THE WORLD BANK OPERATIONS EVALUATION DEPARTMENT

Evaluation of the World Bank's Contribution To Chinese Enterprise Reform

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ACRONYMS

ADB	Asian Development Bank
CESRRI	Chinese Economic System Reform Research Institute
CNPC	China National Petroleum Corporation
FDI	Foreign direct Investment
GITIC	Guandong International Trust and Investment Corporation
IPO	Initial Public Offering
SOE	State-Owned Enterprises
UNDP	United Nations Development Programme
WTO	World Trade Organization

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1. Positive Contributions

Building international links in the 1980s

1.1 It is widely recognised in Chinese policy-making circles that the World Bank made a significant contribution to the country's enterprise reform in the 1980s. Funds to support international contacts at that time were extremely limited. Financial support from the Bank for international exchanges of ideas are still strongly remembered for their valuable contribution in introducing to Chinese audiences the ideas of leading international thinkers in the area of enterprise reform. A major contribution consisted of bringing eminent international scholars and policy-makers to China, and in sending leading Chinese scholars and policy-makers abroad. The World Bank's financial support for these activities had a significant impact on the development of ideas on enterprise reform, especially at the highly influential Chinese Economic System Reform Research Institute (CESRRI), under the State Council. The influence of these enhanced international contacts were evidenced in the massive study undertaken at the CESRRI in 1985, under the leadership of Deputy Director Wang Xiaoqiang, to analyse the challenges facing enterprise reform (English edition edited by Bruce Reynolds, *Reform in China*, 1987). It included, for example, an empirical investigation of the 'Kornai index' (the ratio between the inventories of inputs and output) regarding it as 'the most important comprehensive index capturing the essential difference between the resource-constrained seller's market economy and the demand-constrained buyer's market economy'(Reynolds, 1987: 6-7).

Collaborative research on state enterprise reform.

1.2 The contribution of the World Bank was given more concrete form in the shape of joint research (from 1983 to 1985) on state enterprise reform, between the World Bank and leading Chinese institutions, under the umbrella of the Economics Research Institute of the Chinese Academy of Social Sciences. These took the form of two joint publications (G.Tidrick and J.Chen, eds., *China's Industrial Reform*, World Bank, 1987; and W.Byrd, ed., *Chinese Industrial Firms under Reform*, World Bank, 1992) which together made a valuable contribution to the debate about enterprise reform in China. The contribution was especially valuable as the World Bank team included leading scholars of the USSR and Eastern Europe, namely David Granick and Janos Kornai, and the Chinese side included two of China's most influential economists and policy advisors, Dong Fureng (Head, Institute of Economics, CASS) and Gao Shangquan (vice-chairman, System Reform Commission, Chinese State Council). The studies themselves, and the interactions that went on around their publication, were significant channels through which the World Bank influenced the process of Chinese enterprise reform.

1.3 Collaborative research on enterprise reform continued in the 1990s. The most striking example of this was the publication *Enterprise Reform in China* (edited by Gary Jefferson and Inderjit Singh, World Bank, 1999). This major study involved collaboration between the World Bank and several leading Chinese policy-oriented institutions, including the Institute of Economics and the State Economic System Reform Commission. This path breaking work constitutes the largest study of enterprise reform undertaken jointly by Western and Chinese scholars. It was based on three large-scale surveys undertaken from the late 1980s through to 1992. One

survey analysed 1,200 SOEs and collective enterprises. A second survey analysed 300 township and village enterprises, and a third analysed data from about 5,000 large and medium-sized enterprises. The study constitutes an invaluable documentation of the impact of economic reforms on the industrial sector. However, it also attempts to answer the question: 'Why [have] China's reforms, which appear meagre relative to the more ambitious reform programmes of Eastern Europe and even Russia, had such wide-reaching effects?' The study constitutes the most sustained attempt to explain the exceptional performance of the Chinese industrial sector from the early 1980s through to the early 1990s. It was highly influential in enabling scholars and policy-makers outside China to understand better the Chinese enterprise reform process. However, although not published until 1999, the data sets are from a decade or so prior to the date of publication. The study took place before the dramatic changes both within the Chinese economy, in the global business system (see below) in the 1990s and in China's relationship with that system.

1.4 Other research by the World Bank, notably S. Tenev and C.Zhang, *Corporate Governance and Enterprise Reform in China* (World Bank, 2002), was supported by key Chinese policy-advising institutions (especially the Development Research Centre of the State Council, as in this case). The latter study involved substantial interaction with Chinese scholars and policy makers at a seminar held to gauge reactions to, and improve the conclusions of, the study. In addition, the World Bank has published numerous research papers on enterprise reform, which involved interaction with Chinese scholars and policy-makers.

Industrial projects

1.5 The World Bank has been involved in several industrial projects through its loan programme. The main point of focus has been the fertiliser sector, but it has also been involved in projects in the machine tool, pharmaceuticals, and cement sectors. These projects have mainly focussed on technology transfer, but have also included significant elements of management training. The evaluations of these projects identified a variety of shortcomings in relation to their hoped-for achievements, especially concerning the ability of the Chinese partner to respond in the ways necessary to make the projects a commercial success (see Annex Table 1). However, at the level of technology transfer, they appear to have been basically successful. In relation to the whole of Chinese enterprise reform the projects were not intended to have, and nor have they had, a substantial impact. There appears to have been some initial hope on the part of the World Bank that they might constitute a model that would be studied more widely, but this does not appear to have been the case.

Private enterprise

1.6 Recently, the World Bank has devoted increasing amounts of research resources in the China field to analysing the role of private enterprise in the economy. These efforts culminated in a substantial study, *China's emerging private enterprises* (IFC, 2000). This was the result of collaboration with the State Economic and Trade Commission, both in the construction of the fieldwork and interpretation of the results. It produced a valuable description of the private sector's development, current structure, role in the national economy, and constraints on further development. This was a useful addition to the quite substantial literature on this topic in China. While an

admirable study, it is not clear that it closely inter-acted with policy-formation towards the private sector. The study constituted a wide-ranging survey of developments in this crucial sector. However, the study's breadth meant, inevitably, that it was relatively limited in the depth to which it was able to investigate many key issues. For example, a key question is the relationship of private business to the non-bank financial sector, but the study was unable to devote more than a couple of paragraphs (p. 57) to this vital aspect of the growth of the private sector. This somewhat limited the degree to which the study may have been able to engage with policy change in this sector. The relationship between private enterprise (*de facto* and *de jure*) on the one hand, and local banks and non-bank financial institutions (such as the rural credit co-operatives; rural financial associations; and urban credit co-operatives) on the other, was (and still is) a headache for Chinese policy-makers in the 1990s. To have engaged closely with such urgent issues as this would have been valuable for China's policy-makers.

1.7 One approach that the Bank might consider in its contribution to research on the private sector, is to focus its relatively limited resources on an in-depth study of a single area. Through such an in-depth case study, it might be possible to devise even more powerful policy lessons than through the collection of a large body of material from across the whole country. One of the most influential studies in the history of the growth of this sector was the research undertaken by Dong Fureng, Head of the Institute of Economics. In 1986, he led a small research team to Wenzhou, which was the pioneer of the individual household economy in the early 1980s. They produced a pathbreaking case study which had a considerable influence on the way in which the government viewed the individual economy (translated as *Market forces in China*, 1999, edited by Peter Nolan and Dong Fureng).

Bankruptcy Law

1.8 China's first bankruptcy law was passed in 1986 after intense debate in the National People's Congress. The 1986 law was designed for application to state-owned enterprises, in which state-owned banks were the only substantial creditors, and workers were interested solely in job security or severance/pension income. By the mid-1990s, the economic system had changed dramatically. State-owned enterprises increasingly had non-state minority shareholders and joint venture partners. Although China's banking system was dominated by the four giant banks, numerous smaller banks and non-bank financial institutions had emerged, joining the ranks of creditors in bankruptcy cases. Trade creditors were becoming more sophisticated, and large firms were issuing bonds or borrowing abroad through window companies, mainly in Hong Kong. Employees had acquired large deposits in banks, and many employees had bought company shares on the burgeoning stock markets. Collective enterprises had become extremely important, and the purely private sector was expanding at high speed. By the year 2000, more than 20,000 bankruptcy cases had been dealt with by the Chinese courts. However, they were operating with an archaic law unsuitable to the drastically changed economic structure.

1.9 It was widely recognised that the country needed to revise comprehensively its bankruptcy law to meet the changed circumstances. Work on a revised law began in

1994, and a new Draft Law was proposed in 1995. However, the issue was highly controversial, and work on the Draft was shelved for four years. It was re-introduced for discussion in July 2000.

1.10 The World Bank played an active role in the discussions around re-drafting the bankruptcy law. Its involvement is widely acknowledged as forming a useful contribution to the discussions surrounding the issue. In September 2000 it published a substantial study of the Chinese bankruptcy system (World Bank, *Bankruptcy of State Enterprises in China: A Case and Agenda for Reforming the Insolvency System*, 2000). In it, the Bank called for the 'rapid introduction of a new bankruptcy regime for non-state enterprises and incorporated SOEs'. It also called for matching improvements in institutional capacity. These included enhancement of the capacity of asset management companies; expansion of the capacity of work-out departments in banks; expansion of the ranks of bankruptcy professionals through suitable training and remuneration; teaching bankruptcy and related matters in law schools, accounting institutes and business schools; enhancing the capacity of small-city courts to deal with bankruptcy; and establishing a central institution to monitor and disseminate good practice in bankruptcy. In this debate the World Bank added its voice to that of a substantial group of legal scholars and policy-makers arguing for the urgent introduction of a revised bankruptcy law.

1.11 Following the reintroduction of the Draft Bankruptcy Law there was further intense debate about the issue, with innumerable pieces of research, publications and meetings among academics and policy-makers. The background to the debate included intense discussion about how to deal with the massive overhang of non-performing loans in the banking sector. The paramount importance of financial stability was strongly reinforced by the Asian Financial Crisis. One of the casualties of the Asian Financial Crisis was Guangdong International Trust and Investment Corporation (GITIC), the flagship of Guangdong Province in its integration with the global economy. In early 1999, GITIC was declared bankrupt. This was the first bankruptcy of a super-large SOE. Moreover, the main creditors were international financial institutions. The long, complex bankruptcy provoked intense discussion about the adequacy of the existing bankrutpcy law, and about the principles and practical issues involved in allowing China's large SOEs to go bankrupt.

1.12 Ongoing deep reform in the country's SOEs, typically involving extensive downsizing, was taking place alongside impending entry to the WTO, which also raised the threat of increased pressure on payrolls in Chinese enterprises after entry was completed. Those who advocated rapid introduction of a new bankruptcy law were opposed by those wished to give high priority to the protection of workers' interests rather than the protection of creditors' rights. There was deep distrust within the Communist Party at the prospect of effectively handing over the Party's control of such a vital area of economic and social life to the 'rule of law'. These fears were reinforced by the fact that the period saw numerous revelations about corruption and technical shortcomings in the judicial system. To entrust the future of the country's enterprises to the 'rule of law' which was implemented by such a deficient set of institutions was highly worrying. In fact, after two year of intense discussion, consideration of the Draft by the National People's Congress was once again postponed: 'Its just too risky at the moment to be embarking on a brave reform like passing a bankruptcy law' (*Financial Times*, 7 September 2002).

Centre for Economic Research, Beijing University

1.13 Financial support from the World Bank has been an important to the Chinese Centre for Economic Research at Beijing University. This centre has formed a channel for the introduction of ideas from the world's leading economists, who regularly visit and give presentations at the Centre's extremely active research seminar series. Papers by many leading international scholars have been regularly published in the Centre's Research Paper series, which is widely circulated within China. The Centre has a very active programme of research, with an impressive list of publications. A significant fraction of these relate to enterprise reform. Members of the Centre have played an active role in policy debate at the highest levels of the Chinese government. The Centre has become one of the main channels through which the World Bank influences (albeit indirectly) the thinking of Chinese policy-makers about the philosophy and broad direction of enterprise reform. It is, however, now just one among many such influences (see below) and it would be a mistake to exaggerate its impact.

2. Shortcomings

2.1 The World Bank's voice was never large in China's debates about policy towards enterprise reform. Since the earliest days of enterprise reform, China has persistently followed its own reform path, 'groping for stones to cross the river', determined to keep the reins to control its fundamental reform policies firmly in its own hands. However, as we have seen, in the 1980s at least, the World Bank had a significant, if not a large, role. Moreover, its research projects on enterprise reform in the 1980s and early 1990s played an important role in helping the outside world to understand better the nature of the Chinese enterprise reform process. Today, its interaction with the process of Chinese enterprise reform is greatly reduced. Arguably its main influence comes through its support for the Centre for Economic Research at Beijing University, and ideas that the Centre feeds into national policy discussion. Apart from this, the impact on policy is confined mainly to a useful contribution (fully acknowledged on the Chinese side), in certain specific areas, such as participation in the debate about reform of the bankruptcy law.

2.2 The question that will be addressed in the remainder of this report is: Why has the World Bank's impact upon Chinese enterprise reform become so weak? There are a number of reasons for this.

Growth of Chinese institutional capacity

2.3 The very success of the Chinese development effort means that the contribution of the World Bank to enterprise reform must, inevitably, have been reduced. The Chinese economy has grown at high speed, allowing its higher education and research institutions to enormously increase their capability. Moreover, their access to the world's advanced body of knowledge in every sphere of the sciences and social sciences has been comprehensively transformed. The arrival of the internet has greatly accelerated this process. In sum, the country's capability to conduct its own research programmes has grown immeasurably. It was, therefore, unavoidably the case that the proportionate impact of the World Bank's ongoing

programme of research on China's state enterprise reform would be greatly reduced over time.

2.4 The World Bank's research and policy-advice capabilities in relation to Chinese enterprise reform are relatively limited, and do not appear to have increased significantly, if at all, in real terms since the 1980s. These activities are taking place within a vastly increased pool of resources among Chinese institutions that are devoted to the analysis of this issue. The Bank has devoted considerable effort to the analysis of ways in which to improve corporate governance, to promoting privatisation, and clarification of property rights. These efforts have had some impact. However, the Bank's endeavours in this field now appear as a small part of a massive effort of research and debate at all levels, from the central institutions to the local provincial and city-level policy research entities. To a certain extent it is unavoidable that the World Bank's visibility in Chinese reform discussions has reduced. However, there appear to be more factors at work to explain the Bank's greatly reduced impact on enterprise reform.

Increased role of the investment banks

2.5 In October 1992, Brilliance Automotive became the first Mainland Chinese company to be listed on international markets. One year later, the international listing of a large batch of companies from the Mainland was completed. These were followed by successive batches of listings. By 2002, there were around fifty 'H' share companies listed on the Hong Kong stock exchange. These were all companies incorporated in the Mainland, but floating a portion of their equity on the Hong Kong stock exchange. International flotation had become a major plank in the reform of China's large SOEs. The international IPOs raised over US$ 30 billion in the 1990s, with relatively large sums in several cases.[1] Each of the large SOEs was comprehensively restructured before international flotation. Indeed, a major avowed goal of the international IPOs was to use the pressure from the flotation and subsequent pressure from international minority shareholders and strategic shareholders to push through large-scale changes in management practices in order to construct globally competitive firms.

2.6 The task of restructuring for flotation was massive. It involved separating the core from the non-core business, and corporatising the resulting entity containing the core assets. At China National Petroleum Corporation (CNPC), for example, it involved a massive struggle to impose control over huge subordinate entities, such as the Daqing oilfield, which accounts for over one-half of CNPC's total oil output. It involved large-scale downsizing to produce a firm that had revenues per worker that were closer to those of a globally competitive firm than the pre-existing SOE. At CNPC the number of employees in the core company that was floated (PetroChina) was 480,000, compared with 1.5 million in the original company. It involved also producing a set of accounts that stood up to international shareholder scrutiny, with a reliable valuation of the floated company's assets and financial flows. It involved establishing a governance structure that met international standards.

[1] US$ 4.2 billion for China Telecom in 1997; US$ 5 billion for China Unicom in 2000; and a total of around US$ 8 billion for the flotation of Sinopec, PetroChina and CNOOC in 2000/2001).

2.7 The task of restructuring a gigantic business such as CNPC, Sinopec, China Telecom, or China Unicom, is far beyond the resources available to the World Bank, and not, anyway, the purpose for which the World Bank exists. The reality is that the main practical tasks involved in restructuring the core of the Chinese state-owned enterprise system is in the hands of the global giant investment banks, notably Morgan Stanley Dean Witter and Goldman Sachs. Moreover, the process is far from passive, with the investment banks acting in response to the requirements of the Chinese 'customer'. Instead, there is a highly interactive process, with the investment banks constantly making presentations to the Chinese government and SOEs about ways in which the Chinese institutions can 'make money'. The investment banks are strongly interested in advising their Chinese clients about ways to combine groups of assets into more powerful corporate entities that can be partially floated, or raise additional capital through asset injections, on global stock markets. In the words of one senior investment banker working on China: 'My job is to create oligopoly'. The investment bankers were extremely influential in the restructuring of the Chinese oil and petrochemical industry for flotation. In addition to a giant asset swap, both Sinopec and CNPC comprehensively centralised control over subordinate independent legal entities to create truly unified companies. They were extremely active in the process of restructuring the Chinese telecommunications industry, which has resulted in two giant companies dominating almost the whole domestic industry. The airlines are also being consolidated into three giant firms and the power generation industry is also undergoing high-speed concentration with a view to raising more capital on international markets.

2.8 In sum, international advice to different Chinese entities on the way in which to restructure large SOEs has been dominated since the early 1990s by the global giant investment banks. These companies have massive resources, huge experience, and make large profits from their investments in this process. The World Bank lacks the resources, the incentive and the expertise to undertake this type of work.

Lack of connection with the key issues facing Chinese policy-makers and leaders of large enterprises

China's ambitions

2.9 China's approach to the reform of its large enterprises was heavily influenced by the analysis of industrial policy elsewhere. A succession of 'late comer countries' developed powerful indigenous firms through different measures of industrial policy, including Britain during the Industrial Revolution, the United States and Continental Europe in the nineteenth century, the Republic of Korea, Taiwan and Singapore in the second half of the twentieth century. From the 1950s to the 1970s, Japan's industrial planners supported the growth of a series of oligopolistic companies that developed into globally powerful firms. In the light of these experiences, it seemed reasonable for China to follow similar policies to support the growth of its own indigenous large firms. The history of other fast-growing, late-industrializing countries suggested to China's policy-makers that it was realistic to hope that Chinese large enterprises would be able to 'catch-up' rapidly with the world's leading firms.

2.10 A consistently stated goal of China's industrial policy has been to construct globally powerful companies that can compete on the global level playing field. Wu Banguo, of the Chinese State Council, is representative of this determination in his

declaration in August 1998: 'In our world today economic competition between nations is in fact between each nation's large enterprises and enterprise groups. A nation's economic might is concentrated and manifested in the economic power and international competitiveness of its large enterprises and groups….*Our nation's position in the international economic order will be to a large extent determined by the position of our nation's large enterprises and groups'*. As China prepared to enter the WTO, the country's commitment to building globally competitive large firms remained undiminished: 'The state will encourage big state-owned businesses to become internationally competitive corporations by listing on domestic and overseas stock market, increasing research and development expenditure, and acquiring other businesses. *The country will develop thirty to fifty large state-owned enterprises in the next five years through public offerings, mergers and acquisitions, restructuring and co-operation'* (Bai Rongchun, Director General, Industrial Planning Department, State Economic and Trade Commission, July 2001).

2.11 China's policy-makers selected a 'national team' consisting of over 100 large SOE industrial firms. These included firms such as AVIC in the aerospace industry (now split into two); Sinopec and CNPC in oil and petrochemicals; Sanjiu, Dongbei, and Shandong Xinhua in pharmaceuticals; Harbin, Shanghai, and Dongfang in power equipment; Yiqi, Erqi, and Shanghai in automobiles; Shougang, Angang, and Baogang in steel; and Datong, Yanzhou and Shenhua in coal mining; and China Mobile and China Unicom in telecommunications. China's chosen global giant corporations have been supported through industrial policies, which have included: tariffs, which still were significant in many sectors at the end of the 1990s; non-tariff barriers, including limitations on access to domestic marketing channels, requirements for technology transfer and to sub-contract to selected domestic firms as the price for market access; government procurement policy; government selection of the partners for major international joint ventures; preferential loans from state banks; and privileged access to listings on international stock markets. There are many channels through which China can continue to nurture the 'national team', even within the WTO. The political feasibility of such continued intervention was increased by the USA's recent greatly increased interventions in national industrial policy, including steel protection and the largest piece of government procurement policy in peacetime history, namely the decision by the US Government to purchase 3,000 Joint Strike Fighters from the US company Lockheed Martin.

2.12 In addition to over one hundred members of the 'national team', every province has its own 'provincial team', nurtured and supported through industrial policies of the local government. For example, China's most famous international brand belongs to the electrical appliance company, Haier. Its CEO, Zhang Ruiming, is the only Chinese CEO who to have appeared in *Fortune's* list of the 'world's top 100 CEOs'. Far from being the product purely of the free market, Haier's growth is explained by a combination of the entrepreneurial drive of its CEO, Zhang Ruiming, allied to the strong support of the local government in Qingdao City and Shandong Province. Haier received strong financial support from the local government through their relationship with the local banks; was supported by the government in its merger with other local firms, in negotiations with other governments to take over their local firms in gaining permission to list on the domestic stock market; and through the preferential allocation of high quality industrial land to help it expand through establishing a science park. Haier is technically a 'collective enterprise'. However, in

reality, it is a sprawling holding holding company of such institutional complexity that Zhang Ruiming himself finds it impossible to explain[2]. It is worthy of note that the firm that many people, both inside and outside the country, consider to be China's most successful example of a 'large modern enterprise' has grown up on the basis of principles that in key respects run directly counter to the Bank's fundamental philosophy on enterprise organization, including property rights, corporate governance and relationship of the financial system with the industrial system.

2.13 Analysis of China's long-stated policy of building a 'national team' of globally competitive large firms is conspicuous by its almost complete absence from the World Bank's publications on Chinese industrial policy. This greatly limits the degree to which the World Bank can engage meaningfully with China's industrial policy towards its large SOEs. However, as I will argue later in this report, a key dilemma for the Bank is that so much of the Chinese approach towards transforming large state-owned enterprises is at odds with most of the key arguments that the Bank has advanced about the reform of large state enterprises anywhere in the World.

The global business revolution

2.14 China's attempt to build large globally competitive firms coincided with the most revolutionary epoch in world business history, possibly even including the Industrial Revolution. China's efforts to support the growth of competitive global corporations from among the ranks of its large SOEs has taken place at a time of unprecedented change in the international business system, amounting to nothing less than a revolution. The global business system was much more stable during the period during which Japan, South Korea and Taiwan were putting into place their industrial policy. Moreover, the high-income countries were willing to tolerate extensive state intervention in these countries, because they were viewed as the front line in the fight against communism. China is regarded by the USA as a 'strategic competitor'.

2.15 There were a number of aspects to the *global business revolution*. ***Liberalization of world trade and capital markets.*** The period since the late 1980s has witnessed for the first time the opening up of a *truly global market place* in goods, services, capital and skilled labour. The only market which still remains bound firmly by nationality is the vast sea of unskilled labour. The world's leading firms have massively increased their production capabilities in fast-growing parts of developing countries. Foreign direct investment (FDI) in developing countries grew from $24 billion in 1990 to $170 billion in 1998. China was, by far, the main focus of attention, with FDI rising from $3.5 billion in 1990 to $50 billion in 2001. The struggle among the world's leading firms has now deeply penetrated the most developed parts of the low and middle income countries.

2.16 China is at the centre of this battle. The world's giant firms are struggling intensely with each other for a share of the China market: Boeing and Airbus in aerospace; Pfizer, GlaxoSmithKline, Merck, and Astra Zeneca in pharmaceuticals; Shell, BP and Exxon in oil and petrochemicals; IBM, Siemens, Nokia and Ericsson in IT hardware; Ford, GM, VW and Toyota in autos; Alstom, Siemens and GE in power equipment; Coca-Cola and Pepsico in soft drinks; Philip Morris, Japan Tobacco and BAT in tobacco; Nestle, Mars, Proctor and Gamble and Unilever in FMCGs; Arcelor,

[2] Interview with Zhang Ruiming, 19 June 2002.

Posco NKK-Kwasaki and Nippon Steel in steel; Rio Tinto, Billiton and Anglo-American in mining; Morgan Stanley, Goldman Sachs and Merrill Lynch in investment banking; PwC, KPMG, De Loitte Touche Tomatsu, and Ernst and Young in accountancy; Axa, Allianz, AIG, Prudential and CGNU in insurance; Citigroup, Deutsche Bank, HSBC, J.P.Morgan Chase, and Credit Suisse in banking; News Corps and AOL-Time Warner in the mass media. It is possible to speak of a 'bubble' of FDI by global giant corporations in investment in China, driven by global oligopoly and the herd instinct. No-one can afford not to have a 'China strategy'. If all large firms have such a strategy and the China market collapses, no individual will be blamed.

2.17 ***Explosive M&A and concentration.*** The 1990s witnessed by far the world's most explosive period of *mergers and acquisitions*. Global M&A rose from $156 billion in 1992 to around $3,300 billion in 1999. The size of the merger boom of the 1990s eclipses that of any previous epoch. It will leave a long-lasting imprint on the global business structure. In almost every sector a small number of focused global producers dominates the world market. Competitive capitalism's inbuilt tendency to concentration and oligopoly has finally flowered on a global scale: Just two firms make large (over 100 seats) commercial aircraft. In pharmaceuticals, the top ten firms account for 46 percent of world sales. In oil and petrochemicals, a group of just three 'super majors' has emerged, occupying three of the top seven slots in the *Fortune 500* list of the world's largest companies ranked by sales revenue. In power equipment, the top three firms account for almost nine-tenths of the world total of gas turbines installed in the 1990s. In the auto sector, the top six auto firms account for over 75 percent of the global market. In IT hardware, the top three firms account for 71 percent of the global supply of servers, for two-fifths of the global sales of PCs and three-fifths of global sales of mobile phones. In FMCGs , just two firms account for over 80 percent of global sales of carbonated soft drinks; two firms account for around 70 percent of global sales of camera film; three firms account for almost one-half of global sales of spirits; and four firms account for 60 percent of global tobacco sales.

2.18 ***'Cascade effect'.*** Not only have the core 'systems integrators' experienced an explosive process of concentration. The deepening interaction between core companies and supplier companies has created an explosive *'cascade'* effect that is rapidly leading to concentration and focus among the first tier suppliers and spilling over even into second and third tier suppliers. Concentration among leading aircraft assemblers has stimulated concentration among the main aerospace components suppliers: there are now just three makers of large aircraft engines across the world. Concentration among auto assemblers has stimulated concentration among auto components makers: the top three tyre makers account for almost two-thirds of global tyre sales; the top two manufacturers of auto brake systems account for 56 percent of global sales and the top two firms account for almost one-half of global sales of car air conditioning systems. Concentration among IT equipment makers has stimulated concentration among IT suppliers. One firm accounts for 85 percent of global sales of micro-processors ('Intel inside'), another accounts for 80 percent of high end routers, another supplies around one half of all optical fibres and another accounts for over nine-tenths of computer operating systems.

2.19 In sector after sector, the 'first tier' suppliers are themselves multi-billion dollar companies with 'global reach'. This makes the competitive landscape even more challenging for firms from developing countries, including China.

2.20 ***The 'external firm'.*** Through the hugely increased planning function undertaken by systems integrators, facilitated by recent developments in information technology, the boundaries of the large corporation have become blurred. In order to develop and maintain their competitive advantage, the systems integrators deeply penetrate the value chain both upstream and downstream. They are closely involved in business activities that range from long-term planning to meticulous control of day-day-day production and delivery schedules. Competitive advantage for the systems integrator requires that it must consider the interests of the whole value chain in order to minimize costs across the whole system. Far from becoming 'hollowed out' and much smaller in scope, the extent of control exercised by the large firm has enormously increased during the global business revolution.

2.21 *Dominance of firms based in advanced economies.* Firms headquartered in regions containing a small fraction of the world's population have comprehensively dominated the global business revolution. The high income economies contain just 16 percent of the world's total population. They account for 91 percent of the world's total stock market capitalization, 95 percent of Fortune 500 companies, 97 percent of the FT 500 companies, 99 percent of the world's top brands and 100 percent of the world's top 300 companies by value of R&D spending.

2.22 North America is by far, the world leader in this process. North America has just over five percent of the world's population, but it accounts for 40 percent of the Fortune 500 firms, 46 percent of the world's top 300 firms by R&D expenditure (74 percent of the top 300 IT hardware and software firms, ranked by R&D spending), 50 percent of the FT 500 firms, 54 percent of Morgan Stanley's list of the top 250 'global competitive edge' firms, and 61 percent of the world's top 100 brands.

2.23 Developing countries are massively disadvantaged in the race to compete on the global level playing field of international big business. The starting points in the race to dominate global markets could not be more uneven. The whole of the developing world, containing 84 percent of the world's population, contains just 26 Fortune 500 companies, sixteen FT 500 companies, fifteen of Morgan Stanley's list of the 250 leading 'competitive edge' companies, one of the world's top 100 brands and none of the world's top 300 companies by R&D expenditure.

The challenge for Chinese industrial policy

2.24 China's rapid move towards 'close' integration with the world economy is occurring at a time of revolutionary change in the global business system. This presents an extreme challenge for China's industrial strategy.

2.25 Significant progress has been achieved in the evolutionary growth process of China's large firms. However, case studies conducted in the late 1990s in a wide range of sectors show that after two decades of reform in most sectors the competitive capability of China's large firms is still weak in relation to the global giants (See Appendix*: 'Are large Chinese firms ready to compete on the global level playing field?'*). By the simplest of measures of sales revenue, profits and R&D, China's

vanguard of leading firms that are intended to 'compete on the global level playing field', are still significantly behind the global leaders. This was found to be extremely marked in the high-technology sectors, such as IT hardware, complex equipment such as power plants, and pharmaceuticals, as well as in 'mid-technology' sectors such as auto assembly and auto components. However, even in sectors with apparently less advanced technology, such as steel and coal, there was a significant gap with leading global companies in the high value-added segments of the market. In financial services, it is widely recognised that China's leading commercial banks, investment banks, insurance companies and accountancy firms lag far behind the global leaders.

2.26 At the start of the 21st century, not one of China's leading enterprises had become a globally competitive giant corporation, with a global market, a global brand, and a global procurement system. The Chinese companies included in the *Fortune 500* all faced huge problems of downsizing. China had just two companies in the *FT 500*, which ranks firms by market capitalization. These were China Mobile and China Unicom, both of which operate in a totally protected domestic environment. The vast bulk of their IT hardware equipment was purchased from the global giants.[3] China did not have one company in the world's *top 300 companies by R&D* expenditure. China did not have any representatives in *Morgan Stanley Dean Witter's* list of the world's top 250 'competitive edge' companies. China did not have a single company in *Business Week's* list of the world's top 100 brands.

2.27 China's competition policy is confused. It has the stated intention to attempt to construct its own global giant firms, and done a great deal to support several potential global giants, such as in the telecommunications and oil and petrochemicals sectors. However, as China's integration with the world economy advances, in many sectors the global giants already dominate the Chinese market, either through imports or through production systems established in China. The global giants are rapidly building large multi-plant production systems in China, with billions of dollars-worth of fixed investment, tens of thousands of employees and multi-billion dollar annual revenues.

2.28 The Chinese large commercial airliner market is totally dominated by Airbus and Boeing, and large commercial airline engine market is totally dominated by Rolls-Royce, GE and Pratt and Whitney. Until the recently, the Chinese auto industry was comprehensively dominated by VW's two giant JVs, which together accounted for around two-third of the entire Chinese market. Recently, severe challenges have emerged from giant joint ventures newly announced between GM (already under way), Toyota, and Nissan, and different Chinese partners. The Chinese auto market is *en route* rapidly to reproducing the global oligopoly in the auto industry. The Chinese auto component industry is following a similar path. Within each specialisation (tyres, exhaust systems, brake systems, electrical systems, seats, air conditioning, etc), there is already a domestic oligopoly of joint ventures established by the global giants. The Chinese high value-added soft drinks market is already dominated by the two global giants, Coca-Cola and Pepsi-Cola. The Chinese market for lifts is basically a duopoly

[3] In 1999, total IT hardware sales in China reached US$ 20 billion, including mobile infrastructure and handsets; traditional fixed line and broadband switching equipment; optical cable/optical cable fibre; SD and DWDM products. It is estimated that 90 percent of the IT hardware by value was supplied by the global giants (including Nokia, Motorola, Ericsson, Cisco, Siemens, Alcatel, and Lucent) either through imports or their large production networks of within China.

between Schindler and Otis. The market for large turbines for electric power stations is close to an oligopoly between the global giants: of the 24 giant (800 MW) turbines for the Three Gorges Project, 23 were supplied by the global giants, and it is uncertain who will win the contract for the 24th turbine. The international IPOs of large Chinese firms all use the 'Fat Four' global giant accountants.

2.29 As China's enters the WTO, there is a series of critical questions that need to be answered both by Chinese and globally powerful firms seeking to penetrate the Chinese market. This raises numerous issues for China's industrial policy makers. Would privatisation of China's large enterprises be sufficient to make them competitive on the 'global level playing field' within the WTO? At which level in the global value chain can any given large Chinese firm best compete: as a 'core systems integrator', 'first tier supplier', or lower down the value chain? What role will be permitted for national industrial policy in China within the WTO? Does China's bureaucracy have the capability to administer industrial policy effectively? Does it matter whether China, or other developing countries, have 'national champions' that can compete on the 'global level playing field'? Does the global corporation, with production bases and markets throughout large parts of the world, any longer have a 'national' or a 'regional' identity?

2.30 World Bank has not connected with these issues. The recent revolution in the global landscape of business competition for China's large firms, and the immense challenges it throws in the face of China's policy-makers and business people, is absent from the World Bank's writings on Chinese enterprise reform. Transforming Property rights and corporate governance, which has been the preoccupation of the World Bank's writings on Chinese enterprise reform in recent years, is just one part of this challenge.

Conclusion

2.31 Why has the World Bank since the early 1990s not connected more closely with the Chinese efforts to reform the country's large enterprises? There are a number of possible explanations.

2.32 ***Limitations of mainstream economics?*** The World Bank's quite extensive publications since the early 1990s on Chinese enterprise reform have corporate governance and property rights reform as their main focus. In the early days of Chinese thinking about enterprise reform, it was necessary to devote considerable attention to the central importance of property rights, since this issue was little understood in China. I have emphasised the usefulness of the World Bank's contribution in the 1980s to connecting Chinese reformers with leading Western thinkers in this field. However, a generation has passed through Chinese universities and been trained in Western universities. There is now a deep understanding of the theoretical literature on property rights, and little dispute in China about the central role of transforming property rights in order to improve the functioning of the Chinese economy. Indeed, under the programme of 'letting go the small', a large fraction of the Chinese business system has become either *de facto* or *de jure* private enterprise. However, privatisation is far from sufficient for aspiring Chinese globally competitive firms to catch up with the global leaders, which, as we have seen, is the repeatedly-stated ambition of a large body of Chinese policy makers and business leaders.

2.33 The issues that have increasingly preoccupied Chinese leaders and business people since the 1980s go beyond that of property rights, which is the core of mainstream economics' analysis of industrial economics, and into the area of international business competition which mainstream economics is not well-equipped to handle. Chinese policy-makers and business leaders study intensely the way in which formerly 100% state-owned firms, such as VW (still 20% owned by the local government), Renault (still 40% state-owned), Arcelor (formerly Usinor), Corus (formerly British Steel), Posco, China Steel (Taiwan), ENI (still 20% state-owned), Repsol, BP, EADS (still partially state-owned), BAeSystems, Rolls-Royce, EDF (still 100% state-owned), Development Bank of Singapore (still 10% state-owned) and Credit Lyonnais (still 10% state-owned), were transformed into globally competitive giant firms. The World Bank's analysis of Chinese industrial strategy towards large enterprises has failed to engage with these ambitions. The fact is that this objective still is at the centre of Chinese national policy to 'grasp the large', at the same time as 'letting go of the small'.

2.34 It is puzzling to read through numerous World Bank documents about Chinese enterprise reform and to read not a single word about the global business context. With China's looming (now completed) entry to the WTO bringing the 'global level playing field ever closer, this omission became ever more striking. The terminology that has become the centre of business people's and business schools' analysis of the international business system revolution simply do not appear in the World Bank's documents on Chinese enterprise reform. One might understand this in the 1980s, but as the 1990s wore on the omission became steadily less comprehensible. The terms 'global value chain', 'brand', 'core business', 'outsourcing', 'research and development capability', 'the IT revolution', and 'global procurement', are absent from the World Bank's publications on enterprise reform. Robert Shiller has commented on the bizarre nature of mainstream courses on finance that 'do not even mention bubbles or Ponzi schemes' (Shiller, *Irrational Exuberance, p. 67*). Similarly, a large body of mainstream economics operates without any serious analysis of the reality of the explosive tendency towards global oligopoly that is at the heart of the global business revolution. I have no way of knowing whether this is part of the reason for the World Bank's failure to connect with Chinese policy-making in this vital area, but the absence of the global context in which all Chinese large firms must now operate, is striking.

2.35 Some of the outsiders I interviewed for this report had a simple explanation for the World Bank's failure to connect with the real world competitive challenges faced by Chinese large firms and by Chinese policy-makers. They believe that the reason is not so much the intellectual background of the people concerned, but, rather, the fact that the Bank 'contains few people with real world business experience'. I have no way of evaluating the accuracy of this statement.

2.36 ***Lack of interest in sector-based or regionally-based research?*** Different people on the Chinese side who I interviewed for this report compared unfavourably the way in which, in their view, the ADB and UNDP have become heavily involved in genuinely co-operative research with different Chinese institutions, in order to examine concrete issues of enterprise reform in particular sectors or particular cities

and/or regions[4]. The severe dearth of such research by the World Bank in relation to Chinese enterprise reform since the 1980s is striking.

2.37 Part of the reason for the lack of such studies may be the radical change in all branches of the economics profession away from traditional 'industrial economics', such as that found in the work of F.M.Scherer (*Industry structure, strategy and public policy*) or in the work of economists such as Alec Cairncross, Austin Robertson and G.C.Allen, who were themselves following in the footsteps of Alfred Marshall. Such work is urgently needed by China in its enterprise reform programme, and is, indeed, already being undertaken on a substantial scale by the relevant policy-influencing bodies, such as the Development Research Centre of the State Council, and the State Economic and Trade Commission. These, and other public policy research entities, are increasingly absorbing their analysis of the revolution in global business systems in the 1990s, to try to reconstruct China's industrial policy to cope with these new circumstances. Much of their new thinking in this area is attempting to view industrial policy from the perspective of the input-output relationships that are the core of the global value chain for giant firms, rather than from the perspective of individual firms.

2.38 It might be argued that the failure of the World Bank to undertake such studies is attributable to lack of resources. When a major international investment bank, such as Morgan Stanley or Goldman Sachs, becomes involved in restructuring a large Chinese firm, or even an entire ministry (this is often the entity which is corporatised and floated), in order to construct a corporate entity prior to flotation of part of the equity in an IPO, it commits vast resources, which, effectively, become a first charge on the revenue from the IPO. Restructuring CNPC for example, involved many hundreds of extremely highly paid international experts working full-time for many months. The resources that the World Bank can commit to 'China research' in any given year are only a tiny fraction of the resources that are allocated by a global giant investment bank to a single large Chinese IPO.

2.39 However, there are several areas in which the World Bank's research might have closely connected with Chinese industrial policy and made a valuable contribution, even with relatively small amounts of research funds. Even a small project that was useful to Chinese policy-makers would be worthwhile contribution for the World Bank to make. For example, it might be extremely useful to fund a sharply focussed study on the problems of the Chinese coal industry. Such a study would be especially valuable in terms of 'value-added' for the Chinese side, as most of the coal industry is of only limited interest for international investment bankers. The Chinese coal industry is in the throes of a massively complex transformation of its industrial structure. In essence there is an intense competition between three major categories of enterprise: (i)the vast SME sector, employing around three million people, mostly in conditions of the British Industrial Revolution; (ii)the traditional SOE coal mine sector, also with around three million employees, a large fraction of which is dying, kept alive mainly by loans from the China Development Bank; and (iii)a highly dynamic modern sector, led by Shenhua Coal Group, employing a few hundred thousand workers in total, which is trying to lead the sector towards being globally competitive with the giant mining companies based in the high income

[4] I am merely recording their views. I have no expertise in the work of either the ADB or UNDP in Chinese enterprise reform.

countries. Such a project would have the possibility of attracting serious interest from Chinese policy-makers, and from the state banks, especially the China Development Bank, which has multi-billion dollars-worth of non-performing loans in this sector.

2.40 Another possible approach to World Bank research on Chinese enterprise reform would be to select a given province, city or region, and conduct intense research on the dilemmas of enterprise reform in that location. This would help to link the numerous different aspects of enterprise reform, including the relationship between different forms of property rights, between large, medium and small enterprises, and between indigenous and global capital, including the global giants and the smaller enterprises that follow after them further down the supply chain. Again, this type of research would be real 'value-added' compared to that offered by the investment banks, which have no interest in such research, which has no immediate commercial benefit for them. More go-ahead provincial governors and party secretaries, such as Bo Xilai in Liaoning, or Xi Jingpin in Fujian, might be interested in such research, either for the whole province, or for a particular city. Given the Chinese practice of closing observing 'experimental models' of reform and then popularising them throughout the country, the possibility of a wide impact on policy from such an approach would be considerable, and a highly cost-effective way to relate more closely with key policy issues large SOEs.

2.41 Another way to involve the World Bank more closely, and relatively cost-effectively, in the process of Chinese enterprise reform is to adopt a model such as that used by Cambridge's *China Big Business Programme*[5] (1997-). The Programme is based on case studies undertaken in leading Chinese and matching Western large firms, in order to benchmark the Chinese firms against their global competitors. The cases are set in the wider context of global change in the particular industry being studied. The case study research in the West involves participants from both sets of companies. They then come together for one or two days for intense discussions (which I facilitate) of the lessons to be learned by both sides from the cases. Each meeting focuses on a particular sector, and includes industry leaders, investment bankers and government officials from both sides. The case studies, together with comments from the Chinese companies under study are published separately and distributed in China within each industry. The initial results formed the basis of a large meeting in Beijing (at the end of 1999) with representatives from all the companies studied both in China and in Europe, and senior government officials from both sides. The entire set of case studies which I prepared for these meetings, together with the comments from the different Chinese enterprises, were collected in a single volume for circulation to leaders of most large Chinese enterprises.[6] The budget for the first phase of the Programme was relatively small, and it formed a cost-effective way of closely linking academic research with Chinese policy-making within the large SOE sector, at the same time as providing 'added-value' for leading global firms[7]. The participating Chinese large enterprises and government policy-makers

[5] This Programme is directed by me. It was established in 1997.

[6] Peter Nolan, *Examining Chinese enterprises [Zhongguo qiye xing]*, 2001. English language versions of this appeared as Peter Nolan, *China and the Global Business Revolution*, 2001, and Peter Nolan, *China and the Global Economy*, 2001(a short version of the foregoing study). The industries studied included aerospace, telecommunications, oil and petrochemicals, autos and auto components, pharmaceuticals, power equipment, steel and mining.

[7] This is reflected in the fact that the entire first phase of the Programme was funded mainly by UK-based global giant corporations. These were Shell, BP, BAeSystems, Rolls-Royce, Rio Tinto, and

consider that the programme provides a useful input into policy-making and business practice at a crucial time in their development.[8]

2.42 ***Bureaucrats in Business: A hostage to fortune?*** There is an intense debate within China at the highest levels of policy formation about the future of China's industrial policy. A powerful view within the Chinese leadership believes that China should continue to adjust its industrial policy to cope with the new reality of the global business revolution, and find new ways to build indigenous firms that can compete with the global giants, despite the immense challenge of the global level playing field within the WTO.

2.43 Other interests do not share this view. They argue that it is irrelevant whether the country has a substantial group of indigenously-owned and managed large, globally competitive 'Chinese' firms. In their view all that matters is whether or not firms operating in China are 'efficient'. Whether they are indigenously or foreign-owned is not important to them. Another school of opposition to an active industrial policy to support the 'national team' argues that at China's stage of development it is inappropriate to nurture large, capital-intensive firms. This school of thought argues that the 'Taiwan model', allegedly based on comparative advantage, is the one that China should learn from. Still another set of critics of active industrial policy argue that China's entrepreneurial traditions demonstrate that people within Chinese culture are incapable of running large modern firms, due to the dominance of family-based networks, which are said to be inconsistent with the efficient organisation of a large, modern firm.

2.44 Under current policies, the leaders of the 'national team' are mostly appointed directly by the State Council. Many of those working in senior positions in Chinese leading indigenous firms have moved from the bureaucracy into senior management positions, and anticipate moving back into the bureaucracy when they have finished their period working in business. In other words, under China's current policies, China's bureaucrats are well and truly 'in business'. Perhaps close involvement in research that is oriented towards the policy goal of building China's large, and still majority state-owned, enterprises might be problematic for the World Bank's activities elsewhere, which are distinguished by their strong criticism of 'bureaucrats in business' (World Bank, *Bureaucrats in Business*, 1995).

Barclays Capital. The Programme also received support from the UK's Government's Department of Trade and Industry (DTI) and the Foreign and Commonwealth Office (FCO).

[8] The participating companies in different meetings included all those being studied, namely, AVIC, Harbin Power Equipment Company, Yuchai Diesel Engine Company, Shanghai Petrochemical Company, Sinopec, China National Offshore Oil Corporation, Shougang Iron and Steel Company, Sanjiu Pharmaceutical Company, and Shenhua Coal Group. Those attending the meetings included senior officials from both the Head Office and regional branches. In addition, senior officials from various government departments and other large enterprises attended, including the Association of Power Equipment Manufacturers, the former Ministry of Metallurgy, and former Ministry of Machinery, National Committee for National Defence in Science and Industry (COSTIND), the State Planning Committee, the Chinese Securities and Regulation Commission, the State Council's Development Research Centre, CITIC, Guangdong Enterprises (GDE), Baoshan Steel Corporation, Wuhan Iron and Steel Company. Deputy Minister Lu Yansun (Ministry of Machinery) is patron of the Programme. The first meeting in China (Shanghai) was attended by Qin Xiao, President of CITIC, and Jiang Shangzhou, Deputy Mayor of Shanghai. The final meeting of the first phase of the Programme was attended by the Minister of Aviation Industries, Zhu Yuli.

2.45 I am not in a position to evaluate the relative weight of the above hypotheses. However, the issue of the World Bank failure to connect closely with the Chinese reform efforts in the large SOE sector is one that stands out in reviewing its operations in China since the early 1990s, when the last major collaborative research project on Chinese enterprise reform was undertaken.

Table 1. China: Rating for Completed Projects in Industry

Proj ID	Project Title	Approval FY	Exit FY	Old Sector Group	Net Commitments	Outcome	Sustainability	IDI
Industry (New Group)								
P003433	FERTILIZER INDUS.RAT	1985	1991	Industry	96.3	S	L	Neg
P003469	FERTILIZER II	1987	1994	Industry	97.1	MS	L	Mod
P003445	SHANGHAI MACHINETOOL	1987	1994	Industry	96.5	S	L	Sub
P003517	INDUSTRY - PHARMACEU	1988	1995	Industry	126.7	U	UL	Mod
P003456	PHOSPHATE I	1988	1996	Industry	58.2	MS	Unc	Mod
P003575	PHOSPHATE II HUBEI	1989	1997	Industry	137.0	U	Unc	Mod
P003464	TIANJIN LIGHT INDUST	1989	1997	Industry	152.8	U	Unc	Sub
P003529	Rural Industrial Technology	1991	1998	Finance	114.2	U	Unc	Mod
P003577	Regional Cement Industry	1992	1998	Public Sector Mgt.	82.6	U	Unc	Mod

Rating explanation:

Outcome Rating

- HS-Highly Satisfactory
- S-Satisfactory
- MS-Moderately Satisfactory
- MU-Moderately Unsatisfactory
- U-Unsatisfactory
- HU-Highly Unsatisfactory
- NR-Not Rated

Sustainability Rating

- HL-Highly Likely
- L-Likely
- Non-Not Evaluable
- NR-Not Rated
- Unc-Uncertain
- UL-unlikely

Institutional Development Impact (IDI) Rating

- H-High
- Sub-Substantial
- Mod-Moderate
- Neg-Negligible
- NR-Not Rated