SOCIALIST MARKET ECONOMY: LESSONS OF SUCCESS

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1 INTRODUCTION

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 allocations versus centrally planned allocations.

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 CPC controlled enterprises compete to maximise growth, as in a private corporate economy. The other market elements are external capital (into foreign invested enterprises) 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’s 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 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 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%.

2 SOCILIST ELEMENTS

2.1 LENINIST PARTY

The standard Marxist-Leninist description of the Communist ruled State is the “Dictatorship of the Proletariat.” In China 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 and broad approach to their implementation is decided at the top as are the parameters within which lower levels can take initiatives. Within this framework there is a multilevel decision making process from the national to provincial, Metro cities and Town & Village level. 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.⁶ The degree of operational freedom and flexibility within the designed and designated sphere of operation of the lower levels has however, increased since 1980. China’s governance system is therefore a mix of centralised and decentralised elements, with the latter much wider than it was in the Leninist USSR.

The party has undoubtedly changed and evolved over the last 25 years and is different from what it was under Chairman Mao’s cultural revolution. 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 authority⁷ and every CEO of every government owned/controlled company/firm/organisation. These appointees are therefore not just state officials or

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).

⁵ The only reasonable 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 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 Equivalent to our Joint secretary and above.

company /co-operative CEOs, but part of the network of the CCP. 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.

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.⁸ For instance, the town or village CCP boss who appoints the T&V enterprise CEO could leaves 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.⁹ 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 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).

Other vital departments of the CCP 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 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

⁸ But not in the financial sector where the party/govt still controls capital flows.

⁹ Indian public sector managers have always enjoyed this type of freedom. This does not mean that we can arbitrarily classify the Indian Public sector or the TVEs as private.

easily be confused with a deliberate decision to reduce, dismantle or eliminate the control network, given the level of transparency regarding internal working of CCP.

2.2 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.

2.2.1 LAND

All land is owned and controlled by the State. 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, 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 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. 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.¹⁰ Alternatively the land price can 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 whole of its output.

¹⁰ 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.

2.2.2 LABOUR

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. 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)). 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.¹¹ 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.

2.2.3 CAPITAL

2.2.3.1 Ownership and Management

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 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.¹²

Similarly, Town and Village Enterprises (TVEs), though (in theory) collectively owned by the workers, are subject to local govt. direction (Perkins(1988, 1994)).¹³ 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

¹¹ 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.

¹² In India, the Tata's exercised absolute control over TELCO & TISCO with 6-8% of the share holding till the mid-nineties.

behaviour in input/output markets.¹⁴ As long term value added maximisation is the same as growth maximisation, the conflict between local and national goal 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 1997.¹⁵ TVEs are classified as non-state sector, but often this is mistaken as private sector.¹⁶ TVEs are SOEs controlled by the lowest level of government with a greater degree of autonomy in terms of market operation.¹⁷ 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.¹⁸ 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.¹⁹

¹³ 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.

¹⁴ Competition can however be thwarted by local/ provincial protective barriers to trade.

¹⁵ Regional stock exchange on which the latter raised capital were abolished in 1995. Listing quotas were abolished in 2000.

¹⁶ The correct picture as painted for instance by Gelb and Byrd(1990) and Perkins (1988, 1994) seems to have been lost along the way.

¹⁷ 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).

¹⁸ 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.

¹⁹ 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.

2.2.3.2 Banks

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).²⁰ 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 1995.²¹ 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 China, banks are not intermediaries but instruments of the State (departments) for channelling 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.²² 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.²³ Such bailouts since the Asian crises aggregate to between 50% and 100% of GDP.

²⁰ Minsheng Bank is owned by the All-China Federation of Industry and Commerce a govt organization overseeing private firms.

²¹ Huang(2003), pp118.

²² See Lardy (1998) for a detailed discussion of NPAs.

²³ A Mckinzie journal volume on China (2004) gives just of hint of this.

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 in 2004 that truly market oriented lending based on technical criterion is nil. 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.²⁴ 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.

2.2.4 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.²⁵ 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 avoids 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

²⁴ 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.

in new scientific areas with some success. The output of Chinese scientists as measured by the citation index increased rapidly to respectable levels.

2.3 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.

3 MARKET ELEMENTS

3.1 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.²⁶ At this

²⁵ 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.

²⁶ 'low level government officials did extract informal payments of various kinds' Perkins(1994).

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.

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.

3.2 INTERNATIONAL MARKETS

3.2.1 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)).

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

3.2.3 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. Namely 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.²⁷ 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.

²⁷ 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)).

3.3 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.

4 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.

4.1 OBJECTIVES

In general terms the objective of the CCP is to increase China's global power subject to retaining power 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 similar to that adopted by "Nationalist Market Economies," or "Corporate States," such as Japan and S. Korea prior to their becoming high-income countries, with the difference that growth maximisation was subject to rising welfare of all groups of citizens. The approach contrasts with the Social Welfare maximisation objective of the governments of most "democratic market economies."

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).

4.2 MEANS

The primary means of achieving high growth is high investment rate. This has two prongs. One is government/public 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. 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.

4.3 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 does 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/CPC network, which appoints the top management in listed companies, co-operatives, T&V enterprises and State owned enterprises. The State therefore has a high share of national profits and consequently the ability to have both low tax rates and very high investment rates (including in infrastructure). For instance 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.²⁸ Thus reinvestment of public returns to capital along with FDI inflows of 8% of GDP (7.4% in 1993) 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, when gross FDI was about 5% of GDP. High rates of investment in infrastructure since the mid-1990s reflected a change in the

²⁸ 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.

allocation of public expenditure. This was initially driven by the unemployment created by SOE closure and weaker export demand during the Asian crises.²⁹

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 reached a peak of 10.4% of GDP in 1989 it had declined 0.2% of GDP by 2002.³⁰ 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 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.³¹

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 fallen from 25% at the start of reform to 6% in 1997.³² Lardy also estimates that the

²⁹ 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.

³⁰ The previous peak was 8.4% of GDP in 1978.

³¹ This is happening for instance in textile exports to the USA.

³² 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 govt firms is likely to average between 0%-4%.

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). It would not surprise if international capital markets readily provide these funds on the illusion that this means privatisation of Govt companies or banks.³³ If these funds are not forthcoming or when they run out China will have to alter its development strategy more fundamentally.

4.4 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).

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 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.³⁴ The 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

³³ As Abraham Lincoln said, "You can fool all the people some of the time," perhaps in China a lot more time than he imagined.

³⁴ Almost 50% was from Hong Kong during 1979 to 1999(Huang(2003) pp 36, 48)

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.³⁵ 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 and to hi-tech industry.³⁶ 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

³⁵ Huang(2003) p15. The share of HK & Taiwan in FDI was 61.8% in 1995, and another 4.9% was from Singapore.

³⁶ 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.

public services has to be reduced.³⁷ 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. This suggests that the difference between China's and India's growth rate since 1980 can largely be explained by the difference in FDI inflows (including export-oriented FDI).

5 RESULTS

5.1 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. 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 overestimated 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

³⁷ The latter is related to the income distribution point discussed below.

World, but only 30% higher than India's the 9th fastest growing economy.³⁸ 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.³⁹ 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.⁴⁰ On balance, China's growth rate is likely to decline gradually to more normal levels from the stratospheric rate of 9.5%!

5.2 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 workers (the labour responsibility system) this translated into growing income inequality. Out of total of 127 countries China ranks 91 in terms of the Gini co-efficient of inequality, and 94th in terms of the consumption share of the poorest 20% of the population. 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

³⁸ About 60% higher in terms of per capita growth.

³⁹ After a decade or two it will become negative because of the rapid aging of its population.

⁴⁰ See IMF, World Bank and ADB reports on China and Chang (2001). See also Virmani (1999).

inequality and declining public social services have a potential for socio-political upheaval and counter repression that could disrupt growth.

5.3 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.

Given the continuing generation of non-performing assets, China is somewhat more vulnerable on these issues than the Asian crises countries.⁴¹ 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 CPC/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.

⁴¹ Which have resulted in a (World Bank estimated) national debt of 50% to 100% of GDP. See Jia Kang & Zhao (2001).

5.4 POLITICS

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.⁴² 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.

6 Comparative Performance: India

6.1 Reform Impact: J curve

According to India's National accounts data GDP and per capita GDP have grown at an average of 5.8% per annum and 3.8% per annum respectively during the last 25 years (1980-1 to 2004-5).⁴³ The comprehensive reforms instituted in the 1990s have increased competitive pressures on the Indian economy while at the same time enhancing its ability to compete globally. The growth rate has however increased by only about 0.6% point.⁴⁴ The opening of the economy to international trade seems to produce a J-curve effect: The direct negative effects of competition appear immediately as capacity utilisation falls in un-competitive product lines. With capital immobile, reduction in capital stock is limited by the rate of depreciation. The positive effects of competition on productivity appear gradually. New technology is first adopted by the pioneers and effected through new investment. It diffuses gradually to other firms in the industry.⁴⁵ Improvements in productivity will therefore appear at the aggregate level only after a lag.

⁴² K Subrahmanyam et al.

⁴³ The WDI data underestimate the GDP growth rate substantially though the per capita GDP growth rate is almost the same.

⁴⁴ From 5.5% per annum during 1980-81 to 1991-2 to 6.1% during 1992-93 to 2003-4. Per capita GDP growth accelerated by 1% point from 3.3% to 4.3% per annum.

⁴⁵ There are numerous cases of firms that have transformed their systems and shown large increases in productivity. The effects of these are not however available in the sector data.

We therefore expect the underlying trend rate of growth in India to move up to around 6.5% over the next few years.

The growth rate is projected to rise further to 7% thereafter on the assumption that reforms will continue at the average pace seen since 1991. These include removal of controls on a host of sectors and sub-sectors that are the basis of the jungle of red tape and lead to bureaucratic delays, labour reform, and lifting of entry restrictions in education (see Virmani (2004a) for details).⁴⁶ Three specific (modern services, FDI, demographic transition) and three general factors make this increased growth feasible and sustainable.

6.2 Services: Exports to GDP

First, the one area in which the improved competitiveness of the Indian economy is clearly visible is in the double-digit (20% to 30% per year) growth of Information technology (IT) and IT enabled services (ITES) export. Though such non-traditional (ie. excluding transport & tourism) service exports are already a significant share of India's total exports, they constituted a very small part of the economy. Therefore the impact on GDP growth was limited. With the continuing high growth of non-traditional service export, they are now becoming large enough to have a measurable impact on GDP and their contribution to GDP growth could rise from 0.5% to 1.5% points over a decade.⁴⁷ India is likely to become one of the largest suppliers of non-traditional services to the World over the next few decades (including R&D, financial, medical, educational and social services). OECD ageing citizens will benefit greatly from the universalisation of medical services that their lower cost will make possible.

6.3 FDI: Unexploited Potential

The second factor is the un-exploited potential of foreign direct investment (FDI). The proportion of FDI in total investment and GDP is very low in India compared to other high growth Asian countries such as Singapore, Malaysia, Thailand, China, Indonesia and Vietnam. In contrast to China's FDI-export led growth model, India's

⁴⁶ This book summarises the reforms proposed in a series of internal papers done in the Ministry of Finance (Department of Economic Affairs), Govt of India, from 1995 onwards. The underlying theme of these suggestions is to increase competition in every market and sector by removing the distortions introduced by the Indian version of socialism and to focus government effort on the supply of public and quasi-public goods and services.

⁴⁷ Starting at the lower end and going up to the higher end of the range.

growth has been led by domestic investment and entrepreneurship.⁴⁸ The positive role of FDI in growth (marketing, technology, management systems) is therefore largely un-exploited. A doubling of FDI flows from the recent levels of \$ 3.5 to \$4 bi. to \$8bi to \$10bi per annum will give a substantial boost to productivity and growth.⁴⁹ India is already an attractive location for skill-intensive manufacturing because of the high quality and availability of middle management/ technical skills and knowledge workers. Several areas of competitiveness related to such skills are already visible, namely biotechnology, auto engineering (parts) and specialised chemicals.⁵⁰

With China's per capita income more than twice that of India's its hourly wage will eventually attain the same ratio. Membership of the WTO and scrutiny by global NGOs will make it increasingly difficult for foreign invested firms in China to make people work 100 hours a week. India will therefore become a more attractive location for small & medium scale labour-intensive manufactured exports vis-à-vis China. The new Special Economic Zone (SEZ) law can reduce red tape/bureaucracy, introduce much needed flexibility in labour laws, rules and procedures and accelerate development of high quality infrastructure, thus expediting this process. FDI can play a critical role in integrating India into the global supply chain for a host of products. If domestic hurdles to global operation are removed FDI could add at least a point to growth.

6.4 Demographic Dividend

The third important factor is the demographic transition that is taking place across the World. The high growth of E & S.E. Asian countries was to a substantial degree due to the demographic transition (Bloom et al(2001)). This is the \cap (inverted U) shape followed by the ratio of labour force to population.⁵¹ With the supply of labour rising faster than population per capita GDP growth accelerates. Further the changes in the age profile also result in a rise in the aggregate saving rate ensuring sufficient funds for investment. China is nearing the end of its demographic transition while India has entered its most positive phase. We estimate that this could add between 0.5% to 0.8% points to the growth of the Indian economy.

⁴⁸ See Khanna and Huang (2003) for a comparison with China.

⁴⁹ Several ICRIER working papers by Rashmi Banga have shown the positive effects of FDI in India.

⁵⁰ With the introduction of a product patent regime from this year, the protection of the legal system will now be available to drug developers.

⁵¹ The dependency ratio follows a U shape first falling then rising.

In addition the population of Europe and Japan is aging rapidly and there will be a great demand from these economies for ‘youth-intensive’ goods and services.⁵² Over the next half century India will have the youngest labour force in the world. India is therefore likely to become the largest exporter of such items.⁵³

6.5 Intangibles

There are also several general factors that will sustain growth. One is the existence of a large *under-utilised* pool (20 mi. to 100 mi.) of free thinking, autonomous working, high IQ people. The normal distribution of IQ in a population, means that 2% of population has very high IQ and 10% has high IQ. Applying this to India we get 20mi and 100 mi people respectively. Bad economic policies till 1980 contributed to gross under-utilisation of this resource.

The second is the high quality and diversity of India’s institutions and the social capital built over centuries.⁵⁴ The democratic system, including the relatively new non-governmental institutions and free & vibrant media, is a great source of long-term strength. Rodrik and Subramanian (2004) estimate that India’s (China’s) income level is 15% lower (higher) than that predicted by the quality of its institutions. India’s income will therefore rise to the predicted level with the correction of wrong policies, while China will not be able to sustain the same growth at higher income levels where these institutions are critical.

The third is the experience of working with citizens of very diverse backgrounds (religious, ethnic, language, sub-culture) and the facility with English. This pluralism and language facility is a unique advantage in the globalised 21st century. India is also ideally placed to partner OECD countries in the emerging global knowledge economy of the 21st century. These specific and general factors are sufficient to overcome any negative growth factors, to raise growth to a sustainable 7% or so.⁵⁵

⁵² For instance a study has shown that Nobel prize winners in Physics did their most productive work below or around the age of 25.

⁵³ As China’s population will age much earlier than that of India it is not in a position to exploit this opportunity.

⁵⁴ China had similarly high levels of social capital but much of this was destroyed during the communist revolution and the cultural revolution.

⁵⁵ A more optimistic scenario is also possible in which growth reaches the 7.5%-8% range and remains there for a decade or so. The probability of this is 10-15% in our view. Surjit Bhalla has been asserting for the last 3 years that India’s growth rate will soon exceed 8%.

6.6 Poverty

There are some questions raised by India-sceptics about poverty and inequality in India, which have to be viewed in the light of the following facts. India is a low-income country, so the proportion of poor is still high (about 23%).⁵⁶ The absolute number of poor is thus larger than the total population of all but two countries (USA and China). It is democratic so the poor are free to live and work anywhere and are therefore **visible everywhere**. India's income distribution is, however, among the top quarter of the 127 countries for which the Gini co-efficient is available.⁵⁷ It does very well for the poorest 10% whose consumption share is the 6th highest among these 127 countries.⁵⁸ India is one of a handful of high growth countries whose income distribution has not worsened significantly during the high growth period.⁵⁹ By 2010, when India becomes a lower-middle income country, the poverty rate will be reduced to about 15%.⁶⁰ Poverty is likely to be completely eliminated by the time it becomes an upper-middle income country around 2025.⁶¹

6.7 Governance Issues

The greatest long-term weakness is on the political side. Infirmities in its political system have led over the last 4 decades, to a deterioration in the quality and quantity of public goods (roads, policing, legal system.) and quasi-public goods supplied. The high fiscal deficit is a symptom of this deterioration in governance. Differences in quality of governance across States are also an important cause of rising interstate differences in growth rates and poverty (head count ratio). The governments' lack of success in suppressing Maoist and other insurgencies in the interiors of the country is another reflection of government failure.

Political/governmental reforms are necessary over the next decade to ensure that the system remains on even keel.⁶² This down trend in governance must and will be reversed. Though Indian democracy responds slowly to such intangible threats, it has always been able to deal with them in a democratic and non-disruptive manner. However,

⁵⁶ The poverty rate or Head count ratio is 29th out of 87 countries for which data is reported.

⁵⁷ 32nd to be precise.

⁵⁸ 14th for consumption share of bottom 20% and 25th for bottom 40% of the population.

⁵⁹ Cornea and Court (2001).

⁶⁰ Based on official rate in 1999-2000 (26%) adjusted for survey changes (i.e.28%-29%). We assume a decline of 1% point per year based on the average decline since 1980.

⁶¹ Before that the national poverty line will probably be raised.

because we anticipate a slow correction of this weakness, the Indian economy is unlikely to grow above 7% despite other strengths.

7 LESSONS

In this section we summarise some of the lessons arising from the above analysis of the Chinese economy, viewed from the perspective of the Indian economy and India's growth experience. These lessons therefore implicitly incorporate an India-China comparative perspective.

7.1 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.

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

⁶² See Virmani (2004a) for the new development paradigm needed for high growth in India.

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

7.2 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).⁶³

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.

⁶³ 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.

7.3 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 (QRs) what and from where capital goods and intermediate goods should be imported by entrepreneurs innovation inevitably suffers.

7.4 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.

7.5 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.

7.6 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.

7.7 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 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' party/government still controls around 95% of domestic assets (i.e. excluding FDI).

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 (TVEs), 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 govts and TVEs 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.⁶⁴ 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

⁶⁴ Singapore also had similar objectives, but decentralization is not an issue in a city state.

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 1982-83.⁶⁵

Product market and managerial reforms then shifted to manufacturing sector and the policy focus shifted to an Export led growth strategy. This evolved 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 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 can help maintain growth, this appears unlikely to happen at a speed that will keep the rate of growth from declining albeit gradually.

⁶⁵ It took another decade to close the income gap.

9 Appendix

The following OLS growth regressions for China for the period 1982 to 2002 based on data available in World Development Indicators 2002, are suggestive:

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

(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.

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\$). Similar results are obtained using TSLS.⁶⁶ If we replace gross FDI by net FDI 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.

FDIn\$ is the net FDI inflow in US \$. 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.

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.

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:⁶⁷

$$\text{GrGdp}_L = 1.47 + 0.832*\text{GrKf}_L + 0.283*\text{AR}(1)$$

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

$R^2 = 0.29$, R^2 (adjusted) = 0.24, DW = 1.79.⁶⁸

⁶⁶ Instruments include growth rates of world imports, China's population & labor force and exports(lagged).

⁶⁷ The capital stock series is built using perpetual inventory method using GFCF and assuming a 5% depreciation rate.

⁶⁸ Capital's share is much lower (0.54) and DW very low if we estimate from 1977 onwards.

Using the parameters of this equation we can calculate TFPG as,
 $TFPGa = GrGdp_L - 0.832*GrKf_L$ or $TFPG = TFPGa - 1.47$. Then by OLS,
 $TFPG = 478 - 0.24*year + 0.04*FDI\$_z$

$$(4.4)^{***} \quad (-4.4)^{***} \quad (5.9)^{***}$$

$R^2 = 0.83$, R^2 (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 the CCP/govt. either directly or because of provision of capital subsidies, resulting in declining marginal productivity of capital.

10 References

- Bloom, David E, David Canning and Jaypee Sevilla, "Economic Growth and the Demographic Transition," NBER Working Paper No. 8685, December 2001.
- Chang, Gordon G. (2001), *The Coming Collapse of China*, Random House, New York
- 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.
- 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.
- 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 .
- Khanna, T and Y Huang (2003), "Can India Overtake China," *Foreign Policy* July/August 2003.
- 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).

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.

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.

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, "Economic Reforms: Policy and Institutions Some Lessons From Indian Reforms," Working Paper No. 121, ICRIER, January 2004. www.icrier.org/wp121.pdf .

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

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.