FOREIGN INVESTMENT IN CHINA'S INFRASTRUCTURE: FINDING THE BALANCE BETWEEN EFFICIENCY AND DEVELOPMENT or HOW TO ATTRACT FOREIGN INVESTMENT TO INFRASTRUCTURE PROJECTS WITHOUT SELLING THE COUNTRY'S SOUL TO THE FOREIGN DEVILS

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Abstract

Chinese official plans for the country include more and better infrastructure for which it cannot afford to pay the total cost. China expects foreign investors to provide 20% of the funds needed for this purpose. However, the government and foreign investors do not always have compatible goals or expectations and it appears that actual investment in infrastructure projects will fall short of what is needed. The paper identifies a tension that exists between China’s ‘development’ perspective and the foreign investor’s ‘efficiency’ perspective and attempts to describe what actually happens in the process surrounding the ‘making’ of an infrastructure project. It also suggests that unless this tension is resolved, China’s infrastructure needs will not be met and its economic growth may suffer.

The paper distills the nature and characteristics of each perspective from a review in Chapter I of a number of theories concerning the free market, law and economics, and economic development. Using data gleaned from locally accessible printed materials, online databases, and other media, the paper presents case studies of a number of infrastructure projects in Chapter II. In Chapter III, the efficiency and development perspectives are tested in the case study examples by examining three aspects of infrastructure projects of concern to both China and foreign investors: rate of return, control, and risk. The paper goes on to identify where and how a balance was found, or not found, between the perspectives, leading to the success or failure of the project.

Finally, in Chapter IV, the paper summarizes some of the primary obstacles to foreign investment in infrastructure as well as some of the techniques that have been successful in overcoming them. It also advances the proposition that the tension between efficiency and development evidences a fundamental conflict of norms that will not be resolved until the two sides are able to reach some mutuality of understanding combined with a commonality of purpose, something that will require efficiency-driven foreign investors to reassess not only their goals and expectations, but also their role in the global community.
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Introduction

The Need for Infrastructure

The roads, ports, power plants, airports, railways, water, and telecommunications facilities that make up a country's infrastructure are key factors in successful economic growth and development. It is infrastructure that supports the industries and enterprises that contribute to the growth and improvement of a country's economy and standard of living. China is now following a policy of industrialization and, as such, requires adequate infrastructure to maintain this course; as a developing country, its needs are both great and growing. China's population of 1.2 billion is increasing at an average rate of 16 million people.

1 C. Kessides, "The Contributions of Infrastructure to Economic Development" World Bank Discussion Paper (Washington, D.C.: The World Bank, 1993). See also G. Ingram & C. Kessides, "Infrastructure for Development" (1994) 31:3 Finance and Development 18 at 19 where the authors state that "the adequacy of a country's infrastructure helps determine its success or failure in diversifying production, expanding trade, coping with population growth, reducing poverty, or protecting the environment. Good infrastructure also raises productivity, lowers production costs, and improves living standards. Indeed, infrastructure capacity grows in step with economic output - a 1% increase in the stock of infrastructure is associated with a 1% increase in GDP across all countries". S.R. Frewen, in "Cracking the System" (1995) 22:5 The China Business Review 12 notes that reported estimates suggested that poor transportation links in China in 1994 contributed to the loss of nearly RMB43.8 billion (approx. US$5.4 billion) or approximately 1% of China's GDP. See also "Big Bang for Megaprojects" (1994) 30:11 Asian Business 45, "Investing in development" (1994) 331:7869 The Economist 70.

2 S. Ghatak, Introduction to Development Economics 3d ed. (London: Routledge, 1995) at 320. Industrialization has been regarded as a major strategy for achieving a faster rate of economic growth and a higher standard of living in many less developed countries for several reasons: 1) the economically advanced countries are usually more industrialized than poorer countries; 2) it is seen as a major solution to the problem of unemployment and underemployment; 3) it avoids unfavourable terms of trade that occur with concentration in primary products exports; 4) the dynamic externalities that come with industrialization, such as the establishment of educational institutions or the development of transport facilities, are able to alter current economic and social structures; 5) industrialization is supposed to improve productivity by increasing efficiency; and 6) the desire to attain self-sufficiency has prompted the choice of industrialization. See also P. Lanjouw, "Infrastructure: Ladder for the Poor" (1995) 32:1 Finance & Development 33, T. Ichniowski, "World Bank Sets Sights on Small Infrastructure Projects" (1996) 237:15 ENR 20.

3 Although there does not appear to be any generally accepted definition of 'developing country' or that class of country referred to as 'less developed' or 'underdeveloped', certain characteristics said to be common to many of these countries have been identified: low per capita real income; high population growth rate or very large population; unemployment, underemployment and disguised unemployment and low productivity; extreme poverty; more unequal income distribution that in developed countries; the predominance of the agricultural
per year thus stretching already over-extended water, electricity, and transportation facilities beyond their limits; there is a growing trend toward urbanization in China's three largest cities, Shanghai, Beijing, and Tianjin, which are expected to house 20 million, 15 million, and 15 million people respectively, by the year 2010; and an increasing number of Chinese citizens are becoming wealthier and demanding the services that we in the west take for granted, such as home telephone service. China recognizes that it needs more and better infrastructure, but, in a country of its size, the cost is gigantic. In fact, official Chinese sources estimate that its infrastructure needs to the year 2004 will require an investment of about US$500 billion.


5 D. Deamer, "Financing and Investing in Infrastructure Projects in China" (1995) 17:6 East Asian Executive Reports 7. 1995 World Bank estimates showed China had less than 50 main telephone lines per 1,000 persons whereas wealthy countries averaged more than one main telephone line for every two people. See "Emerging-Market Indicators, Telephones and Growth" (1997) 343:8018 The Economist 106.

6 Clifford Chance, “Equity funding in China – bridging the gap” (Dec96/Jan97) VII:10 AsiaMoney 62.

7 ‘Infrastructure needs’ may be a problematic term to use here; by whose standards are the needs of a developing country to be determined: by those of the advanced developed nations who are presumed to know what is necessary solely by virtue of their status as developed nations, or by those of the developing country itself which may have a specific social, political and economic agenda of its own but has only the experiences of developed nations or advanced developing countries (such as the Newly Industrialized Countries (NICs) of Singapore, Korea, Hong Kong and Taiwan) to draw on to help determine how much and what kind of infrastructure is required to reach developed status? The question of whose standards of ‘development’ are used to measure infrastructure needs leads back to the problem of defining development itself, which is discussed in Chapter II. Rather than delve into this circular conundrum, ‘infrastructure needs’ in this paper refers to officially pronounced estimates made by the Chinese and supported by World Bank and other figures, therefore exhibiting some western influences.

8 Foreign Broadcast Information Service (October 25, 1994), 53, citing an estimate given by China's Finance Minister. One estimate puts the figure needed for transportation infrastructure alone at RMB900 billion (approx. US$100 billion) to the year 2000, only half of which can be covered by government, public fund raising and foreign banks. See "Why Infrastructure Left in Cold" (June 24, 1996) XVII:23 China Economic News 1 at 2. A 1995 report suggests that China will install 10 times more telephones in the next few years than the second leading growth market, India. It also indicates that China added an average 12,000 MW of electric power generating capacity every year from 1990 to 1995 and has to build 150 new power plants before the year 2000 to meet its medium-term goals. This would mean adding the equivalent of Switzerland's current total generating capacity every year. See R. Broadfoot, "China's Growing Impact on Asia" PERC Library (November 1995) at http://www.asiarisk.com/library6.html. See also E. Thornton, “The Rush to Modernize” (1995) 158:14 Far Eastern Economic Review 38. The World Bank has estimated that China will account for more than half of
observer has suggested that China will have to spend US$55 trillion if it wants to have infrastructure that will support a developed economy.9

This paper attempts to set out the different and apparently conflicting perspectives of the Chinese who need infrastructure and the foreign investors who are best able to provide or build it in the amount desired. Through an examination of several specific infrastructure projects, the paper reveals a deep and fundamental conflict of norms that implicates all aspects of infrastructure projects in China and which may not be resolved as long as the two differing perspectives, as they are formulated here, admit of no commonality of purpose or mutuality of understanding between the two sides.

Financing Investment in Infrastructure

Although infrastructure has traditionally been the domain of the public sector, the magnitude of China's requirements is such that the government cannot hope to provide the necessary capital for these projects on its own.10 The World Bank has loaned over US$20 billion to China to 1995, mostly for infrastructure projects.11 In the ten years from 1986 to 1996, the Asian Development Bank has loaned more than US$5.22 billion to China for 47

the total projected infrastructure spending in Asia in the next 10 years. J. Leung, "Bankers flock to gain share of project funding" (1996) 32:4 Asian Business 46 at 49.

9J. Naisbitt, supra note 4 at 142 citing John Reed, chairman of Citicorp. The author states that this figure is three times the world's current annual gross domestic product and more than fifty times the Asian Development Bank's estimate.

10China's Power Minister Shi Dazhen indicated that China requires about US$84.4 billion in the power sector alone during the Ninth Five Year Plan (1996-2000). Of that amount, foreign investors are expected to provide 20% or approximately US$17 billion. Other senior power officials estimated that US$20 billion would be required. "China Vows to Protect Foreign Power Investors" Reuters Beijing (November 14, 1996) at c-reuters@clari-net.

11D. Deamer, supra note 5. However, some estimates indicate that over the course of more than a decade, China has used barely US$10 billion in foreign funds for such projects and most of this was made up of loans from the World Bank, the Asian Development Bank and a Japanese government overseas cooperation fund and used in only a small number of projects. See "Why Infrastructure Left in Cold", supra note 8.
projects. However, the ADB's recent shift in lending focus from infrastructure projects to environmental and social projects means that less money will be available for the former. Japan's Export-Import Bank (Jexim) as well as the US Export-Import Bank (Ex-Im Bank) have also provided loans to support infrastructure projects in China. The World Bank plans to lend a further US$15 billion over the Ninth Five Year Plan (1996-2000) specifically for infrastructure projects. Since that amount is nowhere near enough to finance China's infrastructure requirements, and funds from other international agencies cannot make up the shortfall, the Chinese government has been forced to turn to private foreign investment capital.

Traditionally, the Chinese government controlled the construction and operation of all infrastructure sectors and foreign investors were generally barred from participation. It was not until the early 1990s that the Chinese government realized that foreign capital would be needed to make up the shortfall in public funds and opened up infrastructure projects to foreign investors generally as joint ventures with Chinese firms (usually state-owned enterprises). The first breakthrough came in the power sector where urgently needed generating capacity left the government with little choice but to seek the huge amount of capital required from foreign


13 Ibid at 56.

14 "Long-awaited BOT rules to stimulate confidence" China Economic Review (April 1996) in LEXIS, World Library, Allwld File. The report indicates that Jexim had loaned US$1.1 billion by the second quarter of 1996 and Ex-Im Bank was supporting projects costing US$4-4.5 billion, about half in the energy sector.

15 D. Deamer, supra note 5.

16 "Foreign investment essential component for development: minister" Agence France Presse (October 6, 1997) at C-afp@clari.net. Overseas Trade and Economic Cooperation Minister Wu Yi said that China was not only interested in investments from large multinationals but also from small and medium-sized foreign enterprises. Since 1996, China has been the second major market in the world for foreign investment behind the United States with direct investments totalling US$42.3 billion.


18 Ibid.
investors. But it was not until June 1994 that the Chinese government issued guidelines that expressly solicited foreign investment in infrastructure projects. As might be expected from such a recent change in approach, the Chinese government continues to maintain a multitude of restrictions, conditions and attitudes that make foreign investment in infrastructure projects in China a less attractive proposition than they might otherwise be. Factors such as a prohibition on sovereign guarantees, a currency that is not yet fully convertible, restrictions on foreign exchange convertibility, a slow government approval process, the uncertainty of political stability, and a non-transparent, evolving regulatory environment increase the risks for investors and deter them from investing. Although China received over US$100 billion in foreign direct investment to the end of 1995, most of it went into the manufacturing, service, and real estate

19D. Deamer, supra note 5 at 8.


21C. Hunter & C. Lau, "Facing up to the risks of BOT Investment" (1996) 10 China Law & Practice 14 at 15 where the authors indicate that foreign involvement in certain industries are still banned while others are restricted and still others require special approval. The new Investment Catalogue published in late 1997/early 1998 maintains the prohibition on the operation and management of telecommunications services by foreign investors. See G. Zheng & Dr. H.L. Fu, “New Investment Catalogue disappoints” (Jan/Feb 1998) 12:1 China Law & Practice 51 at 53.

22There was a crackdown by the government in 1994 on the issue of central government guarantees for infrastructure projects and the practice was formally prohibited in 1995's PRC, Security Law. The government's anxiety over having too many guarantees that it could not realistically cover was reinforced in early 1995 by Mexico's debt and currency crisis. From C. Hunter & C. Lau, supra note 21.

23See E. Thornton, "Promises, Promises" (1996) 159:15 Far Eastern Economic Review 42 at 43 where the author reports that a joint venture formed in 1993 to construct a 400 MW combined cycle power plant in Shanghai had to wait three years for all of the necessary final approvals which meant that the generating units were not actually shipped until January 1996. Thornton indicates that many investors who had been interested in larger projects were shifting to smaller ones after watching bigger projects bog down in the national approval process, i.e. approval at central government level is required in most cases for any project over US$30 million.

24D. Deamer, supra note 5; one example of China's evolving regulatory framework is the fact that it did not have any legal mechanism by which a lender could secure a mortgage until 1995. See E. Thornton, supra note 23 at 46.
sectors, with only a small portion going to infrastructure projects. Consequently, China’s official position is that its infrastructure still lags behind the country’s overall development, although there appears to be no trustworthy statistical evidence that might support this claim.

Obstacles to Investment in Infrastructure

Despite the current emphasis on privately-financed infrastructure in Asia, the World Bank reports that there has been little action in most countries with hundreds of memoranda of understanding on projects totalling hundreds of billions of dollars sitting on the drawing board or stalled in the approval process. China is no exception, although the backlog in power projects was broken in 1996 with the approval of a number of stalled projects by the State Planning Commission. However, China's economy is in transition, from the centrally-planned

25"Why Infrastructure Left in Cold", supra note 8.


29J. Anderson & M.T. Burr, “Making strides” Independent Energy (Jan/Feb 1997) in LEXIS, World Library, Allwld File. From 1992 to mid-1995 over 100 letters of intent and MOUs were signed and more than 50 formal project proposals submitted to the central government for approval. Fewer than five of the projects submitted were approved by mid-1995 and none had moved to financial close. See “Foreign investment in power projects in China” Petroleum Economist (April 1996) in LEXIS, World Library, Allwld File.
economy originated by the Communist Party after 1949 to a new, hybrid socialist market economy that does not yet possess recognizable market mechanisms such as a fully convertible currency with no foreign exchange restrictions, a transparent regulatory environment, or a clear and efficient approval process, that help to attract and facilitate investment.\textsuperscript{30}

Even though there may be a huge demand for infrastructure in Asia, some observers contend that market forces do not prevail in this area as the buyer, which is effectively the government itself, still dictates the terms of any agreement and, with many developers looking for projects, governments are able to secure deals that will provide infrastructure to citizens at the lowest possible prices.\textsuperscript{31} Others claim that there are so many projects on offer that developers are able to pick and choose, preferring those that conform to international financing standards.\textsuperscript{32} In a 1995 report, the World Bank identified seven major factors which it viewed as obstacles to private investment in Asian infrastructure.\textsuperscript{33} A more recent, unofficial, Chinese report outlined two main factors that seemed to discourage foreign investors there: 1) in some sectors, projects are both business enterprises and public utilities where the public interest, i.e.

\begin{itemize}
\item C. Hunter & C. Lau, \textit{supra} note 21 at 13.
\item "Race to keep up with growth" (1996) 32:3 Asian Business 60, E. Thornton, "Problematic Panacea", \textit{supra} note 27 at 128. It is one developer's view that the Chinese feel that it is always more trouble to accommodate an outside party than to select a local player for the project. The investor therefore has to ensure that the value that he adds to the project is more than sufficient to overcome such reservations. The urgency of demand for the investor's product is the primary factor motivating the Chinese to work with the foreign investor. See G.Y.S. Wu, "Building China's Infrastructure" (1993) 15:11 East Asian Executive Reports 6.
\item E. Thornton, "Problematic Panacea", \textit{supra} note 27 at 126.
\item World Bank, \textit{Infrastructure Development in East Asia and Pacific} (The World Bank: Washington, D.C., 1995). These factors include: 1) the existence of a wide gap between the expectations of government and the private sector on what is reasonable and acceptable; 2) lack of clarity about government objectives and commitment and complex decision-making; 3) need for more conducive sector policies (pricing, competition, public monopolies) and inadequate legal and regulatory policies, including investment codes and dispute-resolution mechanisms; 4) the need to unbundle and manage risks and to increase credibility of government policies; 5) under-developed domestic capital markets; 6) the need for new mechanisms to provide from private sources large amounts of long-term finance at affordable terms and 7) the need for greater transparency and competition to reduce costs, assure equity and improve public support. The WB cautioned that not all of these constraints necessarily applied to each country in the region and certainly the need for public support does not seem to be as big a factor in China where dictatorship rather than democracy is still the order of the day.
\end{itemize}
in the amount of toll charges or electricity prices, often takes priority over the project's business interests, resulting in losses rather than profits for the enterprise and its foreign investor; and 2) although China has turned to the BOT (build, operate, transfer) method for infrastructure projects where foreigners are involved, the Chinese version of BOT leaves the foreign investor with 100% of the responsibility for financing and construction of the project, without any clear standard for assessing whether the rate of return on investment is reasonable. Furthermore, Chinese laws and regulations lack the necessary clarity and transparency that would allow foreign investors to better assess the risks involved in a particular project. Other observers consider that many of the problems can be reduced to questions of control: the government wants to keep the price down but maintain control over the projects while the investor-developer is faced with perceived greater risks that accompany government control over a project without being offered a level of profit high enough to cover these risks. China's recent attempts to design a viable foreign investment framework for infrastructure projects along BOT lines is considered to be a distinct improvement over the former system but it still contains significant areas of risk for foreign investors, including low rates of return, lending risks, and a short timeframe allowed to both raise financing and build. Although in BOT projects which are wholly foreign owned, the foreign investor does not have to worry about government

34 The foreign investor builds the facility, operates it for a specified time period, usually 20-30 years, retaining the profits, then transfers ownership back to the government at the end of the concession period.

35 Why Infrastructure Left in Cold, supra note 8 at 2. Observers agree that an effective 15% limit on returns in power plant projects is a major disincentive to foreign investors although Chinese officials state that the best rate is 17%. "China Vows to Protect Foreign Power Investors", supra note 10. In 1993 and 1994, Beijing began setting rates of return for private, foreign-owned companies investing in power plants at 12%. As a result, foreign companies were reluctant to take on any projects with such low margins of profit and progress on new deals slowed. See "Race to Keep up with Growth", supra note 31 at 64.

36 Why Infrastructure Left In Cold", supra note 8. This report notes that investors usually decide to shift their investment to India, Thailand or other South East Asian countries after weighing the various factors.

37 "Race to keep up with growth", supra note 31 at 64 where the author suggests that if the government is concerned about excess profits going to the foreign investor, it should negotiate a profit-sharing formula.

38 Ibid at 15.
involvement in the project operation itself, it still has to contend with operation risk, construction risk, and, in the energy sector, power purchase (off-take agreement) risk and fuel supply risk, all of which will affect the rate of return on the investment.

Foreign Investors and the Host Government

The term 'foreign investor' can include not only builders and developers actually involved in the construction and operation of a particular project but also portfolio investors, including institutional investors such as pension funds, who invest capital indirectly in a project by purchasing shares in the project company or consortium. In this paper, the term includes only the builder or developer type of foreign investor, those who are directly involved in the project from the bidding process and negotiations to construction and operation.

It may be safely assumed that the primary motivation for a foreign investor is profit: to obtain the highest rate of return possible with the lowest amount of risk. If the profits are too low to offset the risks involved in a particular project, these investors are likely to take their money elsewhere. From an investor's perspective, therefore, the most important issue for it

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39 F. Chan, "The Laibin B Power Project" (1996) 10:4 China Law & Practice 19. In the author's view, the draft BOT Law ushers in a new era for infrastructure projects where the traditional Chinese attitude that foreign investors had to be prevented from being fully in charge of operating power plants during the concession period is now a thing of the past.

40 C. Hunter & C. Lau, supra note 21 at 18. The authors also note other factors involved, such as political risk, financial and economic risk, risks arising from force majeure, the ability of the project to serve debt and security structure, that add to lenders' concerns in deciding to finance such a project. Infrastructure projects are largely financed through equities and bank loans raised by the foreign investor mainly using their overseas assets as collateral as opposed to the project assets themselves which in China cannot be pledged as security. See J. Leung, "Issue paves way for miles ahead" (1996) 32:9 Asian Business 10 at 11.

41 Although the developers and contractors may be different entities, in the projects studied in this paper, the contractors/operators generally form part of the developer/sponsor group. See G. Bond & L. Carter, Financing Private Infrastructure Projects (Washington, DC: The World Bank, 1994) at 15.

42 According to a representative of one of the largest advisors to institutions world-wide, Frank Russell Company, none of its funds have invested any money in power projects in China because of the effective cap on returns at 15% and they won't until China allows free market returns in the range of 25%. Gordon Wu of Hopewell Holdings, a major Hong Kong-based foreign investor in roads and power plants in China, has stated
and the government is to find ways to minimize the risk concerns - legal, political, and financial - of the foreign investor. The government's perspective is based on a desire to obtain the best infrastructure possible at the least cost and to ensure its control over what it considers to be state assets. It is therefore important to find ways to reassure the foreign investor and foreign lenders on risk concerns without providing sovereign guarantees or issuing regulations or laws that might compromise the government's ability to control state assets.

The relationship between the Chinese government and foreign investors is not an easy one. But infrastructure projects are still being undertaken by foreign investors and China continues to encourage foreign investment in this area. The question arises as to how the often-competing interests of the foreign investor and the government are balanced out so that projects can actually get off the ground. Is there enough flexibility or enough common ground between the two sides in order to fund infrastructure in the amounts needed to maintain China's current rates of growth and to move China from the ranks of the developing countries to those of the developed ones? What forms the basis for the respective attitudes of the Chinese and foreign investors? Are these attitudes supportable in today's global economy? These are just a few of the questions that form the basis of this paper.

that a minimum internal rate of return is 20%. See G. Wu, supra note 31 at 13. The Financial Times has reported that the rush to invest in China is slowing down but Chinese officials noted that the quality of investment had improved and per project investment had increased. China has accounted for about one-third of investment flows to developing countries in the past decade. See “Slowdown in Rush to Invest in China” Financial Times (July 21, 1997) in Chinavista Business at http://www.chinavista.com/business/news/archive/july/july23-03.html.

G.Y.S. Wu, supra note 31. Although Wu states that the motivation for the foreign investor is profit, he acknowledges that in foreign direct investment and particularly in large infrastructure projects, there is a partnership between the private and public sectors that brings benefits to both. Each side must therefore understand each other's needs so that the foreign investor can gain access to new markets and generate profits and China can benefit from opportunities for economic growth, additional employment and technology transfers.

“China reveals its need for foreign investments” The Vancouver Sun (December 27, 1997) E3.
Efficiency and Development

For purposes of this paper, I have characterized the apparently conflicting attitudes or perspectives taken by the Chinese government and foreign investors as "development" and "efficiency", respectively. Briefly, "efficiency" comprises the "free market" philosophy of those espousing the views of Adam Smith, Milton Friedman and the like, who prefer to leave economic matters to the "invisible hand" of the market, excluding government involvement in all but the institution and enforcement of legal mechanisms to protect their property rights, interests, and the workings of the market. This perspective, when applied to foreign investors in this context, can be said to take a microeconomic approach that is self-interested and primarily concerned with reducing risk and obtaining high rates of return.45

"Development" in this context is not simply "economic growth" but includes such elements as political stability, employment, social welfare, human development through education and training, health care, and an increased standard of living. The development perspective takes a macroeconomic focus that is meant to be in the national interest or for the benefit of the majority, if not all, of the country's people.46

Underlying the concept of development are numerous theories of economic development propounded by economists from both developed and developing nations and which, although emphasizing development of the economy, necessarily bring political and social aspects of development into the discussion. Underlying the concept of efficiency is a single idea or theory, that of the superiority of the market or market uber alles. This is the classical liberal theory developed in a single region, western Europe, at a singular stage of European history, the beginning of industrialization.47 The belief here is that if the market is taken care of, it will

45 See Chapter 1, infra, section on Efficiency.

46 See Chapter 1, infra, section on Development.

take care of everything else. Although this concept may appear too spare, too naive or easy an approach in a world as complex as ours, it continues to influence businesspeople and investors alike who are necessarily concerned with their own bottomlines rather than the welfare of a whole people.

Methodology and Sources

Although there is an abundance of scholarly literature dealing with concepts of efficiency, free markets, and theories of development, there is virtually nothing that analyzes the efficiency vs. development tension in the practical sense as identified here. The different expectations, goals, and attitudes of both investors and government are alluded to in reports by institutions such as the World Bank and in articles in economic and business magazines and newspapers from both the western and Chinese media. The Chinese legal regime and its evolution since the opening of China to the outside world in 1978 may also provide some clue as to what the government perspective involves as reflected in what the laws do or fail to do. It appears, however, that no direct analysis has been done in this area.

Furthermore, although it is common knowledge that China is aiming for a socialist market system or market socialism, no one has defined this concept and it is not clear what the final result is expected to look like. To date, the Chinese leadership has given no indication of or tried to explain the philosophy supporting such a concept. An examination of official pronouncements and actions, media reports, laws and regulations, accounts of investor experiences, and other material of this nature may help to clarify the fuzzy nature of the term. The fact that it is or will be a socialist "market" system probably means that there will be some elements of the capitalist, "efficient" system absorbed into it, although the Chinese would

48 One pension fund consultant recently estimated that the Chinese are only one third of the way toward a market economy. See "Scouting for Opportunity" (June 13, 1997) 23:23 Asia Week 59.
probably reject any formal designation of "capitalism with Chinese characteristics". The fact that it is still "socialist" means that Marxist and Maoist theories of development may have some influence over its creation and operation, even though those theories have been generally rejected and criticized in the wake of the fall of communism and the amazing growth of China's economy since the Open Door Policy was announced at the Third Plenum of the Eleventh CPC Central Committee in December 1978. Other theories of development that do not fit neatly into either liberal, free market views or communist, socialist views of development, but have had some influence on the views and thinking of the leaders of developing and less-developed countries, may also have some application in the Chinese approach to development and operating a socialist market system.

The case studies of the infrastructure projects chosen for examination here have been developed from data obtained from locally available sources, including on-line information services. Research data is up-to-date as of the end of December 1997. Projects have been chosen primarily on the basis of the quantity of information available on aspects such as the nature of the contracts, financing, construction, and operation. Not all of the projects have been completed but the delays and problems encountered during different stages of the process provide good examples of the efficiency vs. development paradigm at work. Direct personal interviews with foreign developers, investors, and their advisors as well as Chinese officials would have been extremely useful but the reported reticence, if not reluctance, of most of those involved in infrastructure deals in China to openly discuss the process and the obstacles encountered there, and the expense of such an undertaking, made this an impractical option for a paper of this nature.

Since I do not read Chinese, I have relied solely on English language accounts and English translations of Chinese language reports and laws and regulations. This means that I have had to exercise some caution when using material translated from Chinese as legal

49 P.B. Potter, Foreign Business Law in China (South San Francisco: The 1990 Institute, 1995) at 22.
concepts described in English terms may not always give a full or true meaning of the actual Chinese legal concept. This has also necessitated corroboration from other sources and cross-checking of information and translated materials. Since China does not follow a common law system of law, with which I am most familiar, but rather a civil law type system more along Japanese lines, with its own Chinese characteristics, I have also had to be careful not to misinterpret the significance of legal terms which may resemble common law terms but be quite different in their effect or application.

However, before the reader concludes from the foregoing admission that this paper includes something in the nature of a nuts and bolts review of Chinese laws that concern infrastructure projects, I must add that I have not included any general discussion of the legal framework for infrastructure projects since virtually the entire Chinese legal system is involved in some way and such a discussion would therefore be necessarily so broad as to be self-defeating. Furthermore, although the Chinese have developed an apparently detailed and involved legal system since 1979, an examination of the legal system does not indicate what is actually happening in the process surrounding the planning of, negotiating of, obtaining approvals for, constructing, and operating an infrastructure project. In fact, one might observe that the success or failure of the projects studied has come in spite of the legal system in place at the time, and not because of it. As such, if there is any particular legislation that is or was of particular significance in a specific project, I have noted that legislation in the section devoted to the particular case study.

Structure

In Chapter I, I attempt to flesh out the concepts of efficiency and development by examining some of the most popular theories and analyses that deal with them. At the end of
each section, I provide a summary of the characteristics, attitudes, or qualities that inform each concept as it is used in the paper.

Infrastructure projects are particularly illustrative of the problems arising out of the tension between the efficiency and development perspectives and, in Chapter II, I set out several case studies. Although the projects described here exhibit not only differences in kind, but also in time, size, legal regime, and government and investor attitudes, they do provide an opportunity to identify the areas where the perspectives are in conflict and where they complement each other, as well as how the perspectives balance out so that a project can actually get off the ground. The case studies also allow us to discern certain categories of infrastructure projects in which one perspective may have more influence on the outcome than the other.

In Chapter III, I apply the characteristics or indicators identified for each concept in Chapter I to the specific infrastructure projects examined as case studies in Chapter II. The efficiency vs. development paradigm is tested in three aspects of infrastructure projects which are of concern to both camps: risk management, control, and rate of return.

Finally, in Chapter IV, I briefly review some of the lessons from the case studies and outline some of the obstacles or difficulties encountered in investing in infrastructure projects and some solutions created to deal with them. I then go on to discuss the fundamental conflict of norms that is at the heart of the efficiency vs. development tension and how, without some mutuality of understanding or some commonality of purpose between the two sides, the conflict will never be resolved. At this point, I conclude that foreign investors, as part of the global community, have some moral obligation to achieve the necessary mutuality of understanding and commonality of purpose in order to resolve, or at least reduce, the conflict. Only then will developing countries such as China truly be able to obtain the infrastructure they need for further development at a fair and politically acceptable price.
Chapter I

Efficiency and Development - the Concepts

‘Efficiency’ and ‘development’ are not easily defined terms; their meaning may vary depending on the context, theory or analysis in which they are used. In this chapter, my purpose is not to provide a neat definition of either concept; rather, I intend to draw out certain characteristics, attitudes and qualities associated with each one, by exploring those areas in which they most commonly appear. For efficiency, this means briefly reviewing classical economics theory of the free market as well as the economic analysis of law. For development, this involves providing an overview of some of the more accepted theories of development, found mainly in the study of development economics. At the end of each section, I provide a summary of those characteristics, attitudes or qualities that inform the meaning of each concept for purposes of this paper. The reader should then have a clearer picture of the respective perspectives of foreign investors and Chinese parties as they come to negotiate, agree, build and operate infrastructure projects.

Efficiency

Free Market Theory

As stated in the Introduction, the concept of efficiency as used in this paper, is one based on the principles contained in the free market theory of classical economics. A brief review of the historical development of this theory and its branches is instructive, showing as it does the origins and perpetuation of a theory or philosophy that is a western construct,
originating in Great Britain during its imperial age, and therefore not always compatible with eastern or even southern philosophies or economics.\(^{50}\)

In the 17th and 18th centuries respectively, John Locke and Adam Smith wrote on government, property and markets and discussed the respective rights of private individuals and the public or communities.\(^{51}\) Locke’s assumption that there was plenty of land for all gave rise to his view that the right to an unlimited amount of private property with labour joined to it was a natural right.\(^{52}\) The only function of government was therefore to protect property rights.\(^{53}\)

Adam Smith, writing his *Wealth of Nations* in the years 1766 - 1776,\(^{54}\) assumed the existence and legitimacy of private property rights and asked how these rights could bring prosperity for all through the mechanism of the market.\(^{55}\) Smith was concerned primarily with a domestic market system where local artisans and farmers traded property or goods that they had produced themselves and his work has been read by some theorists as an argument on behalf of the rising British bourgeoisie.\(^{56}\) However, since that time, Smith's theory has become an acontextual, ahistorical version of the marketplace that treats certain arguments or propositions virtually as truisms: 1) that people have a natural tendency or inclination to trade

\(^{50}\) See M.P. Marchak, *supra* note 47 at 27.


\(^{53}\) M.P. Marchak, *supra* note 47 at 28; P.W. Preston, *supra* note 52 at 35.


\(^{55}\) M.P. Marchak, *supra* note 47 at 28.

\(^{56}\) *Ibid*; P.W. Preston, *supra* note 52 at 59. Preston notes that Smith's Scotland was prosperous at the time and Britain had had its bourgeoisie revolution, so Smith could take the idea of progress for granted as well as the political and social arrangements currently in place. Manipulating the relevant economic variables, Smith developed his theory that focused on the market. However, rather than presenting his economic model as appropriate for Britain at that time in history, Smith argued that it was also generally true. See pp. 60-61.
or exchange; 2) that in the process of exchanging, a complementary division of labour is
developed; 57 3) each person entering into a transaction does so to increase his or her wealth and
all transactions are wholly self-interested; 4) the value of goods exchanged will be determined
by the laws of supply and demand provided there is no state interference in areas such as
pricing, supply or demand. By anticipating supplies and demand, sellers and buyers will self-
regulate their activities and equilibrium will be the result. This is understood as rational
behaviour. So long as all parties act in rational self-interest, production and consumption
should be equal since prices and wages will always respond to supply and demand conditions;
and 5) the net effect of a commercial market free of state regulation will be constant growth in
the nature and quantity of goods, increasing division of labour, and overall prosperity. 58 In
essence, by replacing state regulation with the "invisible hand" of the market, economic growth
will result. 59 The moral aspect of the theory concerns the belief that "people acting entirely in
their self-interest are better able to produce the good society than governments purporting to
act in the public interest". 60 However, unlike more extreme advocates of laissez-faire, 61 Smith
saw three major functions for government: 1) to protect society from foreign attack; 2) to
establish the administration of justice, in particular, to pass laws to protect property rights and
interests in order to ensure stability and security for those involved in the market; and 3) to

57 D. Hunt, supra note 54 at 10.

58 M.P. Marchak, supra note 47 at 28 for these five points; see also, P.W. Preston, supra note 52 at 55.

59 M.P. Marchak, supra note 47 at 29.

60 Ibid.

61 Those who supported Reaganomics in the 1980s ignored the significant qualification that Smith made to his
thesis with regard to the efficacy of market forces and the benefits of economic growth in his granting the state
an important cultural purpose with respect to public welfare. Smith's recognition that the labouring poor and
the lower classes could not rely on the market to improve their lot, resulted in his advocating an imposed system
of rudimentary education for the lower classes and higher education for those who were better off before they
would be permitted to "exercise any liberal profession or before [they] could be received as a candidate for any
honourable office of trust or profit". (Book V i.g.14, The Wealth of Nations, supra note 51). Not only were
better educated people more efficient and more effective workers, they were also more decent and orderly and
more likely to respect those who governed them.
erect and maintain public works and institutions that promote commerce and education and that private entrepreneurs cannot profitably undertake.62

These notions of private property and the marketplace found support in other ways from political philosophers and economists in the 18th and 19th centuries.63

Jeremy Bentham, the utilitarian who argued that all conduct, of both individuals and government, should be directed towards promoting the greatest happiness of the greatest number of people,64 viewed property as nothing more than something from which its owner expects to obtain certain advantages, and therefore, considered that law had to protect property so that industry could develop, since no one would bother to put their time and efforts into an enterprise if they thought they would get nothing from it.65 Bentham justified inequality in property rights on the basis of this idea of industriousness.66 Bentham’s concept of human behaviour, assuming people to be rational and carefully calculating, has provided the basis for a great deal of contemporary economic theory with its emphasis on rational choice made by comparing costs and benefits.67 Later, John Stuart Mill68 also defended inequality in property


63 M.P. Marchak, supra note 47 at 32.

64 J. Oser & S.L. Brue, supra note 62 at 122.


66 M.P. Marchak, supra note 47 at 32.


68 J.S. Mill, Principles of Political Economy (3d ed., 1852). Mill, 1806-1873, is considered to be the last great classical economist as neoclassical economics appeared before his death. Neoclassicism emphasized both demand and supply in determining market prices and gave more importance to the role of money in the economy than earlier economic theorists had. They also extended marginal analysis to market structures besides pure competition, pure monopoly and duopoly. See J. Oser & S.L. Brue, supra note 62 at 133, 271.
rights on the grounds that property enhances liberty. Although he agreed that the institution of property lies ultimately with the right of people to enjoy the fruits of their own labours, he was bothered by the question of the scope of such property rights when they involved the labour and skills of others. This Mill resolved by finding in the right of property, a right to acquire by contract, although the freedom to acquire what others have produced by contract rests on an assumption of voluntariness or free consent and fair value.

This theoretical defence of private property occurred at the same time as markets were rapidly expanding across Europe and new urban industrialist classes were demanding economic freedom. For the English, whose so-called Protestant work ethic emphasized industriousness, economic freedom was perceived as not only a natural right but as doing God's will. Because the defences of private property and economic freedom were closely connected ideologically, they could be, and were, advanced at the same time during this period.

Briefly, the political theories propounded between the 16th and 20th centuries viewed government as a creature of contract between individual citizens; this contract defined property rights and the limitations of the state where property was concerned.

In this century, Karl Polanyi argued that to allow the market mechanism sole control over the fate of people and nature, and over even the amount and use of purchasing power,
would result in social destruction. Polanyi disputed the classical economists’ idea of rational, economic man, stating that “[m]an is not an economic, but a social being.” He argued that the free market theory with its assumption of a natural human trading tendency was simply the result of the development of markets themselves, that is, that a market had emerged from communities’ need to organize outside life to assure a continuous supply of food, shelter and items necessary for community life, which then gave rise to rationales for its existence. There is no “commercial gene” in human physiology. Polanyi also argued that, based on the European experience, a particular kind of government was associated with the market which, rather than being laissez-faire as propounded by the free marketeers, was actually strongly interventionist.

With the arrival of the Great Depression in the 1930s, classical economic theories fell into disrepute. The market economy had not reached equilibrium as had been believed and the basic assumption of rational wealth-maximizing behaviour that supposedly characterized all investment and consumer decisions, became untenable. It was John Maynard Keynes (1883-1946) who refuted the classical economists' arguments on wages, marginal productivity and prices. Keynes’ ideas arose out of the neoclassical school although he criticized certain

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77 *Ibid* at 65. See also Chap. 6, 7.


79 G. Dalton, *supra* note 76 at xv.


81 *Ibid* at 47.

82 *Ibid*.

83 Keynesian theory broke with the orthodox view that when competitive conditions exist, resources will be fully employed. D. Hunt, *supra* note 54 at 26.
aspects of neo-classical economics, adopting a macroeconomic approach rather than the microeconomic approach preferred by the neo-classical school. The components of the new theory included: a more interventionist government, free enterprise tempered by some regulation of markets, labour protections and acceptance of workers' rights to engage in collective bargaining, welfare provisions and some redistribution policies, and fairly widespread agreement that some goods are properly protected by market forces. By the end of the second World War, industrialized nations were regulating their domestic economies to a certain extent as proposed by Keynes. Since wages primarily determined prices, to interrupt the process of falling prices caused by unemployment and low wages, governments could inject more money into the economy through public works schemes, minimum wage laws, welfare provisions and unemployment insurance schemes; increasing consumer demand would in turn, stimulate supply and boost the economy.

Keynesian economics required the state to play a much greater role in the economy than Adam Smith and his followers had envisaged. Furthermore, Keynesian understanding of human nature and social responsibilities was far removed from Smith's faith in the ability of private interests to achieve mutually beneficial results in transactions, ultimately leading to optimum social welfare: economic activity is not carried out in a vacuum, there are moral


85 Ibid at 426.

86 M.P. Marchak, supra note 47 at 1; see also Oser & Brue supra note 62 at 412-414.

87 M.P. Marchak, supra note 47 at 47. The author notes that post World War II Keynesian economics was based on steel industries, mass production and mass consumption, nuclear families and nation states. At 1.

88 Ibid at 47-48; Keynes suggested that increasing savings during a recession might further reduce output and raise unemployment levels and that increasing public spending during a recession instead might be good for the economy rather than bad. See D. Hunt, supra note 54 at 26.

89 D. Hunt, supra note 54 at 27.
considerations, and not all participants will exhibit the rational behaviour assumed by the classical economists.\textsuperscript{90}

However, Keynesian economic theory itself fell out of favour in the 1970s and 1980s with global crises in oil, debt, and then, recession.\textsuperscript{91} Libertarians (or neo-liberals) accused governments of undercutting healthy entrepreneurship through its interference in the free market.\textsuperscript{92} Their goal, and they had many supporters in this aim, was to dismantle Keynes' welfare state.\textsuperscript{93} Among those supporting this neo-liberal view of the economy was the Chicago School, a group of economists whose tenets fit within the broader classical-neoclassical tradition, and who produced a variant of neoclassicism referred to as new classicism.\textsuperscript{94} One of its best known proponents, Milton Friedman, has described himself as a 19\textsuperscript{th} century liberal,\textsuperscript{95} emphasizing economic freedom and, as such, has advocated reforms relying less on government and more on the market.\textsuperscript{96} The Chicago School has, since the 1950s, held the view that the

\textsuperscript{90}M.P. Marchak, \textit{supra} note 47 at 48..  

\textsuperscript{91}J. Oser & S.L. Brue, \textit{supra} note 62 at 478.  

\textsuperscript{92}M.P. Marchak, \textit{supra} note 47 at 93.  

\textsuperscript{93}Ibid.  

\textsuperscript{94}J. Oser & S.L. Brue, \textit{supra} note 62 at 477-479. The major tenets of the Chicago School include: 1. the basic economic unit is the individual who makes rational choices by comparing costs and benefits, attempts to maximize his or her well-being, and responds to monetary incentives and disincentives; 2. prices and wages reflect opportunity costs to society at the margin and observed prices and wages in general tend to be good approximations of their long-run competitive ones; 3. a mathematical orientation; 4. rejection of Keynesianism; and 5. limited government because government is inherently inefficient as an agent for achieving objectives that can be satisfied through private exchange. Government's objectives are not always beneficial to taxpayers.  

\textsuperscript{95}Liberalism has been described as resting on two ideals: that of individual freedom and that of a democratic society in which inequalities of political and economic power and social position are not excessive. When pursuit of both ideals results in serious dilemmas, liberalism tends to give priority to the respect for certain personal rights even at substantial cost to other goals such as equality and social stability. See T. Nagel, "Libertarianism Without Foundations" (1975) 85 Yale Law Journal 136. R.A. Posner (1981) \textit{supra} note 65 at 15, 19 says that in the free society conceived by liberals in the original sense of the word "liberal", people should be free to behave as they please so long as they do not invade other people's freedom.  

\textsuperscript{96}J. Oser & S.L. Brue, \textit{supra} note 62 at 489. Friedman contends that the market system protects not only economic freedom but also political freedom.
competitive market system, left relatively free of government interference, produces maximum
economic freedom, which leads to maximum individual and collective economic well-being.\(^{97}\)
In the 1980s, these new liberals, advocates of what is known as the New Right, invoked Adam
Smith’s work as the original inspiration for the economic analysis of the free market system.\(^{98}\)
The 1980s breathed new life into free market theory as seen in the core values espoused by the
neo-liberals: in order of priority, 1) the individual, 2) freedom of choice, 3) market security, 4) 
\textit{laissez-faire}, and 5) minimal government.\(^{99}\) These values were visible in the policies of the
Thatcher, Reagan and Mulroney governments in particular, with increased privatization of state
industries and diminishing support for welfare-related expenditures.\(^{100}\) Although one might say
that current governments have retreated from the hardline approach taken by those leaders,
certainly the effects of their policies have not yet been offset by any full or even partial return to
the welfare state of Keynesian economics. The arguments of the New Right have been and are
still influential within the American liberal market sphere where the economy is competitive, the
social-institutional sphere fragmented, and the culture individualistic.\(^{101}\) It has been said that
New Right arguments appear to make sense only when applied to the US and American-
influenced areas of the world, since other parts of the world, such as Europe with its
predominantly social-democratic welfare capitalist system and the Asian Pacific with many

\(^{97}\textit{Ibid} at 480. This view was greatly criticized by many economists during the period when Keynesian economics held sway.}

\(^{98}\textit{P.W. Preston, supra note 52 at 61. This has been characterized as misleading since Smith’s work belongs with the classicists rather than the marginalists who some insist are the direct antecedents of the New Right.}

\(^{99}\textit{M.P. Marchak, supra note 47 at 95. Libertarianism has been described as an attack on liberalism, putting individual freedom of action above everything and ignoring the ideal of equality and general welfare. Libertarianism “asks why state power should be permitted even the interference represented by progressive taxation and public provision of health care, education, and a minimum standard of living.” See T. Nagel, \textit{supra} note 95 at 137, 148.}

\(^{100}\textit{Which Adam Smith would not have advocated given his support for state-sponsored education and training requirements. See footnote 61, \textit{supra}.}

\(^{101}\textit{P.W. Preston, \textit{supra} note 52 at 63.}
state-regulated economies, exhibit tendencies towards cooperation and communitarianism rather than individualism, tendencies supported by different cultural characteristics.\textsuperscript{102}

However, free market philosophy, whether attributed to Adam Smith or the New Right, still appeals to many investors, both institutional and corporate or individual, now involved in the global economy, not the least of whom are those who invest in infrastructure projects in China.

\textbf{Law and Economics or the Economic Analysis of Law}

It may be safely stated that investors are primarily concerned with maximizing returns on their investment while, at the same time, minimizing their risks. As such, they look to the law and policy of a recipient country to ensure that their concerns are alleviated and their goals achieved. How this law and policy is decided upon or how it should be decided are questions dealt with in law and economics analysis. It is here that that concept of efficiency is given some specific meaning in the particular context of the marketplace, as reflected for example in contract law, as well as in the context of government decision-making.\textsuperscript{103}

Economics has been described as “the science of human choice under scarcity”,\textsuperscript{104} a description that allows economics to touch on practically every human activity, including

\begin{itemize}
  \item \textsuperscript{102} \textit{Ibid.} Preston notes that there is a “subtle civic culture” in Europe and a hierarchical, communitarian culture in Asia Pacific countries.
  \item \textsuperscript{103} R.A. Posner describes the law and economics of the last 35 years as the “application of economics to the legal system across the board: from the common law to civil procedure, from law enforcement to jurisprudence: R.A. Posner (1992), \textit{supra} note 65 at 21. Posner states that the “economic theory of law” which tries to explain as many legal phenomena as possible through the use of economics includes the “efficiency theory of the common law” which hypothesizes a specific economic goal for a limited subset of legal rules, institutions, etc. For Posner, the efficiency theory of the common law is best explained as a system for maximizing the wealth of society. Statute law is less likely to promote efficiency even though it is full of economic concerns and illuminated by economic analysis. (1992) at 23, 25. Posner also suggests that many legal doctrines may rest on vague, unspecified notions of efficiency, since so many of these doctrines date back to the 19\textsuperscript{th} century when a \textit{laissez-faire} ideology based on classical economics was the dominant ideology of the educated classes. At 23.
  \item \textsuperscript{104} T. Williams, “Of Scientism and Storytelling: Perspectives on the Economic Analysis of Remedies for Breach of Contract” in R.F. Devlin, ed., \textit{Canadian Perspectives on Legal Theory} (Toronto: Emond Montgomery, 1991) at 128; other definitions of economics have been provided by: Alfred Marshall: “a study of man’s actions in the ordinary business of life; it inquires how he gets his income and how he uses it”, George
The economic analysis of law,\textsuperscript{105} accepts the idea that economics is a tool for analyzing choice in conditions of scarcity but introduces the qualifying assumption that individuals act rationally to maximize welfare.\textsuperscript{107} This characterization of all human behaviour as rational, self-interested and maximizing may be the most controversial aspect of scientific economics.\textsuperscript{108} The economist's rational economic man, or rational wealth maximizer, can be compared to the law's reasonable man, neither of which are real people but rather concepts used to simplify the complex processes that clarify the connections between events and general patterns of behaviour.\textsuperscript{109}

\begin{quote}
\textit{Positive and Normative Economic Analysis}
\end{quote}

Economics may be analyzed in two different ways: the positive and the normative. Positive analysis is descriptive or predictive and can be used to argue that if certain legal policy

\textsuperscript{105} R.H. Coase, \textit{supra} note 104 at 202-203.

\textsuperscript{106} R.A. Posner (1981), \textit{supra} note 65 at 3-4, describes what he suggests are the two branches of the economic analysis of law: the older branch dating back to Adam Smith which involves the analysis of laws regulating explicit economic activity, such as antitrust, tax, corporation law and regulation of such areas as public utilities, common carriers, and international trade; the newer, more recent branch which analyses laws regulating nonmarket activities, such as torts, family law.

\textsuperscript{107} T. Williams, \textit{supra} note 104 at 128. This wealth maximization principle has been criticized as lacking coherence and consistency and as failing to provide the basis for a comprehensive theory of basic legal rights or corrective justice as its proponents have claimed. See C.G. Veljanovski, "Wealth Maximization, Law And Ethics-On The Limits of Economic Efficiency" (1981) 1 International Review of Law and Economics 5.

\textsuperscript{108} T. Williams, \textit{supra} note 104 at 131; R.A. Posner (1992), \textit{supra} note 65 at 16.

\textsuperscript{109} T. Williams, \textit{supra} note 104 at 131; see also R.H. Coase, \textit{supra} note 104 at 208, R.A. Posner (1981) \textit{supra} note 65 at 1.
is implemented then certain results are likely. This approach is based on the neoclassical economic arguments reviewed in the previous section, that people are rational wealth maximizers and respond to incentives and the laws of supply and demand. Positive economic analysis avoids making value judgments and focuses instead on discovering and stating uniformities among economic phenomena, or what is. Normative economics is sometimes described as “political economy” and is prescriptive or judgmental, dealing with what ought to be. In law and economics analysis, this approach suggests that law should be efficient, that is, that it should allocate resources in such a way that wealth is maximized.

In normative economics, an action is judged by its effect in promoting social welfare, a so broadly defined term that it might almost be synonymous with the utilitarian concept of happiness. Normative economics evaluates economic states by reference to social welfare criteria, of which the most important is allocative efficiency. This involves a situation where

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111 *Ibid*; see M.P. Marchak, *supra* note 47 at 28; see also the criticism of positive economics and scientism in D.N. McCloskey, “The Rhetoric of Law and Economics” (1988) 86 Michigan Law Review 752 at 763-766. However, R.A. Posner (1992), *supra* note 65 at 17-18 points to the effects of deregulation, such as the American airline industry and the socialist economies of eastern Europe and the economic disintegration of the USSR as examples of economics’ successful predictive power.

112 J. Oser & S.L. Brue, *supra* note 62 at 506. Examples of positive economics include value or price theory, theories of the firm, and principles of the gains from specialization and trade. In the authors’ view, the discipline of economics has moved away from the normative toward the positive over the centuries.

113 *Ibid* at 506; R.F. Devlin, *supra* note 104 at 100.

114 R.F. Devlin, *supra* note 104 at 100; R.A. Posner (1992), *supra* note 65 at 13. Posner also states that the economic value of something is how much someone is willing to pay for it or how much someone is willing to accept to part with it. At 12. C.G. Veljanovski, *supra* note 107 at 6, argues that the correct definition of efficiency is that resources are allocated in such a way that the joint surplus that consumers and producers derive from goods and services is maximized, ie. profits plus consumer surplus which is the difference between the willingness to pay and the market price.

115 R.A. Posner (1981), *supra* note 65 at 49. Posner refers to Bentham’s inclusion of the happiness of animals in his definition of welfare or utilitarianism, and notes that the satisfactions of nonhuman beings are not normally included in the concept of social welfare. Posner argues that this aspect of utilitarianism results in an uncertain domain, and poses the question: “Whose happiness counts?”

116 T. Williams, *supra* note 104 at 131.
all of the resources in a society have been allocated among competing uses so that individuals have access to the best possible combination of goods and services produced at the best possible cost.\textsuperscript{117} However, identifying allocative efficiency and measuring social welfare is problematic.\textsuperscript{118} In law and economics analysis, the usual course is to adopt either of the competing definitions of efficiency proposed by Pareto or Kaldor and Hicks.\textsuperscript{119}

\textit{Pareto Efficiency}

Normative analysis begins by asking whether it is likely that a particular transaction or a proposed law or policy will convince those affected by it that they are better off.\textsuperscript{120} In this context, Pareto efficiency asks whether the transaction or proposed change will make someone better off while making no one worse off, i.e. maximum welfare occurs where there are no longer any changes that will make someone better off while making no one worse off.\textsuperscript{121} Any new allocation or distribution would harm someone else. A Pareto optimum economy is based on the individual rather than on communities and implies that there is an optimal distribution of goods among consumers, that there is an optimal technical allocation of resources, and that there are optimal quantities of outputs.\textsuperscript{122} Pareto efficiency assumes that every transaction

\begin{itemize}
\item[\textsuperscript{117}] Ibid; Posner describes efficiency as one meaning of “justice”, at least in common law jurisdictions. For him, conduct described as unjust usually means nothing more than that the conduct wastes resources. He adds that in a world of scarce resources, it is not surprising that waste should be seen to be immoral. See R.A. Posner (1981), \textit{supra} note 65 at 6 and (1992), \textit{supra} note 65 at 27.
\item[\textsuperscript{118}] T. Williams, \textit{supra} note 104 at 131.
\item[\textsuperscript{119}] \textit{Ibid} at 132.
\item[\textsuperscript{121}] \textit{Ibid}; J. Oser & S.L. Brue, \textit{supra} note 62 at 389; R.A. Posner (1992), \textit{supra} note 65 at 13; see also C.G. Veljanovski, \textit{supra} note 107 at 10-11.
\item[\textsuperscript{122}] J. Oser & S.L. Brue, \textit{supra} note 62 at 389-391; T. Williams, \textit{supra} note 104 at 132. Oser and Brue state that in a simple Pareto optimal economy: 1. exchange ends when there are no further possibilities for an exchange that will make at least one of the parties better off without leaving the other worse off, i.e. the consumers’
\end{itemize}
involves parties who have complete information and voluntarily participate in the exchange. The Pareto concept also assumes that only the individual can be the judge of his or her own welfare and that each individual has the power to veto any change in resource allocation since the welfare of one individual is equivalent to the welfare of any other individual.\textsuperscript{123} The Pareto concept has been criticized as a strictly conservative approach to social welfare that does not allow any questioning of the initial distribution of resources.\textsuperscript{124} It is a concept that tends to support the status quo given the great difficulty in satisfying its standard for acceptable change.\textsuperscript{125} Other criticisms of the Pareto efficiency concept include its use of vague and indeterminate concepts of voluntariness and complete information, and the fact that it does not allow for the possibility of external forces being exerted on the parties.\textsuperscript{126} In reality, few parties in any contractual relationship have unconstrained choices and it is rare for parties to enter into a transaction with absolutely perfect information.\textsuperscript{127} Furthermore, Pareto takes existing

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\textsuperscript{123} T. Williams, \textit{supra} note 104 at 132; C.G. Veljanovski, \textit{supra} note 107 at 15.

\textsuperscript{124} T. Williams, \textit{supra} note 104 at 132; see also R.A. Posner (1992), \textit{supra} note 65 at 13.

\textsuperscript{125} T. Williams, \textit{supra} note 104 at 132; see also R.A. Posner (1992), \textit{supra} note 65 at 13.

\textsuperscript{126} M.J. Trebilcock, \textit{supra} note 120 at 110; see also J. Oser & S.L. Brue, \textit{supra} note 62 at 391 who add that public policies that increase national output and overall welfare may also redistribute income in such a way that application of Pareto efficiency would block adoption of any such policy and that the concept is based on a static view of efficiency limiting the possibility of long-run or dynamic efficiency that would benefit a nation's growth of output and welfare.

\textsuperscript{127} Posner acknowledges that no common law doctrine would satisfy a literal interpretation of the Pareto superiority criterion but considers that some would satisfy it in the form of the "principle of consent". Any rule or institution satisfying this principle cannot easily be altered by common law judges in favour of any political interest group. The potential for using the common law to redistribute wealth is therefore small. Interest groups are therefore more likely to promote their self-interest by supporting efficiency in areas regulated by the
preferences as given, providing no ethical criteria to disqualify what might be considered to be unworthy or morally objectionable preferences. Further, many preferences are social constructs which cannot be separated from the choices of social, economic, and legal systems that help to form those constructs. Pareto efficiency also completely ignores the question of the justice or unfairness of how wealth was previously distributed and simply takes that wealth as a given in evaluating the welfare implications of a given transaction. The paramountcy given to individual autonomy has also been criticized as ignoring the contribution of social groups to the quality of human life.

Kaldor-Hicks Efficiency

The Kaldor-Hicks concept of efficiency has been described as a "tie-breaker" to be used when consensus on change cannot be reached. Kaldor-Hicks asks whether the collective decision, eg. to change a law, will generate sufficient benefits to some, ie. the winners, so that the winners could, hypothetically, compensate the others, ie. the losers from the change in order to make the losers completely indifferent to the change, but still have benefits left over for themselves. Although it may be a useful tool for practical policy-making, the Kaldor-Hicks concept has been criticized for not respecting individual autonomy and for ignoring reality, since there is, in fact, no obligation on the winners to compensate the losers. Further, any
efficient changes can cause substantial redistribution of wealth, to the further detriment of the losers.\textsuperscript{133}

As seen in the section on free market theory, neo-classical economists generally value private regimes of exchange and ordering over public or government-ordered regimes, since they are sceptical of government's ability to adopt policies or laws that will increase net social welfare.\textsuperscript{134} This preference is based on the presumption that parties entering voluntarily into a private transaction both feel that they are likely to benefit from it or they would not have entered into it in the first place.\textsuperscript{135} The economic justification for private ordering offered by neo-classical economists has been linked to the political justification for private ordering offered by classical liberals.\textsuperscript{136} In both, individual autonomy is considered a paramount social value and central to individual freedom.\textsuperscript{137} Private ordering is compatible with the idea of individual autonomy in the way that it minimizes the extent to which individual conduct is managed or controlled by external forces such as government and the law.\textsuperscript{138}

Economic analysis has focused on the competitive market which, in theory, is the ideal allocation mechanism against which the “performance of all real world institutions should be measured” and which permits one to clarify the meaning of economic efficiency.\textsuperscript{139} Economists are able to show that “perfectly competitive markets lead to efficiency in the sense that every resource is allocated to its most highly valued use, given the market’s valuation of the

\textsuperscript{133} M.J. Trebilcock, \textit{supra} note 120 at 108; C.G. Veljanovski, \textit{supra} note 107 at 12.

\textsuperscript{134} M.J. Trebilcock, \textit{supra} note 120 at 108; M.P. Marchak, \textit{supra} note 47 at 29.

\textsuperscript{135} M.J. Trebilcock, \textit{supra} note 120 at 109.

\textsuperscript{136} \textit{Ibid}.

\textsuperscript{137} \textit{Ibid}. \ See also discussion in previous section.

\textsuperscript{138} M.J. Trebilcock, \textit{supra} note 120 at 109.

\textsuperscript{139} T. Williams, \textit{supra} note 104 at 133; see also C.G. Veljanovski, \textit{supra} note 107 at 7.
resource.\textsuperscript{140} It is the market that allocates resources through private or individual transactions, rather than the state;\textsuperscript{141} choice or decision-making in the market involves the voluntary exchange of property rights between autonomous, informed individuals with clear preferences who are motivated by self-interest to maximize wealth.\textsuperscript{142} Prices facilitate this choice by providing the necessary information to traders to compare the options available to them.\textsuperscript{143}

It has been argued that since market systems create both winners and losers, the very decision to adopt a free market system requires decisionmakers to resort to Kaldor-Hicks rather than Pareto efficiency which economists generally prefer because it emphasizes the individual and individual choice, and leaves no losers.\textsuperscript{144} Furthermore, although it may be recognized that government decisions imposed on the citizenry create both winners and losers, it is not clear at all that a government can be confident that the gains to one group will exceed the losses to the other.\textsuperscript{145}

There are clearly some limitations inherent in the economic perspective to law. Scientific economic arguments focus primarily on the results of particular decisions, ignoring the process by which those decisions are made or the context in which they occur; they are essentially ahistorical, asocial and acontextual arguments using formal logic to construct the

\textsuperscript{140} T. Williams, \textit{supra} note 104 at 133; see also C.G. Veljanovski, \textit{supra} note 107 at 7.

\textsuperscript{141} Although Posner sees a role for the state in promoting efficiency by providing “public goods” which benefit everyone not just those who pay for them, one of which is a legal system that corrects sources of market failure: R.A. Posner (1981), \textit{supra} note 65 at 103.

\textsuperscript{142} T. Williams, \textit{supra} note 104 at 133. Posner has asserted that “the wealth-maximization principle encourages and rewards the traditional “Calvinist” or “Protestant” virtues and capacities associated with economic progress” although not everyone agrees that the market brings out the best in people: R.A. Posner (1981), \textit{supra} note 65 at 68.

\textsuperscript{143} T. Williams, \textit{supra} note 104 at 133.

\textsuperscript{144} M.J. Trebilcock, \textit{supra} note 120 at 109; R.A. Posner (1992), \textit{supra} note 65 at 13 describes Pareto efficiency as “less controversial”; R.A. Posner (1981), \textit{supra} note 65 at 88-90. For Pareto, the concept of efficiency is confined to purely voluntary informed transactions which have no effect on third parties, so there are never any losers.

\textsuperscript{145} M.J. Trebilcock, \textit{supra} note 120 at 109.
simplest basic relationships between two factors and using deductive reasoning to interpret these relationships.\textsuperscript{146} Economists have also been accused of separating efficiency from income distribution issues, and then ignoring the latter; this kind of separation, it has been argued, cannot convincingly be maintained in a policy or normative analysis for both practical and technical reasons.\textsuperscript{147} The economist’s separation of efficiency from income distribution issues has found institutional expression in the Chicago School’s approach to law and economics which assumes a difference in the goals of common law and statutory law: the common law’s goal is explained as the maximization of society’s wealth while statute law is seen to redistribute and diminish wealth.\textsuperscript{148}

Some of the criticisms levelled against the Pareto concept of efficiency can also be made against the Kaldor-Hicks concept which also accepts existing preferences as valid and, to the extent that the cost-benefit analysis contained in the theory reflects only the value of what someone is willing to pay in a transaction, wealth disparities will bias cost-benefit decisions in distributively unjust ways.\textsuperscript{149} Kaldor-Hicks has also been criticized because it does not ensure maximization of utility or value: there is no way of knowing whether the utility to the winners of not having to pay compensation to the losers is greater than the “disutility” to the losers of not receiving it.\textsuperscript{150}

The distinction between Pareto efficiency and Kaldor-Hicks efficiency in normative economics appears to support the neo-classical economists’ preference for private exchange or market process over collective methods of resource allocation in many contexts, even though considerable conceptual problems arise in trying to specify the conditions for Pareto optimal

\textsuperscript{146} T. Williams, \textit{supra} note 104 at 132-133.
\textsuperscript{147} C.G. Veljanovski, \textit{supra} note 107 at 12.
\textsuperscript{148} \textit{Ibid} at 12-13.
\textsuperscript{149} M.J. Trebilcock, \textit{supra} note 120 at 110.
\textsuperscript{150} R.A. Posner (1981), \textit{supra} note 65 at 91.
It has been argued that where the private exchange process may not be feasible, the concept of Kaldor-Hicks efficiency may be a useful, if difficult to measure, discipline to analyze the choices when a decision has to be made.152

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Against the background of this discussion, it seems apparent that free market theory and the concepts of efficiency in normative economics are suited more to transactions between individual entities rather than communities or whole societies, at which level the ethics of supporting such concepts may leave much to be desired. Foreign investors entering into an agreement with a Chinese state entity to build and operate an infrastructure project, will have a clear understanding at the outset that both sides intend to obtain the greatest benefit possible from the transaction, and that both sides will indeed benefit to some extent, if perhaps unequally. Neither side approaches the deal from the perspective that one of them will lose. However, it is in exploring the “development” attitude or approach of the Chinese side that the obstacles or difficulties that may minimize the benefit to one side or the other, may begin to be perceived.

To conclude this section and drawing on the foregoing review of economic theory and analysis, the concept of efficiency may be described for our purposes as including the following elements and assumptions: 1) individual autonomy and freedom of choice should be paramount; 2) the sole function of the state should be to promulgate and enforce laws and regulations designed to facilitate the working of the market and to protect property rights; 3) governments should refrain from interfering or intervening in market mechanisms such as pricing, supply or demand; 4) by seeking to maximize returns on their investments, investors behave rationally and can be relied upon by governments to achieve results that are mutually beneficial and which will lead to optimum social welfare for all; and 5) what is good for the

151 M.J. Trebilcock, supra note 120 at 121.

152 Ibid.
foreign investor is good for the host state, with unfettered investment contributing to economic growth in the host state and, ultimately, resulting in prosperity and wealth for all. These elements are expressed in a foreign investor’s concern about control, risk management, and rate of return, three inter-related aspects of infrastructure projects that will be examined in more detail in Chapter III.

Development

The Definition Problem

Development is a difficult, and even confusing, concept to define; in fact, some writers have noted that it “seems to defy definition, although not for a want of definitions of offer”. Development has been explained both as a process or activity as well as a goal or end-state, that is, as both immanent and intentional development. It has been argued that it is the difficulty of making the intent to develop consistent with immanent development that lies at the heart of the definition problem. We can see that development is both a physical reality and a state of mind; as an intentional activity, development involves thinking about taking certain action to make development happen but the origin of the intention to develop and the values underlying that intention are often ignored or treated “as independent, fully formed variables ready to do their work for development before it begins.” Some have defined development

153 M.P. Cowen & R.W. Shenton, Doctrines of Development (London: Routledge, 1996) at 1. The authors note that there are hundreds of definitions of development available.

154 Ibid.

155 Ibid at 438. The authors contend that intentional development consists of the means to compensate for the destructive propensities of immanent change. While immanent development therefore contains a destructive dimension, it is hard to reconcile this aspect with intentional development – how and why should the intent to destroy be made in the name of development? Development therefore includes the process of decay, decomposition and destruction as well as growth, expansion and improvement. At 444-445.

156 Ibid at 440-443.
as a process of improvement and development economics as being concerned with rapid and large-scale improvements in levels of living for the masses of poverty-stricken, malnourished, and illiterate peoples of Africa, Asia and Latin America but these definitions have been considered by others to be inadequate.\textsuperscript{157}

The concept of development includes numerous theories which attempt to explain development and its counterpart, underdevelopment, some of which provide policy recommendations to governments, theories which usually begin as theories of economic development. Although not specifically addressed by all theories, any approach to economic development necessarily involves political decisions and social consequences. Although the political and social aspects of economic development may not figure prominently in many economists' minds, they can never be far from the thoughts of a country's leaders.

The terms ‘economic growth’ and ‘economic development’ are often used interchangeably but economists note that there is a distinction: economic growth refers to an increase in a nation’s real output and income that occurs over time, while economic development refers to the process through which nations raise their per capita output and income.\textsuperscript{158} An alternative definition for ‘economic development’ is an increase in per capita economic well-being.\textsuperscript{159} Although ‘development’ in the broader sense has been linked to the concepts “progress” and “growth”, these concepts are not interchangeable.\textsuperscript{160}


\textsuperscript{158} J. Oser & S.L. Brue, supra note 62 at 459. Economic growth results from either increased population, increased capital investments, longer work hours or an increase in the labour force participation rate. It can also be defined in terms of increases in the real output per person, which is the definition used by those focusing on economic development. Economic development implies improvements or increases in productivity and theories of economic development focus on how such increases can be achieved in underdeveloped or slowly developing economies.

\textsuperscript{159} Ibid. The authors describe a situation where people prefer increased leisure to increased income as productivity increases. As such, there could be double the productivity but half of the hours worked, resulting in economic development but no growth and no rising real income unless leisure is considered to be part of income.
The Theories

China's history has taken it from a rural, agrarian, traditional economy through a Marxist-influenced, centrally-planned economy to the current transition to a socialist market economy.\textsuperscript{161} As a developing country, China has been encouraging economic growth while trying to avoid the pitfalls experienced by other developing countries. Although many theories of economic development have been advanced since World War II, none of them has been universally accepted and there is, therefore, no one generally agreed theory of development. Some theories are, however, more prominent than others, and it is these theories that will be discussed here as possibly having some influence on Chinese attitudes and perspectives.

Some writers have attempted to group certain theories into different classifications but it appears that there is not even general agreement on the classifications that ought to be used. For example, one writer describes what he considers the most prominent theories as: economic liberalism, classical Marxism and the underdevelopment position, including both structuralist and dependency theories.\textsuperscript{162} Another writer identifies a number of competing theories supported by different development economists today as: neo-classical, expanding capitalist nucleus, structuralist, neo-Marxist, dependency, basic needs and Maoist.\textsuperscript{163} For purposes of this paper the following classifications have been chosen: the socialist view, including classical Marxist, neo-Marxist, and Maoist theories; the underdevelopment view, including structuralist,

\textsuperscript{160} M.P. Cowen & R.W. Shenton, \textit{supra} note 153 at 7, 8, 444. The authors refer to the idea of “progress” of the Scottish Enlightenment and the “growth” of the classical economists.

\textsuperscript{161} China's leadership shows no inclination to move to a full market type economy although some observers predict a move to “market Leninism” where the market is allowed to act freely while a one party, Marxist-Leninist ‘soft authoritarian’ government keeps a tight rein on dissidents. S.B. MacDonald et al, \textit{New Tigers and Old Elephants} (New Brunswick, NJ: Transaction Publishers, 1995) at 120-122.


\textsuperscript{163} D. Hunt, \textit{supra} note 54.
dependency, and basic needs theories, and the capitalist view, including liberal, stages of growth and east Asian development theories.

What follows is an overview of these theories. As such, this has necessarily been a selective approach and the reader may find the treatment of some theories to be partial and lacking in some respects. However, it is the more common themes running through these theories which are reflected in the perspectives and attitudes of those in the developed as well as the developing world, that I attempt to describe in order to identify those characteristics that will inform the concept of development as it is used in this paper in relation to Chinese government parties.

The Socialist View

Marxist Theory of Development

Karl Marx, writing with Friedrich Engels in the 1840s, was a contemporary of J.S. Mill but held a very different view of contemporary economic conditions.\textsuperscript{164} Whereas Mill saw the possibility in the capitalist economic system for more equitable distribution of wealth and improvements in mass welfare, Marx observed the harsh living and working conditions of the working class and, in his exploration of the causes of these conditions, concluded that the true nature of capitalism would never permit a redistribution of economic and political power away from the bourgeoisie or capitalist class.\textsuperscript{165}

For Marx, capitalism was the dynamic process that would eventually influence all societies, causing world-wide development of the forces of production.\textsuperscript{166} The capitalists'\textsuperscript{164} \textit{Ibid} at 18; see also P.W. Preston, \textit{supra} note 52 at 65-83; S.B. MacDonald et al, \textit{supra} note 161 at 31.\textsuperscript{165} D. Hunt, \textit{supra} note 54 at 18.\textsuperscript{166} R. Gilpin, \textit{supra} note 162 at 270. D. Hunt, \textit{supra} note 54 at 19 notes that “forces of production” refer to the mode of combination of labour with the instruments of labour and raw materials. These forms of combination
driving need to constantly increase their wealth leads to competition, increasing centralization of capital, a constant search for new technology, periodic crises of overproduction and underconsumption, the increased awareness and alienation of workers, and ultimately, revolution, resulting in the replacement of the capitalists by the proletariat and the establishment of a socialist workers' state and, then, a communist state.\(^{167}\) Revolution would occur first in the more industrialized societies where the workers were the most organized and the gap between capitalists and the masses was the widest; where workers were not so numerous, the party could serve as "the vanguard of the proletariat."\(^{168}\)

Marx's focus was on 19\(^{th}\) century western capitalist society but he also modified his European-based theory of development to apply to less-developed economies as well.\(^{169}\) Marx had identified certain evolutionary stages of civilization: primitive commodity production (e.g. ancient Greece), feudalism (Middle Ages), capitalism, socialism and communism, but found that this did not apply to societies where the pre-capitalist stages did not exist.\(^{170}\) To deal with this problem, Marx introduced the concept of an Asiatic mode of production, based on his brief study of Indian economic problems which was characterized by a unified, and relatively self-sufficient, agricultural and manufacturing sector at the village level as well as an autonomous, parasitic ruling state separated from the rest of society.\(^{171}\) Within this conservative and static social structure, there were no internal forces available to move the society forward and therefore, the external force of Western imperialism, or an "exogenous shock" was required.\(^{172}\)

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\(^{167}\) D. Hunt, supra note 54 at 21-22; P.W. Preston, supra note 52 at 73-74.

\(^{168}\) S.B. MacDonald et al, supra note 161 at 32.

\(^{169}\) R. Gilpin, supra note 162 at 270.

\(^{170}\) Ibid at 270-271.

\(^{171}\) Ibid at 271; S. Ghatak, supra note 2 at 64.

\(^{172}\) R. Gilpin, supra note 162 at 271; S. Ghatak, supra note 2 at 64.
Western imperialism would destroy the status quo by introducing modern technology and implanting the seeds of capitalism which would eventually replace the Asiatic mode of production as the dynamic process was begun. Although Marx recognized that imperialism was immoral, he also considered it to be a progressive force without which the less-developed economies "would remain in their state of torpor forever."

For Marxists, the incorporation of less-developed economies into the global economy and their subsequent modernization is a process full of political conflict and disputes over the international division of labour. When this process finally reaches its limit, the transition to socialism and communism will occur.

In the 20th century, Lenin significantly modified Marx's optimistic attitude towards capitalist development in less-developed economies, although he too considered that imperialism was a spur to the development of capitalism in the periphery and progressive and necessary for their modernization. However, Lenin saw the developing capitalism in the periphery as imperialist capitalism rather than indigenous capitalism, and as overwhelming and suppressing any possibility for indigenous capitalism to develop. Pushing indigenous producers out of their own markets, more advanced foreign capitalist producers diminished the prospects for the development of indigenous capitalism in the periphery, to an extent that Marx

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173 R. Gilpin, supra note 162 at 272; P.W. Preston, supra note 52 at 81-81.

174 R. Gilpin, supra note 162 at 272; S. Ghatak, supra note 2 at 64, quotes I. Adelman in Theories of Economic Growth and Development (Stanford: Stanford University Press, 1962) at 91 for what he calls the quintessence of Marxist development theory: "underdevelopment is a consequence of a particular adverse combination of initial conditions and structural parameters, which results in economic and social stagnation. Development can occur only as a result of an exogenous shock, the essential effect of which is to change the initial conditions in such a way that self-sustained growth takes place."

175 R. Gilpin, supra note 162 at 272-273.

176 Ibid at 273.

177 D. Hunt, supra note 54 at 23; R. Gilpin, supra note 162 at 272.

178 D. Hunt, supra note 54 at 23.
himself had not foreseen. Lenin also argued, however, that by exporting capital, technology and expertise to the periphery, the advanced capitalist economies would undermine their own position in the world. The periphery would become competitors with lower wages and able to outcompete the more advanced economies. At the same time, the advanced economies would slow down or stagnate, giving the less-developed economies a chance to catch up and overtake them. As the economic competition intensifies between the two spheres, economic conflicts and imperial rivalries arise, leading to the decline in influence, both economically and politically, of the advanced capitalist economies.

In short, the classical Marxists accept that, for the time being, there is no alternative to capitalist development and tend to believe that, although the process of transition to capitalism at the periphery will be uneven and will cause widespread suffering, as it did in Europe, it will nevertheless occur, and it will replace backward, unprogressive rural ways of life with industrialization, without which development is meaningless.

The Neo-Marxist View

In the 1950s, Paul Baran looked at Marxist theory in analyzing the problem of underdevelopment and developed an alternative view of the effect of political and economic factors.

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179 Ibid; the author notes that a substantial part of the inspiration for the neo-Marxist theory of underdevelopment is to be found in Lenin’s work.

180 R. Gilpin, supra note 162 at 272.

181 Ibid.

182 Ibid.

183 Ibid; see also S.B. MacDonald et al, supra note 161 at 32.

imperialism on less-developed economies. Baran considered that Marx had been overly optimistic concerning the prospects for capitalist development in the periphery and had not had enough information to develop a comprehensive theory of development. In his analysis, Baran focused on class modes of appropriation and use of the “actual economic surplus” in underdeveloped economies. Baran’s approach was applied and modified by Andre Gunder Frank in the 1960s in Latin America. Baran’s underdevelopment is a state characterized by low per capita incomes but Frank’s underdevelopment is a process: a process of continuing extraction of surplus from the periphery and its transference to the centres of world capitalism. For both men the cause of the perpetuation of underdevelopment lies in the failure of local elites to use the actual economic surplus to enhance and increase production in

185 D. Hunt, supra note 54 at 64.

186 Ibid; see also M.P. Cowen & R.W. Shenton, supra note 153 at 61 quoting Baran as follows: “It is the underdeveloped world that the central, overriding fact of our epoch becomes manifest to the naked eye: the capitalist system, once a mighty engine of economic development, has turned into a no less formidable hurdle to economic advancement.”

187 D. Hunt, supra note 54 at 64. “Actual economic surplus” is defined as the difference between actual output and actual consumption. P.W. Preston, supra note 52 at 215-217, notes that Baran identified three related notions of surplus: (a) actual surplus; (b) potential surplus, which the economy could produce given available factors of production; and (c) planned surplus, which is what could be produced in a rational and humane system.

188 D. Hunt, supra note 54 at 64-65; Frank identified three contradictions characterizing capitalist development and the development of underdevelopment. They are: “the expropriation of economic surplus from the many and its appropriation by the few, the polarisation of the capitalist system into metropolitan centre and peripheral satellites, and the continuity of the fundamental structures of the capitalist system throughout the history of its expansion and transformation.” A.G. Frank, in Capitalism and Underdevelopment in Latin America (New York: Monthly Review Press, 1967) at 3 quoted in P.W. Preston, supra note 52 at 218.

189 D. Hunt, supra note 54 at 65; M.P. Cowen & R.W. Shenton, supra note 153 at 61: Frank’s process is an historical one ‘causally related to the ‘pattern of evolution’ of developed, industrial societies.” In these societies, the process involved producers being separated from their means of production (usually, land) then being reabsorbed and reintegrated into the production process as wage workers. In the countries of the periphery this reabsorption process never occurred in the same way.
the domestic economy rather than exporting it or using it to buy luxuries, land or speculative property.\textsuperscript{190}

For the neo-Marxists, a country's prospects for the development of capitalism are largely determined by its position in the global economy, a position which is historically determined.\textsuperscript{191} Since present international conditions are different from those existing in the 19\textsuperscript{th} century, present-day underdeveloped countries will not pass through the same phases of economic development as the industrially advanced countries which were able to use the underdeveloped countries as sources of cheap raw materials, markets for their goods, and outlets for surplus capital. Although politically independent, the underdeveloped countries are economically dependent on the developed countries because of historical, colonial ties and neo-colonial ties of trade, aid, and technology transfer. The local elites and foreign capitalists have little interest in promoting an indigenous competitive, dynamic capitalist sector, preferring to siphon off most of the surplus out of the periphery, perpetuating poor economic conditions. Trade between the periphery and the centre, characterized by unequal terms of trade,\textsuperscript{192} also serves to extract surplus from the periphery. Finally, full development can occur only following a socialist revolution, when the surplus can finally be productively and equitably used.\textsuperscript{193}

\textsuperscript{190} D. Hunt, \textit{supra} note 54 at 65.

\textsuperscript{191} \textit{Ibid} at 66 for the discussion in this paragraph.

\textsuperscript{192} The goods usually produced by the less-developed economies (mainly primary commodities) are both price and income inelastic while the goods they want, i.e. manufactures, higher tech items, they cannot produce themselves and are elastic in both respects. See S. Ghatak, \textit{supra} note 2 at 65.

\textsuperscript{193} D. Hunt, \textit{supra} note 54 at 66; see also S. Ghatak, \textit{supra} note 2 at 65-66. Ghatak adds that the structural effects of the centre-periphery system also involve a choice of unsuitable technology and products for less-developed economies. Capital intensive, often imported, technology usually creates more unemployment and poverty, accentuating the existing inequalities in income distribution.
This analysis seems remarkably similar to that of the structuralists as we will see in the next section, however there are key differences. The neo-Marxists use a class analysis to determine the causes of underdevelopment and the concept of economic surplus, as interpreted by Baran rather than Marx, plays a central role. The structuralists consider that the existing economic structures are the immediate cause of underdevelopment but the neo-Marxists see it in the existing pattern of class control over the disposition of the surplus. The conclusions drawn by the two perspectives are also fundamentally different: the structuralists who have tried to play an active role in influencing policy design and reform in less-developed economies as well as the international economic system, emphasized import substitution as the means to change the existing, offending structure and develop the periphery; neo-Marxists conclude that since development within the international capitalist system is impossible for less-developed countries, the only solution lies with the masses replacing the dominant classes, taking control of the economic surplus, moving immediately to a socialist development policy, and withdrawing completely from the international capitalist system, a conclusion starkly at odds

194 C. Leys, supra note 184 at 52, notes that the Marxist stream mingled with that of structuralism in the 1960s, to the point where one critic of dependency theory referred to them as “different traditions within the theory of dependency”.

195 D. Hunt, supra note 54 at 67; Marx’s idea of surplus is based on the labour theory of value. See P.W. Preston, supra note 52 at 215.

196 D. Hunt, supra note 54 at 67.

with Marx’s view that capitalism is almost certainly a necessary and inevitable stage on the road to socialism.\textsuperscript{198}

\textit{The Maoist Perspective}

Although not all development economists and theorists recognize the Maoist approach as a distinct theory of development, its apparent success in improving mass welfare in China during the period 1949-1976 has created not a little interest in the Chinese development experience.\textsuperscript{199} Others have termed this approach ‘autonomous’ or ‘self-reliant’ development and lumped it in with the dependency theorists’ autonomous development via domestic social transformation.\textsuperscript{200} However, the fact that the Maoist perspective affected more than one quarter of the population of the less-developed countries in the world, that elements of the policy innovations have proved replicable in other countries, that it presents an integrated view of social, political, ideological, and economic change which other development approaches have neglected, and that it influenced subsequent attempts to develop the ‘basic needs’ approach to development, arguably earns it a place among the better known theories of development.\textsuperscript{201}

China had never developed a capitalist system and, in his study of capitalism and the effective role of ideas which comprise religious doctrines impacting on the social structure that

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{198} \textit{i}bid; see also C. Leys, \textit{supra} note 184 at 52; P.W. Preston, \textit{supra} note 52 at 217.  
\item \textsuperscript{199} D. Hunt, \textit{supra} note 54 at 73.  
\item \textsuperscript{200} R. Gilpin, \textit{supra} note 162 at 292.  
\item \textsuperscript{201} D. Hunt, \textit{supra} note 54 at 74, 252.  
\end{enumerate}
\end{footnotesize}
either gave rise to or inhibited capitalism, Max Weber linked Confucianism, Taoist mysticism, and ancestor worship to Chinese social organization and found that China had no equivalents of the self-governing medieval European towns, Western ideas of private property, nor a capitalistic bourgeoisie.\textsuperscript{202} This has been misinterpreted by some to mean that the belief systems of traditional societies could be characterized as obstacles to development.\textsuperscript{203} When Mao and the Communists came to power in 1949, China was still largely a rural peasant society.\textsuperscript{204} In fact, Mao asserted in 1958 that China's "poverty and blankness" made Communism possible long before capitalism and revisionism could corrupt the country.\textsuperscript{205} Under Mao's leadership, the Chinese committed themselves to a course of self-reliant development, planning to modernize the economy outside the capitalist world system, by generating and mobilizing capital from their own labours and creating their own technology.\textsuperscript{206} This course of development was pursued in the face of serious problems that arose most notably during the Great Leap Forward (1958-1961), the Russian withdrawal of aid and technical assistance, and then the Cultural Revolution (1966-1976) which further damaged the

\textsuperscript{202} P.W. Preston, \textit{supra} note 52 at 110-111.

\textsuperscript{203} \textit{Ibid} at 111; M.P. Cowen & R.W. Shenton, \textit{supra} note 153 at 80-81, note that Mao's intellectual formation was typical of those members of an early 20\textsuperscript{th} century generation of Chinese who rebelled against what they regarded as the stasis of official authority and tradition which, despite the 1911 revolution against the Manchu rulers, was seen by them as preventing progressive development in China.

\textsuperscript{204} S.B. MacDonald et al, \textit{supra} note 161 at 36.

\textsuperscript{205} \textit{Ibid}.

\textsuperscript{206} R. Gilpin, \textit{supra} note 162 at 293. However, the Chinese were receiving some Soviet aid during the 1950s and early 1960s.
economy and left the country with a huge void in scientific and technical knowledge and capacity.\textsuperscript{207}

Some of the key elements of the Maoist perspective include: the simultaneous pursuit of economic, social, and political development towards the ultimate goal of communism under the guidance and leadership of a single political party; an economic development strategy which emphasizes development of heavy industry while refusing to neglect light industry and agriculture and which recognizes that investment resources must be allocated to maximize overall capital accumulation while sufficiently increasing mass welfare to maintain support for socialist transformation; the mobilization of seasonally slack labour in rural areas for labour intensive capital formation; the emphasis on economic and political equality between regions by emphasizing self-sufficiency in heavy and light industry and in basic food stuffs and by decentralizing decision-making to the regions; reduction of income differences between people as quickly as possible but not faster than the masses are prepared to accept, along with gradual reduction of reliance on material incentives; and the involvement of professionals with the masses.\textsuperscript{208} A unique strategy employed in this approach was referred to as “walking on two legs”: alongside state development of modern heavy industry, the Maoist approach emphasized local mobilization of slack resources for the development of small and medium scale industry.\textsuperscript{209} In that way, the state-owned heavy industries would use the large-scale capital

\textsuperscript{207}\textit{Ibid}; the backyard steel mills of the Great Leap Forward not only produced substandard steel, the shift of peasant labour from agriculture to heavy industrialization resulted in widespread food shortages and famine that caused an estimated 20 to 46 million dead from starvation. The Cultural Revolution emphasized ideology over expertise and millions died during the turmoil, including many professionals. See S.B. MacDonald et al, \textit{supra} note 161 at 100.

\textsuperscript{208} D. Hunt, \textit{supra} note 54 at 74, 252-253.

\textsuperscript{209} \textit{Ibid} at 235.
intensive technology while the small and medium scale industries took advantage of the country’s huge supply of human capital and used more labour intensive techniques.\textsuperscript{210}

With the death of Mao in 1976, China’s leadership came to realize that the country could not achieve its objectives as long as it was shut off from the rest of the world.\textsuperscript{211} With the announcement of the Open Door Policy in 1978, the Maoist approach to development was discarded in favour of a new ‘socialist market’ approach. Observers have concluded that if China, as a strong state with abundant resources and a relatively large internal market, could not make a success of a self-reliant, autonomous development approach, then there is little hope for less-developed economies without those advantages.\textsuperscript{212} Although the new Chinese economic policy contains some elements of continuity from the Maoist period, some of the more significant changes include an increased emphasis on material incentives, a rejection of the emphasis on the development of production relations as seen in the breakup of agricultural collectives and the switch to individual contracts for state quotas along with the ability to sell surplus product on the free market, and the official sanction of the development of urban and rural, small-scale individual and cooperative enterprise in trade and production, known as township and village enterprises, or TVEs.\textsuperscript{213}

\textsuperscript{210} Ibid at 239.

\textsuperscript{211} R. Gilpin, \textit{supra} note 162 at 294; see also P.W. Preston, \textit{supra} note 52 at 225, noting the waning and ultimate disappearance of optimism in Marxist development theory with a fading of confidence in the example of China.

\textsuperscript{212} R. Gilpin, \textit{supra} note 162 at 294.

\textsuperscript{213} D. Hunt, \textit{supra} note 54 at 254. The author points to the continuing development of small, medium, and large scale industry as a continuing element of the Maoist economic policy. See also S.B. MacDonald et al, \textit{supra} note 161 at 102-103.
The Underdevelopment View

The Structuralist School

The structuralist perspective is primarily associated with Raoul Prebisch, an Argentinian economist and director of the Economic Commission for Latin America (ECLA). Economists with the ECLA were influenced by their knowledge of Latin America’s economic experience in the 1930s and 1940s which included declining prices for primary commodity exports, balance of payments crises, then war-time disruptions of international trade and shortages of manufactured imports, and a shift in trade focus from the UK to the US with its more advanced liberal market economy and different style of interaction as well as its new world role to which it was still unused. It was in this context that the ECLA economists developed a new theory based on their contention that a capitalist world economy tends to preserve or actually increase inequalities between developed and less developed economies, aided by the effects of international trade, and that the main avenue for less developed economies to achieve economic development was via import substituting industrialization and protectionism. Structuralist theory and its main policy, it is generally agreed, were a failure,

214 D. Hunt, supra note 54 at 47-48.
215 Ibid; see also P.W. Preston, supra note 52 at 179-189.
216 R. Gilpin, supra note 162 at 274-275; S. Ghatak, supra note 166 at 341; D. Hunt, supra note 54 at 49 notes that structuralists distinguish between economic growth and economic development. Two widely accepted definitions of (under)development are as follows: 1. an underdeveloped economy is one in which the technological level of some branches of the economy falls well below the technological level and therefore, the labour productivity of the most advanced sector, and well below the level that could be achieved with known technologies; and 2. economic development consists of the introduction of new combinations of production factors which increase labour productivity.
however some of its elements were modified by dependency theorists and formed the basis for the 1970s demands of the less developed countries for a New International Economic Order.\textsuperscript{217} A brief outline of the structuralist argument will therefore be useful before proceeding to dependency theory.

Structuralists contend that the global economy contains a developed centre or core and a backward or underdeveloped periphery.\textsuperscript{218} Technical progress has increased productivity, economic growth and improved welfare in the developed countries of the centre but has had different consequences for the less developed countries of the periphery, where prices have fallen and the prices of their exports in relation to their imports has decreased, i.e. the terms of trade have deteriorated against the commodity exporters.\textsuperscript{219} Technical progress is introduced to the periphery from the outside and is restricted primarily to the production of commodities and raw materials that are exported to the core at depressed prices, thus transferring the fruits of technical progress in the periphery back to the core economies.\textsuperscript{220} Since the potential surplus which would otherwise be available for domestic investment was transferred to the core, economic development in the periphery could neither be self-generating nor self-perpetuating.\textsuperscript{221}

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\textsuperscript{217} D. Hunt, \textit{supra} note 54 at 47; R. Gilpin, \textit{supra} note 162 at 275, 281.
\textsuperscript{218} S. Ghatak, \textit{supra} note 2 at 341.
\textsuperscript{219} R. Gilpin, \textit{supra} note 162 at 275; S. Ghatak, \textit{supra} note 2 at 340-341.
\textsuperscript{220} R. Gilpin, \textit{supra} note 162 at 275.
\textsuperscript{221} M.P. Cowen & R.W. Shenton, \textit{supra} note 153 at 62. The authors quote Prebisch as saying that the consequence of a dependent status is 'that due to external pressure the country cannot decide autonomously what it should do or cease doing'.
\end{flushleft}
The dualistic economic structures of the countries of the periphery have been historically determined, and as suppliers of cheap raw materials to the developed core and as markets for the core’s mass-produced exports, these less developed countries are incapable either of growth or economic development until their governments promote a process of structural transformation by focusing on diversified industrialization, including the production of capital goods.\textsuperscript{222} Rapid industrialization to break away from reliance on foreign demand for primary exports as the engine of growth, to overcome the increasingly unfavourable terms of trade and to absorb surplus labour was advocated by the structuralists within an import substitution strategy including promoting economic protectionism, foreign investment in domestic manufacturing, and creation of regional common markets among the periphery economies.\textsuperscript{223}

Unlike the neo-Marxists then, the structuralists accepted the idea of development through capitalism, and unlike the Marxists, they advocated change in the structure of the economy through reforms in existing economic policy, rather than through radical political and social change, i.e. preferring economic nationalism to socialism.\textsuperscript{224} By the late 1960s, the structuralist theory was in trouble: economic dependency had continued in Latin America despite import substitution; import substitution policies had created even greater problems including, a widening wage gap between workers in sponsored industries and those in local sectors, a lack of access to foreign technologies (to be exacerbated in the 1970s and 1980s), increasing poverty spurring rural-urban migration, marginalization of large groups moving into

\textsuperscript{222} D. Hunt, \textit{supra} note 54 at 50; S. Ghatak, \textit{supra} note 2 at 341.

\textsuperscript{223} R. Gilpin, \textit{supra} note 162 at 277; D. Hunt, \textit{supra} note 54 at 50.

\textsuperscript{224} D. Hunt, \textit{supra} note 54 at 51; C. Leys, \textit{supra} note 184 at 51-52.
the informal labour sector, increasing role of foreign capital, and the seizure of power by the military in many countries. It was in response to the problems presented by the structuralist analysis that dependency analysis was developed.

Dependency Theories

The most often quoted definition of dependence is that of the Brazilian scholar, Theotonio Dos Santos:

By dependence we mean a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected. The relation of interdependence between two or more economies, and between these and world trade, assumes the form of dependence when some countries (the dominant ones) can expand and can be self-sustaining, while other countries (the dependent ones) can do this only as a reflection of that expansion, which can have either a positive or a negative effect on their immediate development.

In the late 1960s and 1970s, dependency analysis produced a number of different approaches which attempted to explain the forms of dependency, its causes, its significance, and its relationship with the processes of underdevelopment and development, particularly in Latin America. Arguably, the two main streams of dependency analysis are found in an evolving

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225 P.W. Preston, supra note 52 at 187-188.
226 Ibid at 189.
227 R. Gilpin, supra note 162 at 282 quoting Dos Santos, 1970 at 231. See also Dos Santos’s definition with slightly varied wording from Dos Santos, 1969, reprinted in Bernstein, 1973 at 76 as quoted in D. Hunt, supra note 54 at 200.
neo-Marxist analysis and in the revised approach of some disillusioned structuralists.\textsuperscript{229} In the 1970s, neo-Marxists, who were faced with evidence of high growth rates in some of the countries of the periphery, had to concede that some form of capitalist accumulation through increasing industrialization was taking place.\textsuperscript{230} They turned to the concept of dependence to argue that this growth was of an undesirable kind, not generated by an autonomous indigenous capitalist class, where the economies remained dependent on the core economies for access to markets, finance, and most importantly, technology.\textsuperscript{231} Another characteristic of the dependent economy was a continuing alliance between the local elite or bourgeoisie and the core bourgeoisie, allowing the core to continue to determine the pattern of change in the periphery with the only route to full autonomous development residing in socialist revolution.\textsuperscript{232}

The structuralists at this time, were observing the consequences of import-substituting industrialization, as outlined in the previous section, along with the dominance of this process by the multinational corporations.\textsuperscript{233} Their disillusionment with the whole process was reflected in a new focus on explaining the capitalist system as a whole, rather than just the

\textsuperscript{229} D. Hunt, \textit{supra} note 54 at 216.

\textsuperscript{230} \textit{Ibid} at 67, 202. This acknowledgement was the most notable change between neo-Marxist development theory of the 1960s and neo-Marxist dependency analyses of the 1970s.

\textsuperscript{231} \textit{Ibid} at 68. Packenham, \textit{supra} note 228 at vii, 5 suggests that the dependency movement has always been about capitalism versus socialism more than about dependency versus autonomy.

\textsuperscript{232} \textit{Ibid}; see also S.B. MacDonald, \textit{supra} note 161 at 39-40.

\textsuperscript{233} D. Hunt, \textit{supra} note 54 at 68; see also R. Gilpin, \textit{supra} note 162 at 283, 284 where he notes that dependency theorists consider the multinational corporation to be the principal instrument of capitalist domination and exploitation in the late 20\textsuperscript{th} century, spearheading the replacement of political colonialism or imperialism with economic imperialism.
causes of underdevelopment in the periphery, by identifying a primary case of economic dependence and tracing the manner in which economic dependence is created.\textsuperscript{234}

Although different dependency theorists may lean toward the neo-Marxist view or the structuralist perspective of dependency, they share several assumptions and explanations regarding the causes of and solution to the problems of less developed countries; as Frank stated: "it is capitalism, both world and national, which produced underdevelopment in the past and which still generates underdevelopment in the present."\textsuperscript{235} In contrast to the modernization theorists at the time,\textsuperscript{236} dependency theorists considered the policy of the advanced core to be harmful rather than beneficial; foreign investment in the periphery was seen to give rise to greater interest and profit outflows; the so-called modernizing elites were really \textit{compradores}\textsuperscript{237} or \textit{lumpenbourgeoisies}\textsuperscript{238} serving their own and foreign interests rather than those of the people; international trade perpetuated the structures of underdevelopment rather than resolving them.\textsuperscript{239} For dependency theorists, underdevelopment is a process in an economic system that generates wealth for the few and poverty for the many; that rather than a dual system of modern and backward sectors, there is one functional integrated whole where

\textsuperscript{234} D. Hunt, \textit{supra} note 54 at 68. Examples of primary cases of economic dependence include the cultural dependence of the elite and multinational corporations.

\textsuperscript{235} R. Gilpin, \textit{supra} note 162 at 282.

\textsuperscript{236} Modernization theory was essentially ahistorical, setting up a dichotomy between traditional and modern societies and focusing on internal economic, social and cultural patterns of Latin American countries. This theory proposed reliance on the marketplace which was simply a reaffirmation of an upgraded version of the role of primary product exporter. See P.W. Preston, \textit{supra} note 52 at 194-195.

\textsuperscript{237} i.e. agents of a foreign power.

\textsuperscript{238} i.e. an ignorantly contented middle class uninterested in changing the status quo.

\textsuperscript{239} C. Leys, \textit{supra} note 184 at 12.
the periphery is necessarily backward and underdeveloped because it is systematically exploited and prevented from developing by international capitalism and the coopted local elites. Dependency theorists maintain that underdevelopment is due primarily to the external forces of the world capitalist system and not to the policies of the less developed countries themselves, but they also assert that it is the cooperation of these local bourgeois elites with international capitalism along with the integration of the society into the world economy that hinders the economic development, social welfare, and political independence of the society. At their more extreme, dependency theorists accuse the world capitalist system as being “predatory” in intention and result. The solution is to destroy the linkage between international capitalism and the domestic economy through a political socialist revolution that replaces the bourgeois elite with an elite dedicated to autonomous development. The state was to have a key role as the vehicle for this new political-cultural-economic project of autonomous development. Dependency theorists desire to create an independent, equitable, and industrialized state, a transformation requiring not only changes in the economic system but also the social and political system.

240 R. Gilpin, supra note 162 at 282-283; underdevelopment is therefore not an original condition but is historically generated in the process of the expansion of capitalism. See P.W. Preston, supra note 52 at 190-191 discussing the work of Brazilian Celso Furtado who presented the economic and social structures of 1960s Latin American countries as being the result of that continent’s incorporation into the world capitalist economy. See also M.P. Cowen & R.W. Shenton, supra note 153 at 62.

241 R. Gilpin, supra note 162 at 286-287.

242 Ibid at 287; see also C. Leys, supra note 184 at 12.

243 P.W. Preston, supra note 52 at 195.

244 R. Gilpin, supra note 162 at 287; D. Hunt, supra note 54 at 198, noting that since economic growth is not their only focus, it is not surprising that dependency theories have been studied and analyzed not only by economists but also by sociologists and political scientists.
Although dependence became a focus of study from the late 1960s, no single perspective emerged nor was any major new analytical framework generated for the interpretation of the causalities of development and underdevelopment, however defined, and we cannot realistically discuss dependency theory as a specific single approach to development with specific parameters and elements applicable generally. However, three major components have been identified as common to the various approaches to dependency theory: 1) analysis of the nature and dynamics of the capitalist world system; 2) analysis of the relationship or linkage between the advanced capitalist countries and the less developed countries; and 3) analysis of the internal characteristics of the dependent countries themselves. It has also been noted that the study of dependency did help to focus attention on a number of factors which can retard or limit the degree of autonomy of less developed economies in their choice of a development strategy.

With the development and successes of the newly industrialized countries, some dependency theorists changed the emphasis of the theory from an explanation of underdevelopment to an explanation of dependent development, but observers have noted a

245 D. Hunt, *supra* note 54 at 69.

246 R. Gilpin, *supra* note 162 at 283; P.W. Preston, *supra* note 52 at 194 adds that the dependency theorists stressed: 1) the importance of considering both the historical experience of the peripheral economies and the phases of their involvement within wider encompassing systems; 2) the necessity of identifying the specific economic, political and cultural linkages of centres and peripheries; and 3) the requirement for active state involvement in the pursuit of development.

247 D. Hunt, *supra* note 54 at 69; as Prebisch put it, the consequence of dependent status is 'that due to external pressure the country cannot decide autonomously what it should do or cease doing': see M.P. Cowen & R.W. Shenton, *supra* note 153 at 62. R.A. Packenham, *supra* note 228 at 298-299, although taking a critical view of the dependency approach, allows that it did offer a number of ideas and hypotheses that were interesting and useful and remain so today.
perceptible movement back to the original Marxist notion that world capitalism is a force for economic development.\textsuperscript{248}

\textit{Basic Needs}

The basic needs approach grew out of a preoccupation with growing inequality within Third World countries in the late 1970s and early 1980s and was influenced by Western interpretations of the Maoist development approach in China as well as dependency thinking.\textsuperscript{249} China is considered to be the most successful of the less developed countries in meeting the basic needs of its population since the 1960s.\textsuperscript{250} As well, both the International Labour Office’s (ILO) 1972 call for ‘redistribution with growth’ and the World Bank’s adoption in 1973 of the principle of meeting ‘basic needs’ were influenced by dependency thinking.\textsuperscript{251} It was the ILO in 1976 that attempted to deal with a growing concern that policies of redistribution with

\textsuperscript{248} R. Gilpin, \textit{supra} note 162 at 288; S.B. MacDonald et al, \textit{supra} note 161 at 40 state that the flexible export-growth model of the Asian tigers (Hong Kong, Singapore, South Korea, and Taiwan) in the 1980s began the fragmentation of an ideology considered one of the basic elements of dependency thought – Third Worldism. Thus, claims MacDonald, by the mid-1980s, the Third World was no longer a political alternative but simply the name for a group of less developed countries.

\textsuperscript{249} D. Hunt, \textit{supra} note 54 at 76-77.

\textsuperscript{250} S. Ghatak, \textit{supra} note 2 at 314.

\textsuperscript{251} C. Leys, \textit{supra} note 184 at 12, 26. Redistribution with growth meant some reduction in inequality but financed out of growth so that the better off in the developing countries might be less unwilling to agree to it. Leys also says that this policy gave way to the idea of just meeting the basic needs of the poor who would always be here after all; the goal of equity disappeared. However, the call for action made by the then President of the World Bank, Robert McNamara, who noted that massive disparities in living standards could be reduced by an extraordinary effort on the part of the international community to reduce the number of people living in absolute poverty would suggest that this is not the case. McNamara also attacked trade protectionism saying it was inefficient, counter-productive, and ultimately self-defeating and would penalize the weaker and poorer members of the international community. See “Dateline: Manila” \textit{Reuters} (May 10, 1979) in LEXIS, World Library, Allwld File; “World Living Standard Disparity to Continue” \textit{The American Banker} (August 1, 1979) in LEXIS, World Library, Allwld File.
growth might not be enough to increase the welfare of the poorest of the estimated 800 million people living in absolute poverty mostly in developing countries, by proposing that all countries should give priority to meeting the basic needs of their people by the year 2000. “Basic needs” were defined to include the minimal food consumption and nutritional requirements for a physically healthy population, certain minimal standards of access to public services and amenities, such as education and health care, access to employment providing a target minimum income, and the right to participate in decisions that affect their lives and livelihood. The basic needs theory therefore drew an important distinction between economic growth and the provision of the basic necessities of life. Proponents of this theory argued that it could provide the basis for faster, more self-sustained growth as well as a higher rate of growth, by gradually increasing the health and efficiency of the labour force resulting in higher productivity and an expanded homogeneous mass market for domestic products. It has been noted that the nutritional condition of the world’s poor is no better today than it was ten years ago and it may be worse in some less developed countries. Public policies to improve the living and

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252 D. Hunt, supra note 54 at 76.

253 Ibid.

254 P.W. Preston, supra note 52 at 245. In the basic needs debate, economic development includes not merely economic growth but steady and measurable progress towards the elimination of absolute poverty and a sustained expansion in the employment opportunities and incomes of the poor. See D. Hunt, supra note 54 at 77.

255 D. Hunt, supra note 54 at 77; some critics argued that a more equal distribution of income will result in an increase in consumption at the expense of savings and a higher rate of economic growth. The theory holds that redistribution of resources to the poor increases savings potential and provides opportunities to develop the skills of the labour force. The restructuring of domestic demand, from that of those in the upper income bracket which has a higher import content, to that of the lower income mass market gets around the two primary constraints in import-substituting industrialization – domestic demand constraint and balance of payments constraint. See also S. Ghatak, supra note 2 at 308.

256 S. Ghatak, supra note 2 at 309. No statistical data is cited in support of this statement, however.
working conditions of the rural poor have been inadequate and in order to truly meet the basic needs of these people, better nutrition, education, health, and housing facilities are required.\(^{257}\)

In basic needs theory, development requires a lowering of income inequality; other lower income producers may also have a high enough marginal propensity to save to allow them to play a significant part in capital accumulation, there is great emphasis on using small scale, labour intensive techniques, in labour abundant economies; the need for structural change and diversification of production in the periphery is a given; the need for economic growth is also a given and the inadequacy of the domestic market and the balance of payments are emphasized as key constraints on growth and diversification; the definition of development gives greater weight to the elimination of absolute poverty, than the structuralists do; issues of technological choice are analyzed and the need to promote more labour intensive technologies is emphasized; and distribution of productive assets, such as land, with all of its economic, institutional, political and social implications, is a key issue.\(^{258}\) A key distinction is between universal and objective needs on one hand and culturally shaped needs on the other, with the first approach being associated with the World Bank perspective on basic needs whose emphasis on the efficiency of delivery of the basic needs implied either directing or bypassing governments and state agencies in recipient countries, justifying a new version of interventionism.\(^{259}\) Not surprisingly, governments in less developed countries have tended to view the approach with some ambiguity, seeing it undermine their attempts at autonomy in the

\(^{257}\) Ibid at 310.

\(^{258}\) D. Hunt, supra note 54 at 334-339.

\(^{259}\) P.W. Preston, supra note 52 at 245-246.
context of proposals made during the heyday of the New International Economic Order.\textsuperscript{260} Despite its fading appeal because of the perceived costs in reduced growth from a comprehensive basic needs strategy and its political non-viability in many developing countries, some note that the approach has continued to hold considerable influence amongst those concerned with development and that it has been refined over the years to include not only the basics of human life but also a clean and sustainable environment as well as an appreciation of the value of different cultural traditions.\textsuperscript{261}

The main policy recommendations of the basic needs theorists include: removing the legal, institutional and financial impediments which discriminate against the expansion of small scale and labour intensive production; developing policies to promote small farm production; spending more on research into the development of technologies suitable to small scale, labour intensive production; and expanding and revising technologies and methods of public service provision, in order to deliver these services to the poor more effectively.\textsuperscript{262}

\textit{The Capitalist View}

\textit{The Liberal Perspective}

Although I have adopted the term “liberal” for this approach to development, this perspective also includes theories referred to variously as economic liberalism, neo-liberal, neo-
classical and those propounded by the New Right. In this section, those theories will be combined and discussed as a single perspective since, although there is some disagreement on recommended strategy, there is considerable agreement on the underlying values, beliefs, and assumptions. Elements of the stages of growth theory can also be found in the liberal perspective but there are enough differences to treat it separately. As well, the east Asian experience has also been claimed by neo-classical theorists as a successful example of liberal theory at work, however, the initial import substitution and protectionist policies and the amount of state intervention involved in export promotion and market regulation, would appear to take this model, if it is indeed a model, out of the liberal arena. For this reason, the east Asian experience is also treated as a separate branch of the capitalist perspective.

In the late 1960s, liberal theorists entered the development debate with a major critique primarily of the structuralists' policy recommendations for import-substituting industrialisation, arguing that policy-makers should have given greater attention to the promotion of a price structure that would provide an accurate picture of the relative opportunity cost of resources, rather than using import controls and undervaluing foreign exchange and bank credit to

263 See references in D. Hunt, supra, note 54, R. Gilpin, supra, note 162, P.W. Preston, supra, note 52 and others. C. Leys, supra note 184 at 80-86 also refers to "new institutionalists" who start from a basis of neo-classical economics. S.B. MacDonald et al, supra note 161 at 43-44, in discussing the rise of conservatism in the 1980s with the Thatcher, Reagan and Mulroney governments, refer to this as the new capitalism which emphasized democratic capitalism. This is defined as: "three systems in one: a predominantly market economy; a polity respectful of the rights of the individual to life, liberty, and the pursuit of happiness; and a system of cultural institutions moved by the ideals of liberty and justice for all."

264 D. Hunt, supra note 54 discusses the stages of growth theory as part of a paradigm she has called the "expanding capitalist nucleus".

265 P.W. Preston, supra note 52 at 256; D. Hunt, supra note 54 at 321.
encourage industrial investment.\textsuperscript{266} Liberal theory took a back seat to basic needs theory in the late 1970s, but was revived in the 1980s with the emergence of the New Right, and reinforced by the policies of the World Bank and the IMF.\textsuperscript{267} Although some have pointed to the rise of a new general approach to development recognizing a global system of interdependence, others hold that it is liberal doctrine that has become the latest doctrine of development.\textsuperscript{268}

It has been argued that there is, in fact, no liberal theory of economic development comparable to the liberal theory of international trade, money, and investment which, as we have already seen, assumes that a market exists and that rational individuals will seek to maximize welfare under perfect competitive market conditions.\textsuperscript{269} It is said that liberal economists approach economic development from the perspective of how best to remove the political and social obstacles to the effective functioning of the market system.\textsuperscript{270} Some view liberal theory as a predominantly short-run, efficiency-oriented perspective designed primarily for microeconomic situations, whereas the continuing concern of development economics has been to identify how to achieve long-run economic progress in less developed countries.\textsuperscript{271}

\textsuperscript{266} D. Hunt, \textit{supra} note 54 at 69-70.

\textsuperscript{267} \textit{Ibid} at 70. The World Bank in a 1981 report on Sub-Saharan Africa emphasized the importance of correct pricing policies and reduced government intervention in economic activities. In the 1980s, the IMF saw an increase in developing country applications for assistance with stabilization and structural adjustment programmes. The IMF's terms of assistance emphasize control of the money supply, removal of price distortions and markets free from public sector intervention. Hunt also notes at 322 that the main criticisms of the IMF's approach are: that it attacks the symptoms not the causes of instability; that the inevitable short term effects are further price inflation, industrial recession and increased unemployment; that it does not guarantee significant improvement in the balance of payments; and that it hits the poor the hardest. See also C. Leys, \textit{supra} note 184 at 18, 80.

\textsuperscript{268} P.W. Preston, \textit{supra} note 52 at 273-293, 315-333; M.P. Cowen & R.W. Shenton, \textit{supra} note 153 at 435.

\textsuperscript{269} R. Gilpin, \textit{supra} note 162 at 266.

\textsuperscript{270} \textit{Ibid}.

\textsuperscript{271} D. Hunt, \textit{supra} note 54 at 31.
also been noted that if a theory of economic development must explain behavioural and institutional change, liberals have not yet produced a generally accepted body of developmental theory.272

However, liberal theorists generally agree on the following points: 1) the world economy is interdependent and mutually beneficial so that international trade can act as an “engine of growth” bringing capital and technology into less developed countries and providing them with access to world markets. Free trade, specialization, and an international division of labour assists in development in the periphery which, because of their smaller markets, will actually benefit from free trade more than the developed core; 2) the rate and direction of diffusion to the periphery depend on such factors as the migration of capital, labour and knowledge, the volume, terms and composition of foreign trade, and the international monetary system. Over the long term, market forces will equalize economic levels, real wages, and factor prices among nations and regions; 3) the basic obstacle to economic development can be found within the less developed economies themselves and include a high percentage of subsistence agriculture, lack of technical education, low propensity to save, a weak financial system, and inefficient government policies; 4) the key to economic development lies in the capacity of an economy to adjust to changing prices and economic opportunities which depends on a country’s social and political system rather than the international market system; 5) successful societies have permitted the market to develop unimpeded by political interference; 6) reasons

272 R. Gilpin, supra note 162 at 266; D. Hunt, supra note 54 at 70-71 indicates that a particular difficulty arises in analyzing the liberal contribution to the development debate since many of the contributions focus on particular issues, such as the optimal forms of adjustment for domestic price distortions or stabilization policy. Liberal theorists rarely begin with a statement of first principles such as a definition of development, or a set of development objectives. See also S. Ghatak, supra note 2 at 60.
for a country’s failure to develop include domestic market imperfections, economic inefficiencies, social rigidities including political corruption and a parasitic social and bureaucratic structure, lack of adequate investment in education and agriculture, and improper public policies such as high tariff barriers and overvalued currencies resulting from economic nationalism; 7) it is the responsibility of each country to institute proper policies to bring about the required changes in their economies. For instance, an increase in the domestic saving rate is necessary to accelerate capital accumulation for development; 8) a government’s unwillingness to suppress domestic consumption and to encourage saving is considered to be the most serious constraint to economic growth; and 9) the economic success of the NICs is an example of successful economic liberalism to be followed by other less developed countries.\textsuperscript{273} A key policy recommendation of this perspective is to remove all market distortions.\textsuperscript{274}

Despite agreement on these internal factors of economic development, liberal theorists are unable to agree what strategy a less developed economy ought to follow to achieve economic development: the question of what role and how great a role the advanced economies can or should play in assisting less developed countries is divided between advocates of assistance to break the cycle of poverty and those who feel such efforts are either wasteful or counterproductive; some stress balanced growth to break the cycle of poverty while others prefer unbalanced growth; there is variation on the emphasis to be given to agriculture or industrial development; they also differ on the issue of efficiency versus equity in the process of economic development and on the role of the state in achieving one or the other; and they

\textsuperscript{273} R. Gilpin, supra note 162 at 266-268; see also C. Leys, supra note 184 at 18. It should be noted however, that the current capital market excesses are a product of the absence of government regulation in that area.

\textsuperscript{274} D. Hunt, supra note 54 at 33.
cannot agree whether the route to development follows a series of definable stages or whether it will differ according to each nation’s experience.\textsuperscript{275}

Liberal theorists also differ in significant areas with those development theorists who have propounded the stages of growth, structuralist and basic needs theories, theories which also claim to be generally applicable to market economies. Some of the more important differences include: 1) vis a vis stages of growth theory (SGT), liberal theory assumes full employment of all resources whereas SGT accepts the possibility in less developed countries of substantial unemployment or underemployment, the key to promoting economic development for SGT is an increase in the rate of savings and investment but liberal economists argue that first priority ought to be to promote increased efficiency in the allocation of existing resources, SGT recognizes the potential of both private and state capitalist accumulation, whereas the \textit{laissez-faire} branch of liberal theorists oppose direct state involvement on efficiency grounds (although some liberal welfare theorists allow for some role for the state here), SGT allows for tariff protection to compensate developing country producers for distortions in the labour market and to expand domestic demand for locally-produced goods while liberal \textit{laissez-faire} theorists recognize no basis for state intervention; 2) vis a vis structuralism, liberal theory ignores both the structure of the international economy and the typical internal structure of less developed economies, policy instruments to promote development of diversified modern industry are seen by liberals as an unacceptable interference with market forces; structuralism in principle, requires some measure of land reform, a proposal opposed by liberals as an interference with private property rights leading to reduced investor confidence, incentives and

\textsuperscript{275} R. Gilpin, \textit{supra} note 162 at 268-269.
deterred private investment; and, finally, 3) basic needs theory incorporates a number of elements that are incompatible with liberal theory including, preoccupation with distributional aspects, advocacy of income and asset redistribution, recognition of policy instruments such as price manipulation, rationing and investment licensing, and acceptance of the need for state intervention in both resource allocation and market regulation.\textsuperscript{276}

The primary criticism directed at liberal theory is that it tends to neglect the political and social framework within which economic development takes place, ignoring, for example, the effects of powerful interest groups and domestic and international balances of power on economic development; economic factors alone cannot explain success or failure in economic development.\textsuperscript{277} Other criticisms focus on the theory’s values and beliefs, its assumptions concerning the key features of economic systems, the preoccupation with identifying the conditions for economic equilibrium, and the almost exclusive focus on short term allocation issues.\textsuperscript{278} More specific criticisms question the validity of the liberal position on trade and industrialization and the use of cost benefit analysis by the welfare branch of the liberal theorists.\textsuperscript{279}

\textsuperscript{276} D. Hunt, \textit{supra} note 54 at 340-343.

\textsuperscript{277} R. Gilpin, \textit{supra} note 162 at 269; D. Hunt, \textit{supra} note 54 at 319. Hunt notes that an alternative perspective on this omission argues that the liberal approach itself is directed to the validation and reinforcement of a particular politico-economic structure (i.e. liberal democracy as espoused by the New Right).

\textsuperscript{278} D. Hunt, \textit{supra} note 54 at 316.

\textsuperscript{279} \textit{Ibid} at 320-325.
Stages of Growth Theory

This theory, propounded in the late 1950s and early 1960s, was a product of American Walt Rostow’s anti-communist view of the purpose of American promotion of economic development in the Third World, and has been described as being the “apogee of modernization theory.” Modernization theory which was heavily influenced by the desire of the USA to combat the influence of the Soviet Union in the Third World during the Cold War, was influential in the 1950s and 1960s, offering an easy route to developed nation status by drawing on the social sciences to provide a general description of the shift to modernity based on optimistic versions of economic growth models and on theories of stable change. The theory set up a simple dichotomy between traditional and modern societies with modernization as the process of moving from one to the other; it was subsequently criticized for illegitimately generalizing the development model of the USA. While Rostow’s historical claims were soon discredited, his theory of the take-off into self-sustained growth has proved to be more enduring.

280 P.W. Preston, supra note 52 at 175; D. Hunt, supra note 54 at 62, 96. Rostow’s The Stages of Economic Growth was subtitled A Non Communist Manifesto and claimed to be an alternative to Marx’s theory of modern history. C. Leys, supra note 184 at 5-6, comments that most development theorists saw their work as science rather than propaganda and were not interested in following Rostow’s example.

281 P.W. Preston, supra note 52 at 178; see also C. Leys, supra note 184 at 9-11.

282 P.W. Preston, supra note 52 at 178; see also M.P. Cowen & R.W. Shenton, supra note 153 at 459 where the authors state that modern, modernism, and modernization, whichever term is used, was a 20th century “attempt to expunge the claims of tradition from modern life. Tradition ... imposed constraint upon the ideal of, and possibility for, self-development in a world offering the immediate prospect of material abundance.” The authors also note the argument that modernization was harmful to Third World peoples because it “forced indigenous people to divert their energies from the positive pursuit of indigenously defined social change, to the negative goal of resisting cultural, political, and economic domination by the West.” At 460. See also 473.

283 D. Hunt, supra note 54 at 96.
The key to Rostow's theory lies in his contention that sustained growth is attainable by significantly increasing the share of savings and investment in national income and that it was a new entrepreneurial or capitalist class that would spur this increase. Rostow described five stages of growth of which the middle three are central to his analysis: the traditional society, the establishment of the preconditions for take-off, the take-off, the drive to maturity, and the age of high mass consumption. During the preconditions phase, the entrepreneurs, or new business class, begin to actively pursue profit through commerce, causing markets to grow, basic capital to expand, financial institutions to develop, and modern manufacturing to appear, usually in an import-substituting role. The take-off phase sees an increase in the rate of investment causing a rise in output, radical changes in production techniques, disposition of income flows perpetuating the rate of investment and the rising trend in output, economic growth becomes normal. The drive to maturity phase involves a long period of progress with 10 to 20% of national income being invested in new production capacity, causing industries to mature and level off and new industries to appear; social and institutional arrangements are adjusted such that eventually a mature economy and society based on the absorption of domestically produced new technologies are established. In the final phase of

284 Ibid at 96-97.

285 Ibid at 97; see also S.B. MacDonald et al, supra note 161 at 37; P.W. Preston, supra note 52 at 175-176.

286 D. Hunt, supra note 54 at 97; see also P.W. Preston, supra note 52 at 175 who notes that western Europe in the late 17th and early 18th centuries provides an example of Rostow's second stage. Society has come to accept modern science and its possibilities for production and begins the slow transformation from a traditional society.

287 D. Hunt, supra note 54 at 97; P.W. Preston, supra note 52 at 175.

288 P.W. Preston, supra note 52 at 176.
high mass consumption, the leading sectors of the economy move away from heavy industry towards the provision of consumer durables and services, while at the same time, social welfare provisions are made; at this point the society has completed its transformation from traditional to modern society.289

The theory requires a flexible, responsive society for take-off as well as political, social, and institutional changes which perpetuate an initial increase in the rate of investment and result in the regular acceptance and absorption of such changes.290 The beginning of the take-off is traced to a sharp stimulus such as political revolution, technological innovation, or newly favourable international environment; the form of the stimulus is not as important as a positive societal response to it.291 In Rostow's analysis, once a country is brought into contact with the world capitalist system, changes in social values and economic institutions begin to occur; when appropriate investment opportunities and the motivation to exploit them have also developed, a successful take-off into economic growth results.292

Unlike the Maoist and basic needs approaches to development, Rostow's theory of growth and development requires an increasing inequality in income distribution until the take-off phase is completed as it is his view that to maximize the rate of growth a large and steadily increasing share of the national income must be concentrated in the hands of the capitalist class, since they have the highest propensity to save, and thus, accumulate capital.293 The theory also

289 Ibid.

290 D. Hunt, supra note 54 at 97-98.

291 Ibid at 98.

292 Ibid.

293 Ibid at 63, 334.
came to emphasize the importance of the use of capital-intensive techniques which were perceived to impact income distribution and savings in a way that benefits the capitalist class, rather than the Maoist’s and basic needs theorist’s preference for small scale labour intensive techniques. The take-off theory did allow for a positive, though not dominant, role for government in promoting and sustaining the take-off process and accumulation of capital, as well as in creating the conditions for its initiation. Differences between theory and practice have also weakened Rostow’s paradigm since his emphasis on the mobilization of savings and investment assumed the existence of such things as well-integrated commodity and money markets, highly developed transport facilities, skilled, educated labour, an efficient bureaucracy, and the motivation to succeed, many of which are missing in the developing world.

The East Asian Experience

In the 1980s, the apparent economic success of the NICs, achieved in a relatively short twenty-five year period, created a great deal of interest in whether a model of development based on their experiences could be developed and whether it would be transferable to other developing countries. Explanations for their success fell into two categories: first, the

294 Ibid at 335.
295 Ibid at 100; S.B. MacDonald et al, supra note 161 at 37.
296 S.B. MacDonald et al, supra note 161 at 37-38.
structuralist or institutionalist school which saw specific economic system and policies or particular political and administrative institutions as the reasons for their success; secondly, the culturalist school, which found its explanation in Asian value systems and cultural traditions. If the former were correct, then there was indeed a model to be exported; if the latter were right, the possibility of exportability would be slim. More recently, Haggard considered that it is unlikely that the East Asian model can be exported in toto since the success of the NICs rested not only on certain discrete policies but on the particular political and institutional context that allowed the NICs to adopt those policies in the first place.

The serious financial crisis that descended in late 1997 upon the economies of South Korea, Thailand, Malaysia, Indonesia, Japan, and Hong Kong, must be viewed as an indication that, if there is indeed an identifiable and exportable East Asian model of development, it is not without its problems and that criticisms aimed at protected domestic markets, corrupt links between government and business, poorly regulated banks, and heavy spending on imported consumer goods and grandiose non-productive megaprojects that required heavy borrowing in foreign markets have been well founded. Notwithstanding the apparent failure of many East

manufactures; see also M.P. Cowen & R.W. Shenton, “The Developmental State in East Asia” in supra note 153 at 427.


299 P.L. Berger, supra note 298 at 9.

300 S. Haggard, Pathways from the Periphery (Ithaca, NY: Cornell University Press, 1990) at 21. In his view, the two main paradigms dominating thinking on the NICs’ economic development: the neoclassical and dependency perspectives, both suffer from the same weakness – they neglect politics and institutions in favour of ‘correct’ policy choices and international- and class-structural determinants of policy, respectively. At 21-22.

Asian economies to protect their currencies and maintain growth rates and pace of
development, the East Asian development experience contains elements that are important to
an understanding of the development perspective as a whole, particularly in a country such as
China which shares certain cultural values with its East Asian neighbours.

In the late 1980s, a Hong Kong economist constructed a model based on the NIC
experience of sustained fast economic growth under export-oriented industrialization, which
comprised political, economic and cultural determinants. He concluded that the model was
not transferable for several reasons: 1) cultural factors based largely on the teachings of
Confucianism are important in making the model work and cultural factors are either not
transferable or not easily transferred to other countries; 2) the model was specific rather than
general, referring to a specific type of economic growth taking place at a specific stage in the
economic development of a country: different preconditions, culture, size and geographical
location, resource endowment and external factors in other countries will alter the form or even
the stages of economic development as identified in the model; and 3) timing and external
factors played a significant part in the NICs’ success; the current global situation might make it
impossible to replicate that success following the same path.

302 E.K.Y. Chen, supra note 297 at 143-153; see also S. Ghatak, supra note 2 at 352 on the theory of export-led
growth.

303 E.K.Y. Chen, supra note 297 at 152-153. Chen notes that high world demand for light manufactures and
the spread of transnational corporations contributed to technology and capital transfer to the NICs and to
promotion of manufactured exports. In the late 1980s, the slower growth of developed countries along with new
protectionist attitudes was likely to slow world demand for light manufactured products. Export-oriented
growth was then seen as a zero sum game with the benefit to one country being offset by the loss to another. He
also foresaw the slowing of transnational corporations’ activities due to possible technological revolution in
automation.
These same questions were addressed by a group of social and political scientists and economists also in the late 1980s. Describing the phenomenon as “new Asian capitalism” these writers reviewed the NIC experience from all aspects important to development. Popular explanations for the NICs’ success included not only the contention that they were poor in natural resources and therefore had to work harder, invest more, and be innovative and entrepreneurial, but also the argument that the NICs had followed a capitalist strategy. However, neither of these explanations are adequate as they only partly explain their success. One crucial common factor pinpointed was the high rate of investment (based on domestic savings rate, foreign aid and foreign private investment) which was some 20-100% higher than that of comparable countries. The ability to finance this high rate of investment despite being historically (since World War II) high-risk places for savings and investment is attributed to three factors: 1) a beneficent cycle of high growth leading to high savings and investment, and high investment facilitating higher growth; 2) official acceptance and encouragement of a high rate of return for private investors; and 3) the fact that all of them were austere societies (at

304 In these essays, the NICs included Japan, which Chen’s model did not.

305 L. W. Pye in P.L. Berger & H-H.M. Hsiao, eds., supra note 298 at 81-83 sees the uniting of Confucianism and advanced capitalism as creating a unique type of political system which he refers to as ‘paternalistic authoritarianism’. S.B. MacDonald et al, supra note 161 at 46 refer to the NICs as ‘dynamic trading states’ which are part of the capitalist family but differ from the neoclassical or liberal states because their governments intervene actively in the economy in order to guide or promote such goals as full employment, export competitiveness and energy self-sufficiency.

306 G. Papanek, “The New Asian Capitalism: An Economic Portrait” in P.L. Berger & H-H.M. Hsiao, eds., supra note 297 at 30-31. The NIC view of neoclassical or liberal capitalism as followed by the US is highlighted by a popular joke in Japanese business circles as recounted by S.B. MacDonald et al, supra note 161 at 47: “How many neoclassical economists does it take to change a light bulb? The answer: None; they simply sit and wait for the invisible hand of the market to do it for them.” MacDonald comments that while the US following Adam Smith’s principles waited for the invisible hand to correct imbalances of global production and distribution, the trading states were guided by the ‘visible hand of the market’.

307 G. Papanek, supra note 306 at 31-33.
least during this period), where luxury consumption was discouraged and enterprises that
created jobs and earned foreign exchange were encouraged.\textsuperscript{308}

This study suggested that the NICs were able to achieve a higher rate of growth for
each unit of investment than most other countries primarily due to effective economic
management involving strategies such as: 1) utilizing abundant labour efficiently, emphasizing
labour-intensive production which requires relatively little scarce capital; 2) little government
intervention to benefit organized labour or politically powerful interest groups; 3) government
intervention only to correct economic distortions, by, for example, using exchange rate and
subsidies system to encourage exports and discourage imports, heavy investment in education,
training and research; 4) targeting industrial development in the medium and long term; and 5)
competitive pressure at the global level and efficiency, as indicated by the rate of growth per
unit of investment, with some equitably imposed protectionism of infant industry evident in
Taiwan and South Korea.\textsuperscript{309}

The consequences of this effective economic management programme included rapid,
labour-intensive growth of industry and industrial exports and subsequently, more equitable
income distribution and reduction in poverty.\textsuperscript{310}

The conclusions drawn on the transferability of the East Asian experience are more
optimistic than the earlier ones: although there are three major elements affecting economic

\textsuperscript{308} \textit{Ibid} at 35-36. The author notes that in east Asia status accrued to a businessperson from the expansion of
his or her business empire rather than from visible displays of wealth. See J.E. Campos & H.L. Root, \textit{The Key
growth and private investment.

\textsuperscript{309} G. Papanek, \textit{supra} note 306 at 37-43; see also J.E. Campos & H.L. Root, \textit{supra} note 308 at 56-64.

\textsuperscript{310} G. Papanek, \textit{supra} note 306 at 55, J.E. Campos & H.L. Root, \textit{supra} note 308 at 7-27.
performance that may not be reproduced elsewhere, i.e. societies and elites under pressure to perform, an historically-caused relatively equal distribution of wealth, including land, and a set of favourable cultural attributes, the principal element in their economic success was the strategy adopted, which is reproducible.\textsuperscript{311} One caveat to this optimistic assessment is that other countries adopting the same strategy may not achieve the same rate of growth, or degree of equity because of different circumstances;\textsuperscript{312} however, in the pure form of the model, which even the NICs did not adopt, a government able to ignore other political and social objectives may well achieve better results than the NICs.\textsuperscript{313}

\textsuperscript{311} G. Papanek, \textit{supra} note 306 at 77.

\textsuperscript{312} \textit{Ibid} at 79. These countries may be more or less successful depending on their human and natural resources, location, relevant historical ‘accidents’, and their culture. Their political system and the model’s allocation of costs and benefits among particular groups in the society will also affect a decision to adopt this model. C. Leys, \textit{supra} note 184 at 35 describes the work of American political scientist Stephan Haggard in 1990 who made a comparative study of the East Asian and Latin American NICs (Mexico and Brazil) and identified four main causes for their varying degrees of success (external pressure for change, favourable groups of associated political interests, a strong state able to produce coherent and centrally implemented policies along with suitable policy instruments and insulated from economically powerful interests, and technical competence). Haggard looked at how each of these conditions in their varying forms and influence, interacted with the varying geographic and resource endowments to create the economic successes noted. He concluded that all conditions were important if not indispensable and that the combination of consistent policy with strong insulation from powerful economic interests might be most important. Although authoritarian rule was not sufficient for competitiveness, it may often be necessary. See reference at note 300, \textit{supra}.

\textsuperscript{313} G. Papanek, \textit{supra} note 306 at 79. Papanek notes that NIC governments intervened to some extent in the economy which resulted in some loss of efficiency and equity, but adds that growth and overall equity are generally not a government’s only goals. See also S. Haggard, \textit{supra} at note 300 whose 1990 book examines the politics of industrialization in both the Latin American and East Asian NICs and which pays particular attention to the differences between the growth trajectories of those countries that promoted import substitution versus those that followed the strategy of export-led growth. He discusses three other important components of industrial strategy as well: the instruments governments use to achieve their objectives; the balance between local, foreign, and state firms in industrialization; and the overall coherence of policy. Haggard argues that international shocks and pressures, and the domestic economic crises associated with them, have been the most powerful stimuli for changes of policy. As if to support Haggard’s argument, the crisis that began in late 1997 in East Asian countries brought on by, among other things, external pressure on their currencies has already caused many of them to institute severe changes to policy in most areas of their economies. Haggard also contends that: 1) theories seeking to predict policy choice from the configuration of social forces – whether conceived in class, interest-group, or sectoral terms – have fundamental empirical and theoretical limitations. The influence of social forces on policy is undeniable, but it is always mediated by institutional setting; 2) although international pressures may provide the stimulus and domestic social structure broadly constrains choice, policy change is heavily conditioned by the interests of political elites in building and sustaining bases of
A more recent study (1996) which looked at how the NICs and the new NICs, Malaysia, Thailand, and Indonesia, overcame underdevelopment acknowledges the importance of the adoption of appropriate economic policies but adds that these policies would not have worked unless the people in each country had believed that the policies could be sustained and that everyone would benefit from them in some way.  

It was the principle of shared growth, involving the business community in building a dynamic industrial base with the wider population being given opportunities for long term lasting benefits from the economic expansion that allowed these governments to concentrate on promoting rational economic policies with broad political support and therefore to resist pressure from special and standard interest groups. It also created a “virtuous circle”, referred to by Papanek as a “beneficent cycle”, of investment, growth and higher incomes, reinforcing the credibility of the government, and further promoting investment and economic expansion.  

Wealth-sharing mechanisms that offered opportunities for upward economic mobility and improvement of long term prospects, ranging from coercive, such as land reform, to more specific policies, such as public investment

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314 J.E. Campos & H.L. Root, supra note 308 at 1.

315 Ibid at 50, see also at 76-108 “Wooing the Business Sector” describing how the support and cooperation of the economic elites who are the wealthier and better educated of the society, was essential to the policy of shared growth.

316 Ibid at 50; see also note 305, supra.
in rural infrastructure were designed to obtain the support of ordinary people for governments’ development strategies.\textsuperscript{317}

Recent events have highlighted not only the differences between East Asian capitalism and the US brand of capitalism, but also the strengths and weaknesses. The view that the next round of global competition could well be between two different ideas of capitalism has been superseded, at least for the short term, by the current economic problems of the East Asian countries and the issue of global poverty.\textsuperscript{318}

In September 1997, at the annual meetings of the World Bank and the IMF in Hong Kong, World Bank president James Wolfensohn urged the international community not to wait but to “act now” in the fight against global poverty and called the gap between rich and poor a time bomb.\textsuperscript{319} This theme was taken up by Malaysia’s Prime Minister Mahathir who has asserted that developed countries should help out their weaker brethren for the sake of global stability.\textsuperscript{320} Dr. Mahathir had been extremely critical of currency speculators, particularly George Soros, since the attack on and floating of the Thai baht in June 1997 which caused ripple effects in the other East Asian economies; it is his belief that speculative investment, backed by the massive financial clout of developed countries, takes advantage of the inherent

\textsuperscript{317} J.E. Campos & H.L. Root, \textit{supra} note 308 at 64-67.

\textsuperscript{318} S.B. MacDonald et al, \textit{supra} note 161 at 47.

\textsuperscript{319} A. Penna, “World Bank chief asks world to “act now” on poverty” \textit{Agence France Presse} (September 25, 1997) in LEXIS, World Library, Allwld File. Wolfensohn noted that in the next three decades, with the world’s population growing by 80 million a year, the number of people living with less than two dollars a day could rise from three to five billion. Other priorities were education and health.

\textsuperscript{320} “Analysis - Mahathir’s Intent in Blaming Forex Speculators” \textit{Asia Pulse} (October 14, 1997) in LEXIS, World Library, Allwld File.
weaknesses in rapidly developing economies, drawing domestic investors into the fray.\footnote{Ibid.} At one point, Dr. Mahathir went so far as to call for an end to currency trading altogether which his Deputy Prime Minister softened to a call to study the negative implications of excessive speculation on currencies.\footnote{R. Velloor, “No change to currency trading, says Anwar” \textit{The Straits Times (Singapore)} (September 22, 1997) in LEXIS, World Library, Allwld File.} Leaders of the Group of 15 developing countries who met in Malaysia in early November 1997 began to rally behind Dr. Mahathir in his campaign against currency speculators, drawing attention to the serious damage that the currency crisis had on developing economies.\footnote{R.K. Yang, “Mahathir: lone voice no more” \textit{Business Times (Singapore)} (November 3, 1997) in LEXIS, World Library, Allwld File.} At the November 1997 APEC conference in Vancouver, British Columbia, there were reports that Asian leaders, humbled by their economic disasters, did not indulge in the usual touting of the superiority of Asian values and instead, acquiesced in the belief that western industrial values as represented by the IMF now hold sway.\footnote{E. Greenspon, “Summit as humbling for Chretien as for his guests” \textit{The [Toronto] Globe and Mail} (November 26, 1997) A8.} However, Dr. Mahathir, in a speech to the gathering, attacked the free market and condemned market forces as being as extreme as the socialism and nationalism of the past and as being as prone to abuses as command economies.\footnote{I. Ngoo, “Mahathir slams free market for Asia’s woes” \textit{The Straits Times (Singapore)} (November 25, 1997) in LEXIS, World Library, Allwld File.} Interestingly, the focus of the Malaysian Prime Minister’s attacks on currency speculators, George Soros, actually made a similar argument that markets left to their own devices will not tend towards equilibrium and that governments of even the most advanced market economies know that markets are not stable and regularly try to
maintain stability by exercising controls. Soros, a US-based billionaire investor and confirmed capitalist, views current global capitalism and its laissez-faire ideology as “dangerously deficient” and in need of better control through rules and laws governing market forces. Although the concept of Asian values may have receded in discussions of economic development as a result of the financial crisis, that does not mean that laissez-faire capitalism has won the day. It appears that Asian governments recognize that good government is as crucial in maintaining the stability of the market as well as in maintaining the rule of law or promoting social justice.

The current strategy devised by the East Asian leaders gives primary responsibility for stabilizing their severely devalued currencies to the IMF. In comparing Asia’s crisis to that experienced by Mexico in 1995 and from which it has successfully rebounded, some participants considered that the East Asian countries would probably rebound more quickly than Mexico because of their still high savings rates. The crisis has been blamed on, among other things, financial mismanagement and massive manufacturing overcapacity which caused a downward spiral that decimated currencies and financial markets and shrunk growth. One

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326 “Who guards the guardians?” The Straits Times (Singapore) (December 5, 1997) in LEXIS, World Library, Allwld File.

327 R. Velloor, supra note 322. Soros also said that he considers that the laissez-faire idea that markets should be left to their own devices to be dangerous since the instability of financial markets can cause serious economic and social dislocations. The capacity of the state to look after the welfare of its citizens has been severely impaired by the globalization of the capitalist system which allows capital to escape taxation much more easily than labour.


329 Ibid.

bright spot in these dark days for the East Asian economies may lie in the fact that the reforms forced on governments by the currency crisis should ultimately lead to improved opportunities for trade and investment in the region, since eliminating trade barriers and encouraging foreign investment will improve the competitiveness of domestic enterprises and make them better able to compete in the global arena in the long run.\textsuperscript{331}

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Although ‘development’ as an idea may be Eurocentric,\textsuperscript{332} the policies of many less-developed countries designed to promote their economic development and improve the welfare of their people, rest on diverse theories of development which no longer rely on historically European-based experience for their existence.

Given China’s position as a huge developing country and growing world power, it is somewhat unique among developing countries. Having escaped much of the imperialist colonial influences felt by countries in Africa, Latin America and Asia, China’s road to development might also be said to be somewhat unique. From a very traditional society through a period of Marxist-influenced Maoist approach to development, emphasizing industrialization while attempting to meet the basic needs of the people, China’s current approach reflects elements of a number of the theories reviewed here. This new perspective appears to be a “mixed bag” or even a “pick-and-choose” approach to development, taking the


\textsuperscript{332} M.P. Cowen \& R.W. Shenton, supra note 153 at 5 contend that the idea of development is Eurocentric because it was in Europe that development was meant to compensate for the consequences of the development of
most useful or appealing elements of various theories and incorporating them into a development policy tempered by the usual "Chinese characteristics", i.e. a cautious, gradual and even tentative approach to policy and law-making. This is illustrated by the recent call by Premier Li Peng for a more rational approach to China’s transition to a market economy, and to avoid wastage and increase competition.

For purposes of this paper, the following characteristics will be considered to comprise the Chinese 'development' perspective: 1) a suspicion of foreigners and their motives, eg. economic imperialism leading to unwanted political and social effects; 2) a desire to limit foreign ownership of property to the greatest extent possible; 3) a desire to be self-sufficient while at the same time recognizing the need for foreign investment capital, technology and expertise to achieve official goals; 4) recognition that foreign capital moves to those projects where the return is greatest and the risk least; 5) a desire to achieve equality of the regions; 6) a desire to minimize the wage gap; 7) the encouragement of TVEs and a desire to reduce urban migration; 8) a desire for full employment; 9) a desire to provide improved access to higher education and training, including on-the-job training, to improve skills; 10) a desire to provide improved access to better health care; 11) a preference for labour intensive over capital intensive techniques in many areas; 12) a recognition and fear of the revolutionary possibilities in a dissatisfied work force and peasantry and an overriding concern to retain political power; capitalism; to construct order out of the social disorder caused by rapid urban migration, poverty and unemployment.

333 "Chinese premier urges more rational economy" Agence France Presse (August 10, 1997) at C-afp@clari.net. This rational approach is to include rational allocation of resources, avoidance of repeat investment in major projects, reduction of production costs to make more competitive products, emphasis on technical upgrading of existing enterprises rather than starting new, big projects and the removal of regional barriers when establishing large enterprise groups through mergers or bankruptcy.
and 13) a desire to retain state control over what are considered to be state assets, to the greatest extent possible.
The infrastructure projects presented as case studies in this chapter have been selected for a number of reasons. First, although it would have been possible to select projects solely from one industrial sector, i.e. power projects alone, I have chosen projects from three different sectors, energy, transportation and water, in hopes of giving a more complete picture of the difficulties and successes encountered in various projects. Secondly, although there are a significant number of infrastructure projects listed for China, many are still in the feasibility and financing stages, and of those that have concluded agreements or that have been completed, only a few provide enough accessible data in order to conduct a proper study. Of the following five case studies, only two have been actually completed to date: two power plants (plus one phase of a three phase highway project). However, since, in many cases, it is the process involved in arriving at an agreement with financing that poses the greatest hurdle for most infrastructure projects in China, and not the actual construction, I believe all of the case studies chosen are instructive in highlighting those areas where the tension between the efficiency and development perspectives is most apparent.

**Energy**

The speed and size of China's growth in the last decade or so has had enormous effects throughout the country. Industrial and consumer demand for power has surged and, in many cases, there have been insufficient funds available to finance an equally rapid expansion of the country's power capacity. In the early 1990s, Chinese officials estimated that national power
supply would have to increase by 20-30% just to eliminate the current power shortages.\textsuperscript{334} Factories were forced to shut down for up to three days a week in many parts of the country and offices kept their lights off; in some areas, the sale of air-conditioners was banned because of fears they might increase the strain on the power system.\textsuperscript{335} The normal measure of a power shortage or surplus is system reserve capacity, the gap between peak demand and capacity. In most countries, a system reserve capacity of between 15-25% is considered appropriate; China's is zero and its power plants are running practically non-stop.\textsuperscript{336} The costs of power shortages are high: most large factories have installed their own diesel generators to keep operating when brownouts occur, but those that cannot afford a private power supply have to bear the expense of lost production.\textsuperscript{337} By 1994, only about 60% of Chinese households had electricity and installed capacity was only about 144 watts per person compared to 3,182 for the average American, 1,285 in Japan and 85 in India.\textsuperscript{338} Although China has become the world's second largest power producer,\textsuperscript{339} per capita consumption of power in China averages 562 kwh per person annually, ranking 80th in the world.\textsuperscript{340} In order to meet its needs, China


\textsuperscript{335} Ibid.

\textsuperscript{336} Ibid.

\textsuperscript{337} Ibid.

\textsuperscript{338} "Setting the rules for power game" \textit{South China Morning Post} (September 26, 1994) in LEXIS, World Library, Allwld File.

\textsuperscript{339} “China’s Power Industry Boasts Rapid Development” \textit{Xinhua News Agency, CEI} (June 18, 1997) in Chinavista Business at http://www.chinavista.com/business/news/archive/june/june20-02.html. Official figures indicate that total installed capacity has exceeded 236 million kw and annual power production has exceeded 1,000 billion kw.

has to install at least 15,000 MW of generating capacity every year until the early part of the 21st century, requiring an annual investment of US$14-15 billion of which, in 1995, US$3.4 billion had to come from foreign sources. China still holds to its goal of 300,000 MW of installed capacity by the year 2000, although at the beginning of 1996 it had a capacity of just 210,000 MW, thus requiring an almost impossible annual installation rate of 22,500 MW.

China's encouragement of foreign investment in the energy sector was intended to cure its power ills. However, after a flurry of interest and numerous proposals, only a few projects initially were constructed, leaving China's power requirements still largely unsatisfied. Initial rates of return on power project investments of approximately 25% moved the Chinese government to cap, unofficially, rates of return at 12-15%, causing investor interest to disappear for several years. A new Electric Power Law and the circulation of BOT rules has created renewed interest in Chinese power projects. The following case studies review two of the earlier projects which have been completed, Shajiao B and Shajiao C in Guangdong province, both projects undertaken by Hopewell Holdings Ltd. of Hong Kong, and one project, Laibin B in China's southwestern Guangxi Zhuang Autonomous Region, that

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344 Ibid at 23.

345 "The Infrastructure Finance Boom", supra note 340; P. Handley, "Asia: Hard Truths About Asian Infrastructure" Institutional Investor (November 30, 1995) in LEXIS, World Library, Allwld File. Investors considered that it was not rational for a project in China to return less than 23%. Even in the US, the minimum return is 16%.

346 “Long-awaited BOT rules to stimulate confidence” supra note 14; C. Hunter & C. Lau, supra note 21 at 14.
has recently been awarded on the basis of the new BOT draft rules. It is hoped that this review will provide a sense of the progress made over the last decade in Chinese government attitudes and those of foreign investors as well.

Shajiao B Power Station

Project Description

Shajiao B, a conventional 2 X 350 MW coal fired power plant built at a cost of US$512 million and the first power plant in China built on a BOT basis, is situated near Tai Ping on the Pearl River Estuary, about 60 km from Guangzhou in Guangdong Province. In 1983, Guangdong's daily power supply capacity, including power purchased from Hong Kong, met only about 74% of its actual requirements, forcing many factories to operate only four days a week and creating frequent brownouts for residential consumers. Guangdong province has been one of the fastest developing regions in China, no doubt assisted by its proximity to Hong Kong and the Special Economic Zone (SEZ) at Shenzhen. Forecasts in 1983 set an annual rate of growth in agricultural and industrial production at 7.1%, requiring a corresponding growth of 9% in power generation. In 1987, when Shajiao B first came on line, Guangdong province with a population of 65 million had an installed capacity of 3,500 MW, compared with the UK which had 70,000 MW and a smaller population. In 1993, the Governor of


349 Ibid.

350 R. Slavid, "In China's Rice Bowl, Where Electricity is in Desperately Short Supply, the Country's First Privately-Funded Power Station is Nearing Completion" Reuter Textline Construction News (April 16, 1987) in LEXIS, World Library, Allwld File.
Guangdong noted that predictions put the province's GDP growth at 12.9% per year for twenty years.\textsuperscript{351}

Into this great demand for power in the early 1980s came Gordon Wu, head of Hopewell Holdings Ltd. ("Hopewell"), a Hong Kong company primarily known for its real estate development ventures and having pioneered a European concrete construction technique called slipforming in Hong Kong in the 1970s.\textsuperscript{352} As Wu likes to recount, he was sitting in his hotel room in Guangzhou one evening when the lights went out, inspiring his decision to build a power plant to deal with the problem.\textsuperscript{353} In the early 1980s, he began negotiations on Shajiao B, so-called because the Chinese were building a 660 MW power station in the same area, Shajiao A. The Chinese government itself was not able to fund enough new power stations to keep up with or support economic growth in the region so was open to the idea of a second power station at Shajiao. However, other builders such as Bechtel Group and EPDC of Japan also made proposals directly to the Chinese in competition with Hopewell's.\textsuperscript{354} Because of this it was not until 1984/85 that the agreements were signed\textsuperscript{355} and the joint venture was formed.\textsuperscript{356} One of Hopewell's proposals that undoubtedly won Chinese support, was its guarantee of a fixed electricity price per kilowatt hour for ten years at a level that was equal to

\textsuperscript{351} C. Walker & A.J. Smith, \textit{supra} note 347.


\textsuperscript{353} "Hong Kong: Construction News Talks to Gordon Wu About Development Opportunities in Hong Kong" \textit{Reuter Textline Construction News} (May 12, 1989) in LEXIS, World Library, Allwld File, [hereinafter "Development Opportunities"].

\textsuperscript{354} C. Walker & A.J. Smith, \textit{supra} note 347 at 212-213. Shajiao B was initially structured to allow sales both to the provincial power authorities and Hopewell's other ventures in the area including the China Hotel in Guangzhou. See R.T. Sherman Jr., \textit{supra} note 340.


\textsuperscript{356} R. Slavid, \textit{supra} note 350.
or lower than the price the Chinese were paying to import power from Hong Kong. Gordon Wu attempted to obtain Chinese approval for the project by travelling to Beijing to have dinner with Premier Li Peng and to discuss the project; Premier Li's concern was that Hopewell would be making too much money on the project but Wu disagreed, telling him that international bankers require adequate returns; Wu then offered Premier Li the chance to participate in the returns and he agreed - Chinese parties subsequently took 45% of the project.\textsuperscript{358}

**Legal Regime**

At the time Shajiao B was negotiated and the agreements signed, China’s 1982 Constitution gave foreigners the right to invest in China and to have their investments protected by the laws of China.\textsuperscript{359} The Joint Venture Law and Joint Venture Law Implementing Regulations had been promulgated in 1980 and 1983, respectively.\textsuperscript{360} However, this Law dealt with equity joint ventures (EJVs) only since the Chinese believed that EJVs offered the best means of obtaining quickly the technology and management skills that they needed.\textsuperscript{361} The Law provided some security to foreign investors in that it guaranteed their right to invest and earn profits in China and the Regulations addressed other issues of concern to investors, including profit repatriation, labour, land use, and foreign exchange.\textsuperscript{362}

\textsuperscript{357} R.L.K. Tiong, supra note 355 at 114.

\textsuperscript{358} P. Marriage, "Wu's visions of power" South China Morning Post (November 7, 1993) in LEXIS, World Library, Allwld File.

\textsuperscript{359} Constitution of the People’s Republic of China (1982), Article 18, in China Laws For Foreign Business (Sydney: CCH Australia, current) ("CCH") at 4-500.


\textsuperscript{361} P.B. Potter, supra note 49 at 22.

\textsuperscript{362} Ibid at 23.
Although the Chinese favoured formation of EJVs, many foreign investors entered into joint ventures governed by their contracts alone and known as contractual joint ventures which they considered to be more flexible than the EJV form. Shajiao B is an example of a contractual joint venture.

EJVs are limited liability business associations and designated as legal persons and distinct taxable entities. The foreign party had to contribute at least 25% of the registered capital but, in practice, the ratio was usually 50:50 or 49:51 with the Chinese partner holding the majority share. The Board of Directors is the highest organ of authority deciding all major issues; the chairman of the Board had to be appointed by the Chinese side and the allocation of seats on the board was determined by reference to the ratio of the parties’ contributions to the registered capital. The joint venturers share profits and losses based on their registered capital contributions, which, for the Chinese side, rarely consisted of cash.

There were no regulations governing cooperative joint ventures (CJVs) during this period and the Chinese authorities approving these associations therefore had to deal with the CJVs that emerged in practice by analogy to the provisions in the Joint Venture Law and Regulations. CJV participants were able to set the amount and type of the contributions by each side, and how the profits and losses were to be distributed; this distribution did not have to follow the percentage of capital contributed by each side. Furthermore, there was no 25

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364 Ibid.

365 P.B. Potter, supra note 49 at 23. The Chinese side generally contributed land use rights, buildings, and equipment.

366 A.E-S. Tay, supra note 363 at 2-530.

367 P.B. Potter, supra note 49 at 24.
percent minimum contribution for the foreign investor required and the foreign investor could recoup its capital investment prior to the CJV’s termination.368

Finally, regulations passed in 1983 by the State Council required that joint venture contracts with foreigners be governed by Chinese law.369 As will be seen below, this requirement caused no little concern for Wu’s lenders.

Joint Venture

The joint venture is between Shenzhen Special Economic Zone Power Development Co. (SPDC), the Chinese state entity, and Hopewell Power (China) Ltd. (HPC), which is 50% owned by Hopewell 370 5% is owned by a Japanese firm, Kanematsu-Gosho (HK) Ltd. and 45% by Chinese-owned Hong Kong companies.371 Under the agreement, HPC was to manage, operate and maintain the station for ten years, from April 1, 1988 to March 31, 1998, at the end of which time it is to transfer ownership of the station to SPDC free of charge.372 HPC was

368 Ibid.

369 Article 15, Regulations for the Implementation of the Law of the People’s Republic of China on Joint Ventures Using Chinese and Foreign Investment, promulgated September 20, 1983 by the State Council, reads: “The formation of a joint venture contract, its validity, interpretation, execution and the settlement of disputes under it shall be governed by Chinese law.” This requirement was later added to by Article 5, Foreign Economic Contract Law of the People’s Republic of China, adopted March 21, 1985 at the 10th Session of the Standing Committee of the 6th National Peoples Congress, which states: “...Contracts for Chinese-foreign equity joint ventures, Chinese-foreign co-operative enterprises and for Chinese-foreign co-operative exploitation and development of natural resources to be performed within the territory of the People’s Republic of China shall be governed by the law of the People’s Republic of China.” In CCH at 6-550 and 5-550, respectively.

370 C. Walker & A.J. Smith, supra note 347 at 213.

371 “The Shajiao Coal-Fired Power Station Project in Guangdong Province in the Peoples' Republic of China (PRC) is the First PRC Project to be Structured Like a Conventional Project Financing" Euromoney International Financial Law (June 17, 1986) in LEXIS, World Library, Allwld File, [hereinafter "Conventional Project Financing"].

372 Ibid. See also C.Walker & A.J. Smith, supra note 347 at 213.
required to have the station on line by April 1, 1988 and could keep any profit earned before that date due to early commissioning of the station as a bonus.\(^{373}\)

**The Agreements**

Under the joint venture agreement, HPC was responsible for the design, manufacture, delivery, construction, testing, and commissioning of the plant, including the provision of all labour, supervisors, construction equipment, and temporary works on a full turnkey basis.\(^{374}\)

Two other supplementary agreements were reached which gave HPC some comfort to take to its lenders. HPC's lenders would not accept Chinese law governing these agreements, and a compromise had to be reached which allowed them to be written under Hong Kong law.\(^{375}\) A power off-take agreement required the Chinese to purchase a minimum of 60% of the plant's capacity on a 'take or pay' basis, and to pay HPC a fixed price per kilowatt hour for the whole of the concession period.\(^{376}\) A coal supply agreement required the Chinese to arrange to supply coal for the whole of the concession period at a fixed price per tonne, on a 'supply or pay' basis.\(^{377}\) These supplementary agreements were backed by a performance guarantee given

\(^{373}\) C. Walker & A.J. Smith, *supra* note 347 at 213.

\(^{374}\) *Ibid.*

\(^{375}\) "Conventional Project Financing", *supra* note 371. To fend off any argument that the supplementary agreements were supplements to the joint venture contract and therefore governed by Chinese law, the agent, Citicorp International Limited was added as an additional party.

\(^{376}\) C. Walker & A.J. Smith, *supra* note 347 at 213; see also "Why Hopewell is still the champion of BOOT" *International Trade Finance* (May 17, 1990) in LEXIS, World Library, Allwld File. "BOOT" is often used synonymously for BOT – it means “build, own, operate, transfer” – the “operate” is generally understood in BOT, since it is generally the concession owner that operates the facility.

by the Guangdong International Trust and Investment Corporation (GITIC), a Chinese government entity.\textsuperscript{378}

Any disputes arising under the agreements fell to be dealt with by the Hong Kong courts but only after the parties first attempted friendly consultation or conciliation. If no settlement was reached within 30 days, a party had the right to take the matter to the Hong Kong courts.\textsuperscript{379} A legal opinion was obtained from a Hong Kong law firm regarding the enforcement of foreign judgments in China that execution of any judgment obtained in Hong Kong or the UK would be conducted in accordance with China's Law on Civil Procedure.\textsuperscript{380}

Even though Shajiao is not located within Shenzhen Special Economic Zone, HPC was granted a preferential tax rate of 15\% on its profits along with a two year tax holiday period followed by a three year period at 7.5\%, essentially a tax break for one half of the concession period.\textsuperscript{381}

The contract schedule called for full load operation of the first 350 MW unit within 30 months of the issue of a Letter of Intent; full load operation of the second unit was required within 33 months of the issue of a Letter of Intent.\textsuperscript{382} To HPC's credit, construction began on July 1, 1985, with the first unit completed within 22 months and the second unit completed within 25 months, earning HPC a substantial bonus of approximately US$50 million as well as a British Construction Industry Award.\textsuperscript{383}

\begin{footnotes}
\footnotetext[378]{"Conventional Project Financing", supra note 371; "Why Hopewell is still the champion of BOOT", supra note 376.}
\footnotetext[379]{"Conventional Project Financing", supra note 371.}
\footnotetext[380]{Ibid.}
\footnotetext[381]{Ibid.}
\footnotetext[382]{C. Walker & A.J. Smith, supra note 347 at 214.}
\footnotetext[383]{Ibid at 213; A.T. Cheng, supra note 352; "Rain may dampen Wu's road hope" South China Morning Post (June 14, 1993) in LEXIS, World Library, Allwld File.}
\end{footnotes}
Project Financing

Since there was no law at the time that set out the level of approval required for a contractual joint venture in China, HPC's lenders wanted some indication from Beijing that proper approvals had been obtained.384 Foreign lenders are not entitled to access records of internal State Council decisions, so the lenders had to rely on a legal opinion from Beijing lawyers.385

HPC was responsible for 100% of the financing of the construction costs of Shajiao B, with SPDC committed to purchasing a set amount of electricity from the station and supplying coal, all at fixed prices, for the whole of the ten year concession period. Instead of loaning funds to the project, the Chinese government assisted in arranging an 'emergency loan facility' to the investors to provide funds in the case of force majeure, and also gave certain guarantees to protect them against exchange rate fluctuations.386 The Chinese side also agreed to pay half of the price for electricity in foreign currency while the other half, in renminbi, was used to pay for Chinese coal.387 This allowed HPC to service its debt and repatriate profits more easily.388

HPC arranged the project financing on the basis of the joint venture agreement through a syndicate of 46 international banks co-ordinated by the Bank of China, Hong Kong branch, Citicorp International Limited, and the Hong Kong and Shanghai Banking Corporation.389 In April of 1986 when the financing package was concluded, it was considered to be highly


385 Ibid.


387 R.L.K. Tiong, supra note 355 at 112.

388 "Why Hopewell is still the champion of BOOT", supra note 376.

innovative. The project was funded by a combination of Hopewell shareholder equity ($17 million), subordinated loans in renminbi, and debt financing in both renminbi and yen. A renminbi loan was taken from Chinese banking sources on a deferred payment basis, i.e. not to be repaid until the supplier credit and other commercial bank loans were repaid. The HK$3.3 billion financing package was split into two tranches of HK$600 million and Y11 billion, coupled with a Y52 billion guarantee facility or supplier credit backed by the Export-Import Bank of Japan (Jexim). Jexim would not take the project risk for its own account and the syndicate therefore agreed to provide it with a comprehensive guarantee. What made Jexim's participation attractive was its offer of a ten year fixed interest rate of 7.3% together with the willingness of the Chinese authorities to accept the exchange rate risk. In 1987, Citicorp engineered a refinancing of this supplier credit, securing a syndicated loan of floating rate Euroyen 50 billion which was eventually swapped into a fixed rate of about 5.4% resulting in cost savings to the project of US$40 million. The banks agreed to look only to the electricity sales proceeds for repayment and so refused to accept offtake and coal supply agreements governed by Chinese law. After several months of deadlock on this issue, the Hong Kong law compromise was reached. HPC


391 "Why Hopewell is still the champion of BOOT", supra note 376; R.L.K. Tiong, supra note 355 at 119.


393 "Conventional Project Financing" supra note 371; "Why Hopewell is still the champion of BOOT", supra note 376.

394 "Why Hopewell is still the champion of BOOT", supra note 376.


396 "Why Hopewell is still the champion of BOOT", supra note 376; C. Walker & A.J. Smith, supra note 347 at 215.

397 R.L.K. Tiong, supra note 355 at 119.
has certain ownership rights in the power plant; it cannot own the land but simply has a right to the use of the land. However, these ownership rights are assets of HPC; as assets, these rights are covered by the banks' fixed and floating charge over HPC's assets, revenues and undertaking.398 At the time this financing package was put together, there was no law in China dealing with insolvency and there was some doubt as to the banks' ability to recover against the assets located in China. This was not put to the test however, as the loan was paid off in 1994.399

Construction

When it proposed building Shajiao B, HPC had no experience in either power plant construction or BOT schemes.400 Yet it undertook sole responsibility to build the station under a fixed price, turnkey contract, in two years, excluding nine months of preliminary works.401 However, to dilute some of this responsibility and acquire the necessary knowledge and experience for such a project, HPC negotiated a turnkey contract with a consortium of equipment suppliers and contractors on a fixed price, fixed completion, and agreed quality basis.402 Project management was taken over by Hopewell Costain, a partnership between Costain International, a UK company, and Hopewell's civil construction subsidiary, Slipform Engineering Ltd.403 The consortium included: Mitsui & Co. as commercial leader; Toshiba


399 P. Marriage, supra note 358.

400 R.L.K. Tiong, supra note 355 at 113.

401 Ibid; R. Slavid, supra note 350 contrasts the shortness of this contractual timeframe with the fact that a 500 MW power station on Hong Kong's Lamma Island took 40 months to build, without any of the problems associated with working in China.


403 R. Slavid, supra note 350.
Corporation as technical coordinator, and responsible for turbine and generator islands; Ishikawajima-Harima Heavy Industries Co. Ltd. for the boiler island, and Slipform Engineering for civil and architectural work. Deferred credits provided by the consortium allowed HPC to pay over a 7 and a half year period and eased its cash flow worries. Other firms involved in the project included Ove Arup and Partners and James Williamson and Associates for civil engineering design, Ewbank Preece Engineering Ltd. and Guangdong Power Design Institute as electrical and mechanical engineering consultants, and Frank and Vargeson as quantity surveyors.

Most of the work on the project was tendered to Chinese subcontractors and, in the first year alone, more than 50 subcontractors were used on site. It was expected that by completion, about 2,200 subcontractors would have been used on the project. A large local labour force of up to 800 people was also employed. The subcontractors even included the Civil Engineering 5th Division of the Chinese Navy which assisted in pulling and laying cables.

Work on the project began at the end of September 1984 with excavation crews levelling the sloping site and 2 million cu. m. of material being used to form a reclaimed platform in the Pearl River, giving an overall site area of 25 ha. Rock had to be blasted and

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405 Ibid; R.L.K. Tiong, supra note 355 at 119.
408 Ibid.
411 R. Slavid, supra note 350.
river silt excavated by two dredgers to a depth of 15 m. before construction of sea walls, a wharf, and intake culverts could begin.\textsuperscript{412} Construction of the sea walls required quarried rock to be brought by hand-drawn cart to river boats and then off-loaded by hand at the site.\textsuperscript{413} While over 2,000 piles were driven into the reclaimed section to support the ancillary structures, 142 caisson piles, up to 1.8 m. in diameter were excavated manually to depths of over 30 m. below sea level.\textsuperscript{414} Much of the site preparation work was completed, at HPC's risk, before the financing package had been agreed.\textsuperscript{415} The laying of the foundations for the turbine house began in August 1985 and the first concrete pour took place in October 1985.\textsuperscript{416}

In an unusual approach to a project of this sort, HPC used slipforming techniques to construct 14 structures including transformer buildings, water tanks, and the chimney.\textsuperscript{417} The 210 m. tall chimney, containing two flues, was slipformed in two stages over a 54 day period: the first 70 m. is tapered and the remaining section is uniformly circular.\textsuperscript{418} Slipform Engineering owns a considerable amount of equipment for straight wall slipforming and found it to be a successful approach, particularly given the time constraints imposed under the contract.\textsuperscript{419} For example, two water tanks were slipformed in a total of four weeks while one

\textsuperscript{412} "Not an Easy Market", supra note 407.

\textsuperscript{413} Ibid. Sand for the concrete batching plant also had to be delivered by barge and manually off-loaded.

\textsuperscript{414} R. Slavid, supra note 350.

\textsuperscript{415} C. Walker & A.J. Smith, supra note 347 at 219.

\textsuperscript{416} R. Slavid, supra note 350; "Not an Easy Market", supra note 407.

\textsuperscript{417} "Shajiao C stokes China's private-power market" (April 1996) 140:4 Power 45 at 46 where the author describes this construction technique used on many of the world's tallest structures. The slipform is a continuously moving mold, usually made of steel. It slides along the poured and compacted concrete using a series of hydraulic jacks. This dramatically shortens construction time, reduces labour costs, and creates a minimum number of construction joints.

\textsuperscript{418} Ibid.

\textsuperscript{419} Ibid.
tank takes six weeks to build by conventional methods.\textsuperscript{420} On June 30, 1986 the boiler drum for the first unit was put in place.\textsuperscript{421} On March 15, 1987 the first boiler was lit, right on schedule.\textsuperscript{422}

Some of the hurdles that had to be overcome by the project managers included: ensuring that the subcontractors knew and understood what was in the contract and what was expected of them in spite of language barriers and cultural differences; the unfamiliarity of the Chinese with many of the construction techniques used including slipforming and modern concrete construction methods; the inconvenience of numerous changes in personnel with the Chinese treating the project as a major educational opportunity for people from other areas; poor bricklaying skills; poor shop drawing skills; dangerous local roads; difficulty and slowness in organizing delivery of materials to a site only a couple of hours by ferry from Hong Kong; problems between different Chinese subcontractors; and short supply of lifting equipment.\textsuperscript{423} Despite these drawbacks, work proceeded on schedule, probably because as soon as the work started to fall behind schedule, the Chinese subcontractors immediately increased the size of the workforce.\textsuperscript{424} The project managers were impressed by the competent standard of the marine works carried out by the Chinese who had good equipment, cranes, and dredgers.\textsuperscript{425}

The speed with which Shajiao B was constructed and brought on line is amazing when contrasted with the case of Shajiao A which reflects the usual pace of construction in China.

Construction of Shajiao A which generates only 600 MW of power in contrast to Shajiao B's

\textsuperscript{420} R. Slavid, \textit{supra} note 350.

\textsuperscript{421} "Not an Easy Market", \textit{supra} note 407.

\textsuperscript{422} R. Slavid, \textit{supra} note 350.

\textsuperscript{423} \textit{Ibid}, "Not an Easy Market", \textit{supra} note 407. The two largest cranes on the site could lift 60 tonnes apiece but the largest load, the generator stator, weighed 255 tonnes. It had to be installed using a pole-up technique.

\textsuperscript{424} R. Slavid, \textit{supra} note 350. The workforce was made up largely of non-locals. They lived on site, in very basic accommodation, only going home for four days at Chinese New Year.

\textsuperscript{425} "Not an Easy Market", \textit{supra} note 407.
700 MW, began about a year before Shajiao B.\footnote{R. Slavid, \textit{supra} note 350.} Despite the earlier start and smaller plant size, Shajiao A was further from completion than Shajiao B in March 1987.\footnote{Ibid.}

Shajiao B's two 350 MW units primarily use coal from Datong together with 30% from other Chinese sources and the international market but can also operate on light oil if necessary, although only at one quarter of full capacity.\footnote{Ibid; "CEPA expects 27mt by 2000" \textit{International Coal Report} (September 29, 1995) in LEXIS, World Library, Allwld File. Total coal taken is usually about 2 mt per year.} The market for Shajiao B's electricity is Shenzhen SEZ where a lack of power regularly caused factories to work on short-time.\footnote{"Not an Easy Market", \textit{supra} note 407.} Since the station's electricity is produced at 500 kV and China's power was supplied on a 220 kV grid at the time, transformers had to be installed to step the power down for distribution on the grid until construction of a new, high voltage grid was completed.\footnote{R. Slavid, \textit{supra} note 350.} In its first year of operation, Shajiao B ran at 92% capacity, much higher than most other power plants in China.\footnote{"Why Hopewell is still the champion of BOOT", \textit{supra} note 376.}

\textbf{Results}

Although Shajiao B has been described as being relatively simple and old fashioned and an example of a project where technical quality gave in to project schedule, it does incorporate some innovative features as well as labour saving equipment for materials handling and a sophisticated automatic unit control scheme reducing the need for operator attendance.\footnote{C. Walker & A.J. Smith, \textit{supra} note 347 at 216-218.} As a
copy of previous stations built by the same suppliers, little time was spent on initial engineering and high quality final plant data was provided to the civil engineering consultant within just five weeks of issuing the letter of intent.\footnote{Ibid at 217.} The simplicity of plant design allowed delivery of pre-assembled and pre-fabricated components to the site, reduced labour time in running cable and laying pipe, and simplified construction of the boiler ancillary plant in the roofless boiler house, thus reducing construction time and allowing HPC to earn its substantial early completion bonus.\footnote{Ibid at 218.}

From Hopewell's point of view, the Shajiao B project can be considered as very successful.\footnote{"Hong Kong: Hopewell - Returns to Investors Disappointing" *South China Morning Post* (February 10, 1992) in LEXIS, World Library, Allwld File.} The project reached the end of its concession period on March 31, 1998 and, by all accounts, is performing more or less as planned. Wu has stated that he earns one cent for each kilowatt of power supplied by Shajiao B and for every dollar he earns, the Chinese authorities earn between five and six dollars.\footnote{"Development Opportunities", supra note 353.} The lure of potentially large bonuses for early completion of the plant appears to have been the driving force behind the tight schedule. Since the plant was a repeat of others, Hopewell and its partners were able to achieve a remarkable result for this type of project and costs were able to be accurately forecast and controlled with the added guarantee of plant performance as required.\footnote{C. Walker & A.J. Smith, supra note 347 at 218.} Other factors contributing to the project's success were: Wu's influence and local roots; the huge demand for electricity in Guangdong Province; cooperative government officials; good control of technological risk through the use of tried and tested turbine and construction technology; completion six months ahead of schedule even with site preparation work undertaken by Hopewell before the financing
was finalized;\textsuperscript{438} the main civil engineering contractor, as a member of the Hopewell Group, had considerable incentive to speed up the construction schedule; the Chinese party, SPD, did not interfere in any way with the design and construction process; good project management from Hopewell Costain; and, the delivery of the plant in large prefabricated assemblies.\textsuperscript{439}

One black spot on this otherwise successful project occurred because of the sharp devaluation of the \textit{renminbi} since 1985, leaving Hopewell's power project spin-off company, Consolidated Electric Power Asia (CEPA), with 70\% of the foreign exchange losses incurred with devaluation, which were then US$24 million a year.\textsuperscript{440} CEPA's losses were expected to total US$87.5 million by the time the plant reverted to the Guangdong authorities.\textsuperscript{441} CEPA did benefit initially, however, from a high level of demand for electricity with offtake in excess of 70\% per year, well above the agreed minimum rate of 60\%.\textsuperscript{442}

Furthermore, by 1995, it appeared that increased power generation in China was affecting sales from Shajiao B although sales still reached 3.5TWh with average annual availability holding at 92\%.\textsuperscript{443} HPC reported a 50\% reduction in profits that year, although this reduction primarily reflected the end of its partial tax holidays and amortisation of the foreign currency loss.\textsuperscript{444}


\textsuperscript{439} C. Walker & A.J. Smith, \textit{supra} note 347 at 219.

\textsuperscript{440} "Things Fall Apart" \textit{China Economic Review} (February 1995) in LEXIS, World Library, Allwld File. Under the contract, payment for electricity was to be made half in \textit{renminbi} (shown as "Yn" or yuan) and half in Hong Kong currency at a fixed rate of Yn0.28 to HK$1. This became Yn0.73 to HK$1 in 1993.


\textsuperscript{442} "Things Fall Apart", \textit{supra} note 440.

\textsuperscript{443} "CEPA expects 27mt by 2000", \textit{supra} note 428.

From the Chinese government's point of view, Shajiao B has performed satisfactorily once some early problems were resolved and plant availability has been high, providing some 13% of Guangdong's power output.\textsuperscript{445}

\textit{Shajiao C Power Station}

\textbf{Project Description}

Following the successful completion of Shajiao B in 1987 and with his unbridled enthusiasm for megaprojects in the Pearl River Delta region,\textsuperscript{446} Gordon Wu immediately began negotiations to build another, bigger coal-fired power station at Shajiao. Negotiations were held up following the Tiananmen Square incident and ensuing political crisis in 1989, but the State Planning Commission in Beijing finally gave its approval in mid-1990 to Hopewell to construct a 2 X 660 MW power station at a cost of about US$800 million.\textsuperscript{447} When it was determined that two units would not be adequate for Guangdong's requirements,\textsuperscript{448} the

\begin{footnotesize}
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\item \textsuperscript{445} C. Walker & A.J. Smith, \textit{supra} note 347 at 219; C. Goldstein, "China's Generation Gap", \textit{supra} note 334.
\item \textsuperscript{446} "China: Guangdong Power Shortage Critical" \textit{South China Morning Post} (March 8, 1992) in LEXIS, World Library, Allwld File. Wu's view was that the region was close to becoming the fifth economic Asian 'tiger', after Hong Kong, South Korea, Taiwan and Singapore.
\item \textsuperscript{447} "Hopewell wins deal to build 600 MW Shajiao C station" \textit{Power Asia} (July 30, 1990) in LEXIS, World Library, Allwld File, [hereinafter "Hopewell wins deal"]. Construction could not begin however, until the final feasibility study had been accepted. Wu's earlier success in obtaining the Shajiao B and other projects in China had been attributed to his close ties with former Communist Party General Secretary Zhao Ziyang who lost both position and power after the Tiananmen Square incident. However, Wu met with the new General Secretary Jiang Zemin and the Minister of State Planning, Zhou Jiahua, in early 1990, and managed to gain their support for Shajiao C.
\item \textsuperscript{448} A 1991 report by Business International stated that demand exceeded supply by over 40% with shortages during the summer idling about 50% of Guangdong's industrial capacity. Although there was a 21% increase in power generation in the late 1980s, industrial production increased by 32%. See "China: Guangdong Power Shortage Critical" \textit{supra} note 446.
\end{itemize}
\end{footnotesize}
Guangdong provincial government approached Hopewell to add a third unit,\textsuperscript{449} making Shajiao C the country's biggest coal-fired generating plant, at a cost of $US1.87 billion.\textsuperscript{450} While Shajiao B provides 13% of Guangdong's power supply, Shajiao C was expected to raise that share to 35%.\textsuperscript{451}

The design and construction of Shajiao C is similar to that of Shajiao B.\textsuperscript{452} Shajiao C achieved full commercial operations on June 29, 1996 and was officially opened on August 1996.\textsuperscript{453} It is touted as the world's largest power station to be financed by the BOT method, producing a minimum of 10.8 bn kWh each year.\textsuperscript{454}

\textbf{Legal Regime}

A number of new laws and regulations had been promulgated by the time the agreements for Shajiao C were finally concluded. The Sino-foreign Cooperative Joint Venture Law was promulgated on April 13, 1988.\textsuperscript{455} This Law restricted some of the flexibility

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\item \textsuperscript{449} C. Goldstein, "Switched-on tycoon" (August 6, 1992) 155:31 Far Eastern Economic Review 48. Zhu Senlin, Guangdong provincial governor approached Wu in May 1992 suggesting that Wu handle the supply contracts and the financial side and he would handle the necessary approvals from the State Planning Commission. This approval was given by July 10, 1992. The increase in capacity boosted the cost from US$1.4 billion to around US$1.8 billion.

\item \textsuperscript{450} "How Wu's no-nonsense swept caution aside" Power Asia (May 2, 1994) in LEXIS, World Library, Allwld File. Electricity supply in the early days of the Shajiao projects was only 250 kWh per capita, compared to 3,500 kWh in Hong Kong and 9,000 in the US. See also "Things fall apart", supra note 440; N. Reynolds, "Wu courts deals despite debt" South China Morning Post (August 27, 1996) in LEXIS, World Library, Allwld File.

\item \textsuperscript{451} C. Goldstein, \textit{supra} note 449.

\item \textsuperscript{452} "Development Opportunities", \textit{supra} note 353.

\item \textsuperscript{453} N. Reynolds, "Results of property, infrastructure and power groups below forecasts" South China Morning Post (October 11, 1996) in LEXIS, World Library, Allwld File; N. Reynolds, \textit{supra} note 450.

\item \textsuperscript{454} "Shajiao C stokes China's private-power market", \textit{supra} note 417; "Shajiao C makes debut" Power Asia (September 2, 1996) in LEXIS, World Library, Allwld File.

\item \textsuperscript{455} Encyclopedia of Chinese Law (December 1986 – June 1993) (Hong Kong: Asia Law & Practice, 1993) at 139. More recently, certain provisions of this law were interpreted in \textit{Interpretation of the Implementation of}
possessed by the earlier CJVs by requiring the parties to adhere to the following procedures: form a joint management body responsible for deciding major issues; obtain approval for a project feasibility study before beginning negotiations as is required of EJV participants; obtain approval of the CJV contract, articles of association, and other relevant documents from the Ministry of Foreign Trade and Economic Cooperation (MOFTEC); once the certificate of approval is issued, apply for a business licence with the State Administration for Industry and Commerce (SAIC); and, when the business licence is issued, the CJV comes into existence and it may apply to obtain status as a legal person.\textsuperscript{456}

The Joint Venture Implementing Regulations were amended in 1986, further clarifying a number of important issues, such as profit repatriation.\textsuperscript{457} The Foreign Economic Contract Law (FECL) of 1985, was the only legislation regulating the relationship of parties in a CJV prior to the promulgation of the 1988 CJV Law.\textsuperscript{458} The FECL provided not only that the formation of joint venture contracts and other agreements would be governed by Chinese law but also that disputes must also be governed by Chinese law unless that law is different from an international treaty to which China has acceded, in which case the treaty is to apply.\textsuperscript{459} The General Principles of Civil Law of the PRC promulgated on April 12, 1986 and which took effect on January 1, 1987,\textsuperscript{460} clarified such important concepts as “legal persons”, thus assisting

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\textsuperscript{456} P.B. Potter, supra note 49 at 24.

\textsuperscript{457} Ibid at 28.

\textsuperscript{458} A.E-S. Tay, supra note 363 at 2-530.

\textsuperscript{459} Ibid. The Chinese government also adopted on April 10, 1987 the Notice of the Supreme People’s Court on Implementing the Convention on Recognition and Enforcement of Foreign Arbitral Awards (the “New York Convention”), in CCH at 2-345.

\textsuperscript{460} In CCH at 19-150.
investors in identifying which organizations and entities had the authority to enter into contracts or were acting within the scope of their authority.\textsuperscript{461}

In response to a decline in foreign investment during 1985 and 1986, the Chinese government promulgated the Provisions of the State Council of the People’s Republic of China for the Encouragement of Foreign Investment\textsuperscript{462} (the 22 Articles), which attempted to address investor concerns and offered inducements such as tax reductions for advanced technology and export enterprises, stabilized land use fees, foreign exchange balancing measures, preferential treatment in areas including bank loans, access to raw materials, and managerial autonomy.\textsuperscript{463}

The 22 Articles were primarily directed to manufacturing enterprises which were technologically advanced or involved in exporting their products, although the non-specific articles did have some effect for enterprises involved in infrastructure.\textsuperscript{464}

Joint Venture

Hopewell Energy Ltd., part of Hopewell, and Guangdong General Power Company (GGPC), a provincial government entity, formed a joint venture, Guangdong Guanghope Power Company Ltd. in which Hopewell took a 40% interest and GGPC took the majority 60% interest.\textsuperscript{465} The paid-up capital of the joint venture was about US$200 million with the balance of the investment from bank loans.\textsuperscript{466} To limit Hopewell's exposure in the project, Wu

\textsuperscript{461} P.B. Potter, \textit{supra} note 49 at 28.

\textsuperscript{462} CCH at 13-509, promulgated on October 11, 1986 by the State Council.

\textsuperscript{463} P.B. Potter, \textit{supra} note 49 at 28.

\textsuperscript{464} The legislation provided that those articles which were not specifically directed to exporting or technologically advanced enterprises apply to all FIEs.

\textsuperscript{465} "Hopewell wins deal" \textit{supra} note 447; "Coal-fired power station for China" \textit{European Power News} (June 1992) in LEXIS, World Library, Allwld File; "Shajiao C makes debut", \textit{supra} note 454.

\textsuperscript{466} "Hopewell wins deal", \textit{supra} note 447.
planned to sell 4% of his stake in the project to Cheung Kong Holdings and Hutchison Whampoa and another 8% to Kanematsu Corp. of Japan.  

The Agreements

The agreements for Shajiao C are similar in most respects to those signed for the Shajiao B project.

Since the investment required to build the station is almost twice as great as that for Shajiao B, the twenty year concession period is also twice as long. China attached two conditions to the deal to which Hopewell agreed: 1) that imported coal be used for the initial operating period, and 2) that Hopewell raise its own capital.

A turnkey contract set a tight schedule with penalties for failure to finish the project. Synchronisation of the first unit was to occur 33 months after contract signature. Early completion bonuses were again offered and estimated at US$400 million by Hopewell. Hopewell again obtained an offtake agreement for electricity produced by Shajiao C. This time, however, the agreement was denominated in US dollars rather than in another foreign currency at a fixed exchange rate as in the Shajiao B agreement, with the hard

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467 C. Goldstein, supra note 449 at 49.

468 "Coal-fired power station for China", supra note 465.

469 "Hopewell wins deal", supra note 447.


471 "Coal-fired power station for China", supra note 465.


473 "Things fall apart", supra note 440.
currency obligations of the buyer guaranteed by GITIC.\textsuperscript{474} Hopewell's charge for power supplied is 5.64 US cents per kWh.\textsuperscript{475}

**Project Financing**

This project was financed in a similar fashion to Shajiao B, through a combination of equity, shareholder loans, and bank financing.\textsuperscript{476} Hopewell provided an estimated US$150 million on which its expected return was about 25%.\textsuperscript{477}

The loan documentation for US$750 million in debt financing from the syndicated loan market was signed in December 1992, although ground-breaking had begun in May 1992.\textsuperscript{478} Financing was 50% oversubscribed.\textsuperscript{479} It was Hopewell's reputation for completing projects ahead of schedule as well as its willingness to put up the majority of shareholder funding in equity and subordinated debt that produced a final debt to equity ration of 0.6:1 which, in turn, allowed Wardley Capital, financial adviser on the transaction, to arrange a shorter maturity of just 7.5 years, considered to be exceptional for power projects.\textsuperscript{480} This also meant that pricing, at 1.375% over LIBOR during construction, converting to a term loan at 1% over LIBOR, was close to comparable western rates.\textsuperscript{481}


\textsuperscript{475} C. Chapel, "Wu backs coal generation as best for power" *South China Morning Post* (October 30, 1992) in LEXIS, World Library, Allwld File.

\textsuperscript{476} "Things fall apart", *supra* note 440.

\textsuperscript{477} "China: Survival of the Fittest", *supra* note 474.


\textsuperscript{479} C. Goldstein, "Skirting the Potholes" (December 1992) 155:48 Far Eastern Economic Review 62 at 63.

\textsuperscript{480} M. Fletcher, *supra* note 470.

\textsuperscript{481} Ibid.
Construction

The joint venture contracted the construction of Shajiao C to a consortium led by GEC Alsthom. GEC Alsthom was responsible for the conceptual design and overall technical coordination as well as construction, supply and commissioning of the steam turbines and balance of the plant, including the coal-handling and ash disposal systems.\(^{482}\) Other members of the consortium included: CE International China Inc., an ABB Combustion Engineering company, which was responsible for the boiler islands including air pollution control equipment, and Hopewell's Slipform Engineering Ltd. which was again to carry out the civil engineering work.\(^{483}\) Subcontractors used were Chinese nationals, as required by the joint venture agreement, but their ranks could be supplemented by Hong Kong labour, if necessary.\(^{484}\) Section managers for civil engineering works, marine works, power, and central services were hired from around the world.\(^{485}\)

Shajiao C was designed to accommodate a range of indigenous coals as well as coal which has to be imported from places such as Australia due to transportation problems reducing normal supplies from northern China.\(^{486}\) Since Chinese coal is generally high in ash content, the three Shajiao C units are equipped with electrostatic precipitators, designed to be 99.3% efficient, to reduce flyash pollution from the plant.\(^{487}\) Other environmentally-advanced

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\(^{482}\) "Coal-fired power station for China", supra note 465; "Shajiao C makes debut", supra note 454.

\(^{483}\) "Coal-fired power station for China", supra note 465; "Shajiao C makes debut", supra note 454.


\(^{485}\) Ibid.

\(^{486}\) "Shajiao C stokes China's private-power market", supra note 417.

\(^{487}\) Ibid.
features of the power station reduce nitrous oxide emissions, provide higher thermal efficiency, reduce flyash erosion, and reduce soot emissions.\textsuperscript{488}

The builders used construction experience gained with Shajiao B in forming the station's main buildings and structures of concrete, one third by the slipform method.\textsuperscript{489} As with Shajiao B, slipforming made a significant contribution to Shajiao C's rapid construction and allowed the first unit to be synchronized to the grid just 32 months after the contract was awarded.\textsuperscript{490} The major innovation, for which plant design had to be altered, was replacing the traditional structural steel boiler racks with slipformed concrete structures which were cheaper and quicker as they could be built in-house by Slipform Engineering.\textsuperscript{491} Although this method required a large number of caisson embedments to reinforce and support the racks, and reduced slipforming speeds to about 4 metres per day, it did save three months' construction time.\textsuperscript{492} As with Shajiao B, concrete was batched on site and delivered by hand-carts, although the placement of an average 15 cu. m. per hour did not justify pumping.\textsuperscript{493} Cement was delivered to the site by six trucks a day from Hong Kong and a 2,000 tonnes bulk carrier twice a week.\textsuperscript{494}

Other related work undertaken by the consortium included construction of a waste water treatment facility, a coal settling pond, a filtered water treatment plant, a demineralised

\textsuperscript{488} Ibid at 46.

\textsuperscript{489} Ibid. The turbine hall, a 7 metre deep intake and outfall, the outer shell of the transfer tower, 400 sea wall caissons and the 260 metre high chimney were all slipformed: K. Wallis, supra note 484.

\textsuperscript{490} "Shajiao C stokes China's private-power market", supra note 417.

\textsuperscript{491} K. Wallis, supra note 484.

\textsuperscript{492} Ibid.

\textsuperscript{493} Ibid.

\textsuperscript{494} Ibid.
plant, a coal crusher and screen house, ash silos, a coal transfer house, and a 1.4 km long jetty.\textsuperscript{495}

The first unit was synchronised on December 13, 1994, six months ahead of schedule.\textsuperscript{496} The second unit was synchronised on May 4, 1995 and the third unit on August 23, 1995.\textsuperscript{497} However, rotor vibration problems in GEC Alsthom's turbines in the first two units delayed commercial operation of the project while they were sent back to England for repairs.\textsuperscript{498} Reliability trials were conducted and the three units went commercial at the end of December 1995, in June 1996, and in February 1996, respectively.\textsuperscript{499} The original schedule had called for the first unit to begin commercial operations in April of 1995.\textsuperscript{500} The unexpected delay reduced Hopewell's early completion bonus as well as eliminating benefits expected from a brief holiday on the commencement of loan repayments.\textsuperscript{501} Wu claimed that GEC Alsthom would compensate Hopewell for 80\% of the loss of the early completion bonus.\textsuperscript{502} Despite the delay, Shajiao C was completed in four years, faster than any other power station of its type.\textsuperscript{503}

\textsuperscript{495} \textit{Ibid.}

\textsuperscript{496} "China: Survival of the Fittest", \textit{supra} note 474.

\textsuperscript{497} "GEC turbine troubles stall Shajiao C timetable" \textit{Power Asia} (October 2, 1995) in LEXIS, World Library, Allwld File; "CEPA expects 27 mt by 2000", \textit{supra} note 428.

\textsuperscript{498} \textit{Ibid}; D. Clayton, "Cepa says Shajiao units ready soon" \textit{South China Morning Post} (January 24, 1996) in LEXIS, World Library, Allwld File.

\textsuperscript{499} "Report punctures Wu profit claims" \textit{Power Asia} (March 18, 1996) in LEXIS, World Library, Allwld File; N. Reynolds, "Results of property", \textit{supra} note 453.

\textsuperscript{500} "GEC turbine troubles stall Shajiao C timetable", \textit{supra} note 497.

\textsuperscript{501} \textit{Ibid.}

\textsuperscript{502} "Report punctures Wu profit claims", \textit{supra} note 499.

\textsuperscript{503} "Shajiao C makes debut", \textit{supra} note 454.
Results

Despite the manufacturing problems that delayed completion of the project, Shajiao C can be considered to be successful, both from a construction and an investment point of view. Return on investment was estimated to be in the range of 25%, an adequate amount to satisfy Hopewell's bankers. However, other aspects of the project were more problematic.

By August 27, 1996, Hopewell had yet to come to an agreement with GEC Alsthom and ABB Combustion Engineering Systems to recover some of its 85% loss in early completion bonuses.504 Hopewell's share of the bonuses that were paid out amounted to HK$89.52 million (approx. US$11m), much less than had been expected.505

Hopewell's earnings from Shajiao C, from 1997 on, were also uncertain and likely to be substantially lower for the first ten years of operation, being affected by a Chinese government policy providing for asset depreciation over ten years instead of the twenty year policy Hopewell was fighting for.506 Both of these factors, significantly reduced Hopewell's, now CEPA's, creditworthiness and its attractiveness to investors.507

Although some reports indicate there is an oversupply of power in Guangdong with installed capacity exceeding consumption and threatening investors' returns, others say that power shortages remain.508 All towns in Guangdong do not yet have an adequate supply

504 N. Reynolds, supra note 453. These bonuses were estimated a HK$1.5 billion: see "Report punctures Wu profit claims", supra note 499; M.T. Burr et al, supra note 472.

505 N. Reynolds, "Results of property", supra note 453. A Hopewell director admitted that although it had hoped to earn hundreds of millions of dollars profit by completing Shajiao C as early as spring 1995, it would earn only tens of millions of dollars. Under the contract, Hopewell would have kept much of the profit earned before the official deadline of June 30, 1996 - after that the Chinese joint venture partner keeps most of the profits. See E. Thornton, "Fading Magic" (September 5, 1996) 159:36 Far Eastern Economic Review 74.

506 "Report punctures Wu profit claims", supra note 499.

507 Ibid.

508 K. Starke, "China opens the door" Independent Energy (January/February 1997) in LEXIS, World Library, Allwld File ["opens door"]. Industry sources said that Shajiao B has been operating slightly under capacity and Shajiao C has been selling only one-third of its output: E. Thornton, "Fading Magic" supra note 505.
primarily because, although China was supposed to have moved to a regional power grid system, some cities still rely solely on local grids that use low voltage lines and power from outdated and obsolete plants. In order for all towns to be connected to the newer supply of power, the government has to allocate more capital to develop the grid system but it needs time to do so.

Laibin B Power Station

Project Description

The Laibin Power Project, Phase II, known as Laibin B, has been in the planning stages since the early 1990s and has come to represent China's first attempt at developing a BOT power plant, funded entirely by foreign investors without government guarantees. Under a BOT scheme, foreign investor/developers set up a project company in China to be responsible for the investment, financing, construction, operation, and maintenance of the project. During the concession period, the project company effectively owns the project facilities and has the right to deal freely with the project for purposes of investment, financing, design, construction, equipment procurement, operation and management, and reasonable charges for

509 K. Starke, supra note 508.
510 Ibid.
the product.\textsuperscript{513} For the Chinese, the most significant aspect of BOT is the fact that it permits foreign interests to hold ownership rights in what have always been considered to be ‘state assets’ even if only for a finite period of time.\textsuperscript{514} Tariffs charged for road use, electricity, or water are also highly sensitive politically for the Chinese government and, for foreign investors, negotiating ‘reasonable charges’ may mean the difference between winning a project and losing out to other bidders.

Laibin B is expected to serve as the model for limited-recourse financing for future power projects in China and, in fact, in early 1997, the Chinese invited pre-qualifying bids for a BOT power project at Wangcheng in Hunan Province.\textsuperscript{515} Laibin B was one of several power projects planned for Guangxi Zhuang Autonomous Region, located just west of Guangdong Province in South China.\textsuperscript{516} Guangxi Zhuang had a total installed capacity of 3965 MW in 1993, three quarters of which was generated by hydro-electric stations. Laibin B, which involves the expansion of an existing 2 X 125 MW coal-fired facility originally planned as a 2 X 300 MW coal-fired plant and later expanded to 2 X 350 MW is to be completed in 1999 at a cost estimated at between US$560-648 million.\textsuperscript{517}

Laibin B was chosen by the Chinese government to experiment its BOT draft rules for at least three reasons: Guangxi Zhuang has an average economy by Chinese standards, which

\textsuperscript{513} Art. (2) BOT Circular, \textit{ibid.}

\textsuperscript{514} This point is reflected in the fact that the original draft of Art. (2) of the BOT Circular stated that ownership of the project was to remain with the government. See C. Hunter & C. Lau, \textit{supra} note 21 at 16.

\textsuperscript{515} J. Ma, \textit{supra} note 511; "First foreign-funded power plant" (March 1997) 9:2 Asia Law 11.

\textsuperscript{516} J. Ma, \textit{supra} note 511; "First BOT Power Venture Open for Bidding" \textit{Xinhua News Agency} (December 8, 1995) in LEXIS, World Library, Allwld File.

\textsuperscript{517} "China - Guangxi Power Project", \textit{supra} note 511. The Guangxi Power Bureau planned to increase capacity to about 10,000 MW by the year 2000; "Beijing sheds (some) light on China's new BOT regime" \textit{Power Asia} (March 4, 1996) in LEXIS, World Library, Allwld File; "IPP success not guaranteed in China" \textit{Privatisation International} (April 1, 1996) in LEXIS, World Library, Allwld File; J. Ma, \textit{supra} note 511; "Contracts, financing tied up for GEC BOT Guangxi deal" \textit{Power Asia} (November 25, 1996) in LEXIS, World Library, Allwld File; "First foreign-funded power plant", \textit{supra} note 515.
unlike Guangdong province, makes it a good representative test for the country as a whole; Guangxi Zhuang has a relatively independent power grid, limiting the impact of externalities on the experiment; and the new plant was to be built almost on the same site as the A plant, expanding its capacity while at the same time reducing the amount of investment required.  

Laibin is located about 80 kilometers from Liuzhou, the region's largest industrial town, and 120 kilometers from the regional capital Nanning, cities which would use power from the new plant. Compared to Guangdong province where the Shajiao plants were built, Guangxi Zhuang is a much poorer region of China, with questionable creditworthiness and no proven track record in providing adequate amounts of foreign exchange for foreign investors.  

When the tender documents for Laibin B were issued to prospective bidders in December 1995, the only developer to have completed BOT power projects in China was Gordon Wu. At the time, however, Laibin B was described as one of the world's ten most important BOT projects.

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518 "First BOT Power Venture Open for Bidding", supra note 516.

519 Ibid. Prospects for electricity sales in the region are very good since the per capita supply is half of the national average while its GDP had an annual growth rate of 17% from 1991 to 1995, 5 percentage points higher than the national average.

520 "IPP success not guaranteed in China", supra note 517. In 1993, Guangxi's GDP per capita of US$240.10 placed it 21st out of China's 30 provinces and centrally managed cities. A recent report indicated that the Region had eliminated 60 types of illegal charges that were being levied against foreign-funded enterprises in order to improve the investment environment and promote the introduction of overseas funds. The charges were considered to be illegal because they were instituted by 24 institutions, including construction and land administration departments, without the approval of authorized departments. The Region is to publish a list of allowable charges and foreign-funded enterprises are to be treated the same as their domestic counterparts. See "Elimination of extra fees aids foreign investment" China Business News (October 1997) at http://www.chinavista.com/business/news/home.html.


Legal Regime

A law governing the formation and regulation of wholly foreign owned enterprises (WFOEs) did not come into existence until April 1986.\textsuperscript{523} WFOEs were the least encouraged and most restricted form of investment enterprise, possibly due to Chinese perception that little technology, know-how, or technical skills would be obtained through an enterprise wholly owned and controlled by the foreign investor.\textsuperscript{524} The WFOE Law reassured investors that China would not nationalize or expropriate a WFOE, except under special circumstances, in which case reasonable compensation would be made. WFOEs, although not subject to local departmental interference in the operations of the enterprise, are required to submit their production and operation plans to the local department-in-charge for record purposes.\textsuperscript{525} The December 1990 Implementing Regulations for the WFOE Law clarified the operating conditions for WFOEs and set out the industries that were prohibited, restricted, or required special approval.\textsuperscript{526} As part of a public utility, Laibin B required special MOFTEC approval as a WFOE undertaking to build and operate a power plant. The only other BOT power projects in China to that time had been joint venture projects.

The legal framework that primarily guided the Laibin B project is found in the Draft BOT Circular, published in August 1995, which at the end of 1997 had not yet become binding law.\textsuperscript{527} The new framework: allows local governments to invite international developers to bid

\textsuperscript{523} The Law of the People's Republic of China concerning Enterprises with Sole Foreign Investment, adopted at the 4\textsuperscript{th} Session of the 6\textsuperscript{th} NPC on April 12, 1986 in CCH at 13-506.

\textsuperscript{524} A.E-S. Tay, supra note 363 at 2-520; P.B. Potter, supra note 49 at 25.

\textsuperscript{525} A. E-S. Tay, supra note 363 at 2-520.

\textsuperscript{526} P.B. Potter, supra note 49 at 25. Prohibited industries included media, foreign trade, insurance, and telecommunications. Restricted or special approval industries included public utilities, real estate, trust and investment, leasing, communications, and transportation.

\textsuperscript{527} E. Lam, "China seeks to boost financing" International Financial Law Review (October 1997) in LEXIS, World Library, Allwld File.
for projects competitively, rather than setting up projects by private negotiation as they had done previously; permits the project company to be a WFOE; provides for state guarantees of the conversion of foreign exchange needed to repay the principal and interest of loans and also for guarantees of the remittance of dividends out of China; and, prohibits government debt guarantees and provides for finance contracts to be limited or non-recourse against the power producer.\footnote{\textit{Ibid.}}

In 1993, the government passed the PRC Company Law which came into effect on July 1, 1994 and which provides a comprehensive set of rules and procedures for the establishment, organization, and operation of companies.\footnote{See P.B. Potter, \textit{supra} note 49 at 29. \textit{Company Law of the PRC} adopted December 29, 1993 by the 5\textsuperscript{th} Session of the Standing Committee of the 8\textsuperscript{th} National People’s Congress in CCH at 13-518.} Its provisions on limited liability companies have some application to JVs and WFOEs which are classed as limited liability companies under their respective legislation.\footnote{\textit{Ibid.}}

The PRC Electric Power Law,\footnote{(1996) 10:4 China Law and Practice 59 [English translation].} promulgated in the spring of 1996, also affects projects like Laibin B as it regulates the ‘wholesale’ prices charged by the power producer to the grid operator, as well as the ‘retail’ selling prices charged by the grid operator to the ultimate end-users, i.e. industrial, commercial, and residential customers.\footnote{E. Lam, \textit{supra} note 527.} Article 43 of the Electric Power Law limits the autonomy of the power producer and purchaser to determine prices in that prices cannot be set or changed without the prior approval of the local Price Control Bureau, the power department of the State Planning Commission, and the Ministry of Electric Power and prices must be denominated in \textit{renminbi}.\footnote{\textit{Ibid.}}

\footnote{\textit{Ibid.}}
The Foreign Exchange Control Regulations promulgated in 1996\textsuperscript{534} prohibit Chinese companies from using foreign currency to calculate and settle trade, which means that the Chinese power purchaser has to pay for the power in renminbi. Therefore, power producers, have to find a way to adjust Chinese power rates to take into account any depreciation of the renminbi during the currency of the loan. Furthermore, there is not an efficient mechanism in place whereby the foreign investor can convert its income stream to its own currency and repatriate it. The state's foreign exchange conversion guarantee under the BOT Circular partly resolves this problem, but not for capital account transactions. These still require the approval of the State Administration of Foreign Exchange. FIEs can, however, effect current account transactions to facilitate the repatriation of profits but they must still use designated foreign exchange banks or swap centres to exchange renminbi for foreign currency.\textsuperscript{535}

**BOT Bidding Process**

As stated above, although the authorities circulated draft BOT rules in mid-1995, at the date of this writing, no BOT law had yet been approved and issued. Under the new law, foreigners will be allowed to own 100\% of Chinese power projects which is discouraged under China's current industry guidelines.\textsuperscript{536} Despite the lack of a definitive regulatory framework, several pilot BOT projects were approved by the State Planning Commission, Laibin B being approved in May 1995.\textsuperscript{537} Bidding documents for the 20 year concession were made available in December 1995.\textsuperscript{538} The bidding process was conducted by the Bridge of Trust Infrastructure

\begin{footnotesize}

\textsuperscript{535} *Ibid.*

\textsuperscript{536} K. Starke, "opens door", *supra* note 508.

\textsuperscript{537} "Beijing sheds (some) light on China's new BOT regime", *supra* note 517.

\textsuperscript{538} "First BOT Power Venture Open for Bidding", *supra* note 516.
\end{footnotesize}
Investment Consulting Co. whose six shareholders are all backed by central ministries and local governments, including the Ministry of Electric Power, the Ministry of Construction, and the State Planning Commission. Advising the Bridge of Trust was SBC Warburg with Gide Loyrette Nouel, a French law firm, drafting the legal requirements for the bidding documents. Interested developers were pre-qualified and divided into an "A" list, including 12 US, European, and Japanese companies, and a "B" list, consisting of ten other companies which could only continue in the bidding process if they bid in partnership with an "A" list company. Foreign bidders had to supply full details of their project proposals, including their own completion schedule, an estimate of capital costs, and a projected rate of return on their investment. From among 31 applicants, the Bridge of Trust invited 12 foreign bidders to submit proposals.

Fearing financing difficulties due to Laibin B's remote location together with a tight construction schedule, expectations of a relatively low rate of return, as well as stiff competition from other developers, four international consortiums withdrew from the process and others had re-grouped before the final bidding even started, reducing the original short list of 12 consortiums to six. The six bidders were required to pay a US$10 million bid bond.

539 "Beijing sheds (some) light on China's new BOT regime", supra note 517; M. Miller, "China warms to BOT infrastructure projects" Asia Times (March 27, 1997) in LEXIS, World Library, Allwld File.

540 "IPP success not guaranteed in China", supra note 517.

541 "Beijing sheds (some) light on China's new BOT regime", supra note 517.


At the top of the shortlist of three finalists was the Electricite de France (EdF) consortium which was invited by the State Council to propose a financial package for the project before the end of 1996.\footnote{"EDF's Prat - 2 (invited to propose deal to build, run Guangxi power plant) \textit{AFX News} (June 19, 1996) in LEXIS, World Library, Allwld File.} EdF, which had been associated with the Daya Bay and Lingqo nuclear power stations, gained top spot as a result of its quoting the lowest prices for electricity from Laibin B.\footnote{H. Lu, \textit{supra} note 545; "China: EdF of France Looks to Chinese Market" \textit{Les Echos} (November 19, 1996) in LEXIS, World Library, Allwld File.}

The Chinese government retained the right to begin negotiations with the second group on the list if it was not happy with the progress of the EdF group. During the negotiation period, the term of the concession period was reduced to 18 years rather than the 20 years originally sought.\footnote{J. Ma, "Agreement near on Laibin B power project" \textit{South China Morning Post} (October 8, 1996) in LEXIS, World Library, Allwld File; H. Lu, \textit{supra} note 545.} Although the main part of the contract was settled by October 1996, the EdF consortium had not yet secured its financing package as it was negotiating for an export credit loan.\footnote{J. Ma, "Finance delays power contract" \textit{South China Morning Post} (October 11, 1996) in LEXIS, World Library, Allwld File.} As expected, the conditions presented by Laibin B made financing difficult to arrange.\footnote{N. Driver, "China Near First BOT Project Deal" (November 11, 1996) 237:20 \textit{ENR} 21. Export credit agencies were having to take provincial risk for the first time: see "Asia: Asian Project Finance, Infrastructural Imperatives" \textit{Euromoney} (February 19, 1997) in LEXIS, World Library, Allwld File.} Pressure was exerted by the Guangxi government on...
EdF to get its financing package in as soon as possible. EdF's US$526.9 million contract was finally approved and a draft agreement signed in November 1996.\textsuperscript{551} The final contract was signed in May 1997 and the financing documents signed in early September 1997.\textsuperscript{552}

Those involved considered the bidding process, which was China's first international tender, to have been fair and transparent.\textsuperscript{553} International standard contracts were used and the rate of return was said to be free of government control.\textsuperscript{554}

The Agreements

In the original tender proposal, the concession period was to be 20 years, with the power purchase and fuel supply agreements guaranteed by the Guangxi government.\textsuperscript{555} Electricity was to be purchased by the Guangxi Electric Power Bureau under a pricing formula that included a foreign exchange indexing component, with the index used to be proposed by the bidders.\textsuperscript{556} The pricing formula was to be based on renminbi, with US dollars to hedge the foreign exchange risk and the support of the State Administration of Exchange Control to reinforce the provincial government's pledge to ensure an adequate supply of foreign exchange to service the successful bidder's debt.\textsuperscript{557}

\textsuperscript{551} M. Miller, \textit{supra} note 539; "USA: Trumeter Opens Florida Depot" \textit{Manchester Evening News} (May 12, 1997) in LEXIS, World Library, Allwld File.

\textsuperscript{552} "USA: Trumeter Opens Florida Depot", \textit{supra} note 551; C. Gailey, "The power of persuasion" \textit{AsiaMoney} (October 1997) in LEXIS, World Library, Allwld File.

\textsuperscript{553} "Asia: Asian Project Finance, Infrastructural Imperatives", \textit{supra} note 550.

\textsuperscript{554} A. Chetham, "Investors expected to welcome power issues" \textit{South China Morning Post} (March 25, 1997) in LEXIS, World Library, Allwld File.

\textsuperscript{555} "Beijing sheds (some) light on China's new BOT regime", \textit{supra} note 517; D. Clayton, "Hopes high for power projects" \textit{South China Morning Post} (February 21, 1996) in LEXIS, World Library, Allwld File.

\textsuperscript{556} "Beijing sheds (some) light on China's new BOT regime", \textit{supra} note 517.

\textsuperscript{557} "IPP success not guaranteed in China", \textit{supra} note 517; D. Clayton, \textit{supra} note 555; J. Ma, \textit{supra} note 511 [HSBC unit]
The draft concession agreement was signed on November 11, 1996 between the EdF-GEC Alsthom consortium and Guangxi Zhuang government and then went to the State Planning Commission and the State Council for approval.\(^{558}\) EdF won the project on the basis of the level of prices it proposed to charge for Laibin B's electricity.\(^{559}\) The concession period agreed to is 18 years with the first generating unit scheduled to go on line in October 1999 and the plant ready for commercial operation by the end of that year.\(^{560}\) Guangxi Electric Power Bureau agreed to buy a net supply of 3.5 billion kWh a year from Laibin B.\(^{561}\) The agreement also required the three lead banks arranging the project financing to complete financing within six months.\(^{562}\)

About one quarter of the project's estimated cost of US$560 million, US$140 million, is to be provided by consortium shareholders and will serve as the registered capital of the operating company.\(^{563}\) The remaining 75% was to be raised through limited recourse project financing, which France's Banque Indosuez, Britain's HSBC Investment Bank, and BZW Barclays offered to underwrite. The interest rate was to be kept within 100 basis points above the three month LIBOR.\(^{564}\) In March 1997, the project financing was restructured to include a 10 year US$55 million stand-by facility, increasing the total debt to US$545 million, including

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\(^{558}\) H. Lu, supra note 545; "Contracts, financing tied up for GEC BOT Guangxi deal", supra note 517.

\(^{559}\) S. Kohli, "Future of China, Hong Kong in spotlight at IMF-World Bank meetings; Mainland power deal to become benchmark" South China Morning Post (April 30, 1997) in LEXIS, World Library, Allwld File.

\(^{560}\) H. Lu, supra note 545; see also J. Ma, supra note 511. [HSBC unit] The construction period for the first unit is 30 months and the second 33 months; see also "Mainland Uses BOT to Attract Foreign Investment in Infrastructure" Daily News Tokyo Financial Wire (December 4, 1996) in LEXIS, World Library, Allwld File.

\(^{561}\) H. Lu, supra note 545.

\(^{562}\) J. Ma, supra note 511 [HSBC unit].

\(^{563}\) Ibid; H. Lu, supra note 545; K. Starke, supra note 508 [China opens].

\(^{564}\) J. Ma, supra note 511 [HSBC unit].
the 12 year US$300 million French export credit tranche and the 10 year $190 million term loan.\textsuperscript{565}

EdF will hold 60\% and GEC Alsthom will hold 40\% of the capital of the project company.\textsuperscript{566} GEC is the consortium leader, supplying turbines and boilers; Cegelec is to supply instrumentation, control, and electronics while EdF DNET, EdF's engineers, will be in charge of other installations.\textsuperscript{567}

Results

Construction of Laibin B commenced on September 5, 1997.\textsuperscript{568} Although it is still early to judge the overall success of this project, Laibin B does provide a blueprint for future BOT deals, especially in the power sector in China.

The structure of the project attracted a large number of bids even though the Chinese required huge liquidated damages and a very tight timetable for completion of the project.\textsuperscript{569} Since it is generally the government approval process that slows down most projects in China, this may be a sign that the new BOT structure will work better.

\textsuperscript{565} "China: Syndicated Loans - Laibin B Power Project" \textit{Euroweek} (March 27, 1997) in LEXIS, World Library, Allwld File. Originally, export credit insurance offered by the French export credit supplier Conface was to cover US$290 million or 64\% of the required loans. See H. Lu, \textit{supra} note 545; M Miller, \textit{supra} note 539. A syndicated commercial loan for an estimated US$130 million was to be arranged by the three lead banks. See J. Ma, \textit{supra} note 511 [HSBC unit]; J. Ma, "Bridge finance to draw on BOT" \textit{South China Morning Post} (November 28, 1996) in LEXIS, World Library, Allwld File.

\textsuperscript{566} "Contracts, financing tied up for GEC BOT Guangxi deal", \textit{supra} note 517; "Agreement on Laibin B coal-fired station" \textit{Power Europe} (December 13, 1996) in LEXIS, World Library, Allwld File.

\textsuperscript{567} "Contracts, financing tied up for GEC BOT Guangxi deal", \textit{supra} note 517.

\textsuperscript{568} Guangxi hosts country's first BOT power plant" \textit{BBC Summary of World Broadcasts} (September 10, 1997) in LEXIS, World Library, Allwld File.

\textsuperscript{569} C. Gailey, "Elements of Success" (Sept 1996) VII:7 Asiamoney 61 at 67.
To date, Laibin B is considered a success by Chinese authorities and as such will encourage decisionmakers for future projects.\(^{570}\) Coming soon after the announcement of current account convertibility, the BOT guidelines make infrastructure projects more attractive.\(^{571}\) However, the internal rate of return on power projects may still be a problem for foreign investors in China and the number of opportunities that exist in other parts of the world to invest in power projects may be a problem for both China and independent power developers there.\(^{572}\) Another power project currently in the works, the Waigaoqiao II plant in Shanghai, saw a different strategy used: instead of emphasizing a set rate of return, advisors favoured bidding on the price of electricity to be sold, including a fixed capacity fee paid by the domestic utility to the foreign company for the use of the plant.\(^{573}\)

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When it comes to power projects, some observers consider that there is a buyer’s market in Asia.\(^{574}\) Governments that once would do anything to attract power providers now have the upper hand, partly because they are better informed on prices, project costs, and the cost of capital.\(^{575}\) The result has been stiff competition among project developers, offering rates so low that in some cases, projects have become loss leaders, with successful bidders

\(^{570}\) Zhou Jian, vice president of the Bridge of Trust, also stated that the Chinese know that BOT projects using these methods had succeeded in other countries but that the methods had not been tried in China prior to Laibin B. See M. Miller, *supra* note 539.

\(^{571}\) S. Kohli, *supra* note 559.

\(^{572}\) A. Chetham, "Finance break for power projects" *South China Morning Post* (April 21, 1997) in LEXIS, World Library, Allwld File. 16 to 17% returns are not ideal for investors and there are deals that will earn more than that. In the next two years, twenty or more countries are selling some or all of their power assets, eg. Brazil is selling US$50 billion in assets and returns available in Latin America are in the 24-25% range. These returns are much more attractive to non-recourse loan lenders.

\(^{573}\) D. Clayton, *supra* note 555. [hopes high]


relying on future projects to recoup their losses and turn a profit.\textsuperscript{576} Laibin B is a case in point - with an 18 year concession period and low power supply rates, it is questionable whether the EdF-GEC Alsthom consortium will see a return that will allow it to break even by the end of the period.\textsuperscript{577} EdF is already pursuing another power project in China and its success in negotiating the Laibin B project will undoubtedly influence Chinese decisionmakers on the new project and others.

\textbf{Transportation}\textsuperscript{578}

China's transportation infrastructure still lags far behind international standards with obsolete technology and equipment in use, weak management, and a huge gap between capacity and demand.\textsuperscript{579} The number of civilian vehicles has risen 13.4\% every year between 1978 and 1995 but the total length of highways over the same period has increased only by an average 1.6\% per year.\textsuperscript{580} Chinese authorities admit that the transportation industry has fallen far behind the socio-economic development in the country and recent estimates suggest that

\textsuperscript{576} E. Thornton, \textit{supra} note 27 at 59.

\textsuperscript{577} Although the rate of return has not been announced, analysts estimated it at about 17.5\% a year: D. Ibison, "China power plays reclaim foreign suitors" \textit{South China Morning Post} (May 10, 1996) in LEXIS, World Library, Allwld File.

\textsuperscript{578} This section does not concern itself with air transportation since there has been very little foreign involvement in building infrastructure in this area, no doubt because of its national security sensitivity.

\textsuperscript{579} J. Dong, "China Welcomes Foreign Investments in Infrastructural Construction Projects" (January 6, 1997) XVIII:1 China Economic News 2.

poor transportation links contributed to a loss of nearly 1% of China's GDP in 1994.581 By the end of 1996, the country had built a total of 1.18 million new km of highway.582

Measured in kilometres per person, China's current road networks rank it behind such developing countries as Argentina, Brazil, India, Mexico, and even the former Soviet Union.583 In China, 1,500 counties and 190,000 villages had no road access at the end of 1994.584 China's railway network is roughly equivalent to US railway infrastructure in the 1860s; even India has a larger rail network on one third as much land area as China.585 China does have a comprehensive system of inland and coastal water routes but previous policies that prohibited foreign involvement in development of this sector has left boats and harbours in need of upgrading.586

The Chinese government plans to improve its transportation infrastructure but it is not expected to catch up to actual needs for another ten to twenty years.587 Government goals for the year 2000 include: to have a total of 1.25 million kilometres of roads to link up the four national road trunk lines along the coasts, the Yangtze, the Lianyungang-Lanzhou railway, and the Beijing-Guangzhou railway which run through the main industrial areas; 1,000 midclass berths along the coasts focusing on coal, container, and bulk cargo shipment systems; and improved inland river lanes and ports.588 Standing in the way of these grand ambitions is a lack

581 J. Dong, supra note 579; S.R. Frewen, supra note 1.


583 S.R. Frewen, supra note 1.

584 S. Davison, supra note 580.

585 S.R. Frewen, supra note 1 at 13.

586 Ibid.

587 Ibid at 12.

588 J. Dong, supra note 579.
of funds. To complete four national highways by the year 2000 will cost more than US$6 billion in foreign funds. These highways are part of a larger plan to build a network of 12 national trunk routes totalling 30,000 km by 2010 at a construction cost estimated at US$65 billion, 10% of which will come from foreign investors. To encourage foreign investors to participate, the government plans to implement more open policies and a number of pilot projects will be launched via BOT, stock issues, bond issues, and other forms of financing. Foreign investment in China's road industry between 1991 and 1995 helped to increase the total length of highways by 12.6% to 1.15 million km. Chinese authorities are now clearly encouraging foreign participation in joint ventures to build and manage wharves and ports: foreign participation in port areas and wharves in the development zones is permitted, the construction of expressways, tunnels, and bridges are open to 100% foreign ownership, and there is no limit in foreign participation in Chinese joint ventures on first and second-class highways.

Although transportation projects such as toll roads or bridges also qualify for construction on BOT lines, it is recognized that they present significant hurdles for any BOT model. In power and water projects, the government is the single customer, monopolizing the sale of what is produced. However, road toll charges are levied on individuals so that there are many customers rather than just one, and that makes a road project more complicated. It is not clear whether the Chinese government can or will guarantee a minimum rate of traffic flow.

589 S. Davison, supra note 580.

590 Ibid. Most of the $65 billion will come from the World Bank, the Asian Development Bank and Chinese domestic funding.

591 J. Dong, supra note 579.

592 S. Davison, supra note 580.

593 J. Dong, supra note 579; S. Davison, supra note 580.

594 M. Miller, supra note 539.
to protect investors' interests. Setting up and operating a toll road is a difficult process as both central and provincial government approvals are required and toll collection can be affected by hazards such as motor vehicle accidents and robberies. As a result of their special nature, therefore, transportation BOT projects are much more difficult to finance.

In any event, the current Ninth Five Year Plan (1996-2000) encourages investment in China's highways and the government is promoting BOT projects in this sector. An official at the Highway Administration Department of the Ministry of Communications has said that China needs approximately US$12 billion for roadway construction to the year 2000. Several pilot BOT projects have commenced and plans are being made for others, mostly in the eastern part of China.

Guangdong province leads the country in road density and the length of first class roads: 350 km of highways had been opened as of June 1996 and another 250 km are expected to be completed by mid-1998, giving it the largest highway network in China. During the Eighth Five Year Plan (1991-1995), the Guangdong government built 25,300 km of highways, 25 times the number built during the Seventh Five Year Plan. By the year 2000, ten highways totalling 1,500 km are scheduled to be built in the Pearl River Delta at an estimated cost

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595 S. Davison, supra note 580.
596 J. Ma, supra note 565.
597 "Beijing sheds (some) light on China's new BOT regime", supra note 517.
598 Ibid.
599 Ibid. These include the Chengdu-Mianyang expressway in Sichuan, the Junshan Yangtze bridge in Hubei and the Beijing-Tongxian toll road. BOT transportation projects are planned for Tianjin municipality, Jiangsu, Hebei and Henan provinces.
of $5 billion. Guangdong Province has taken the lead in BOT transportation projects, the most well-known being Hopewell Holdings' superhighway linking Guangzhou with Shenzhen (and Hong Kong) and with Zhuhai (and Macau).

The Guangzhou - Shenzhen - Zhuhai Superhighway

Project Description

With China's Open Door policy in 1979 came the creation of Special Economic Zones (SEZs) including the Shenzhen SEZ which has developed rapidly to become an extremely important economic area in the Pearl River Delta region of Guangdong Province. In the early 1980s, however, Guangdong Province was considered by many to be an economic backwater. Western and Japanese investors were discouraged not only by problems with telephones and power supplies but also by poor roads. Even though Shenzhen SEZ and Zhuhai SEZ offered valuable benefits in the form of cheap labour, low or no taxes, preferential customs treatment, and minimal bureaucracy to foreign investors, the results were disappointing. When Gordon Wu of Hopewell announced his intention to build and own a privately financed superhighway linking Hong Kong, Guangzhou, and Macau, many observers thought he was crazy. However, Wu's relationship with the Chinese government and

602 R. Wang, supra note 600.
604 "So that the sky won't fall down" The Economist (June 18, 1988) in LEXIS, World Library, Allwld File.
605 Ibid.
606 A. Tanzer, supra note 603.
Guangdong provincial administration built up through close cooperation on the Shajiao B power project, gave him encouragement.\textsuperscript{607}

The most important transport link in the province was between Shenzhen and the densely populated city of Guangzhou about 140 kms northwest of Shenzhen. Freight and passengers moving between these two centres had to rely on a twin-track railway and a single carriageway road.\textsuperscript{608} Buses, coaches, and goods vehicles were the major users of the road with private cars representing only a very small percentage of the total flows.\textsuperscript{609} Travel time from Shenzhen to Guangzhou took an estimated six to seven hours.\textsuperscript{610} By 1992, an estimated 80-90\% of Hong Kong's manufacturers had shifted at least part of their output to China.\textsuperscript{611} Guangdong had overtaken Shanghai as the number one provider of goods in China and its economy was rapidly growing at a rate of 15\% a year, with the Pearl River Delta region experiencing growth of 20\% a year.\textsuperscript{612} Initial calculations of 15,000 cars per day were superseded by an estimated 35,000 vehicles per day using the old two-lane road.\textsuperscript{613} Wu's planned Guangzhou-Shenzhen-Zhuhai Superhighway (GSZ), a dual three-lane carriageway separated by a 9 metre median, was a project intended to link the Guangdong cities of Zhuhai, Zhongshan, Jiangmen, Guangzhou, and Shenzhen SEZ by mid-1993. It would cut the time needed to travel between Hong Kong and Guangzhou to two hours and between Shenzhen and

\textsuperscript{607} E. Luce, "China: Wu Plans Link From Yangtze to Guangzhou" South China Morning Post (August 24, 1991) in LEXIS, World Library, Allwld File. Wu considered that the safest investments were in infrastructure since people need it no matter what the economic or political climate.

\textsuperscript{608} Ove Arup & Partners, "Guangzhou-Shenzhen-Zhuhai Superhighway Shenzhen Section China" at http://www.arup.com.../zsuper/zsuper.htm.

\textsuperscript{609} Ibid.

\textsuperscript{610} A. Tanzer, supra note 603 at 41.

\textsuperscript{611} Ibid at 42.

\textsuperscript{612} Ibid at 40; R. Ocampo, "China: Hopewell Aims to Invest US$2B in Mainland" South China Morning Post (May 7, 1992) in LEXIS, World Library, Allwld File.

\textsuperscript{613} P. Baldinger, "Guangdong's Rockefeller" (Jan-Feb 1993) 20:1 The China Business Review 38 at 41.
Guangzhou to a little more than an hour.\textsuperscript{614} Plans also included construction of parking facilities, gas stations, car repair stations, stalls, and shopping malls along the route.\textsuperscript{615}

China's first superhighway remained on the drawing board for several years during which time it was almost scrapped, but an initial agreement was signed on July 26, 1984, followed by the Phase I agreement on April 23, 1987 giving Hopewell a 30 year concession period from the completion date of June 1994 for that phase.\textsuperscript{616} The GSZ was to be built in three phases: Phase I - a 122 km section linking Shenzhen with Guangzhou; Phase II - a 110 km section linking Guangzhou with Zhuhai near Macau; and Phase III - a 38 km east-southwest ring road around Guangzhou, linking the city to the first two phases.\textsuperscript{617} The cost of the project was estimated at $US3.5 billion with Phase I cost estimated at US$1.4 billion, and Phases II and III estimated to cost US$1.4 billion and US$550 million, respectively.\textsuperscript{618} The contracts for Phase II and III were not signed until November 23, 1992, with both projects to be completed by mid-1996.\textsuperscript{619}

Phase I of the project was further divided into five sections: Section A (20 km), Section B (32 km); Section C South (30 km); Section C North (17 km); and Section D (23 km).\textsuperscript{620}

\textsuperscript{614} "Hopewell's 8-B. Dollar Highway Rolls Ahead" \textit{Jiji Press Ticker Service} (April 24, 1987) in LEXIS, World Library, Allwld File; "Rain may dampen Wu's road hope", \textit{supra} at note 383.

\textsuperscript{615} "Transport and Communications: Agreement on Canton-Shenzhen-Zhuhai Highway" \textit{BBC Summary of World Broadcasts} (October 17, 1984) in LEXIS, World Library, Allwld File.


\textsuperscript{617} K. Chu, "The construction of Hopewell's superhighway has been too slow...; Wu faces rival to mainland highway" \textit{South China Morning Post} (October 11, 1992) in LEXIS, World Library, Allwld File; "Hopewell Signs Contract to Build Highway in China" \textit{Japan Economic Newswire} (November 24, 1992) in LEXIS, World Library, Allwld File.

\textsuperscript{618} \textit{Ibid}; A. Tanzer, \textit{supra} note 603 at 41; "Hopewell Signs Contract to Build Highway in China", \textit{supra} note 617.

\textsuperscript{619} C. Goldstein, \textit{supra} note 479.

\textsuperscript{620} K. Chu, \textit{supra} note 617.
Section A consisted of the Shenzhen Section of the highway, running from the Lou Ma Zhou Hong Kong border crossing to the Second Border Crossing between Shenzhen SEZ and the rest of Guangdong Province at Nantou. This section required major interchanges at Nantou and Futian with connections to the immigration and customs facilities of Lou Ma Zhou as well as construction of approximately 20 bridges to deal with hilly terrain and extensive areas of fishponds.

Phase I was opened to traffic on a trial basis in July 1994 and formally opened in early 1996. Loss of an early completion bonus of US$129 million due to delays in construction tarnished Hopewell's reputation with its own investors. Investors were further dismayed by cost overruns of US$746 million which were attributed to revised plans involving interchanges, property developments, and shopping malls not included in the original budget. Wu expected Phase I to generate about US$375 million annually from its second year of operation with revenue being generated not only from tolls but also in the form of rental income from property developments at the interchanges. A two-tiered toll structure charges local drivers half of the international rate which is charged primarily to Hong Kong drivers.

621 Ove Arup & Partners, supra note 608.
622 Ibid.
624 A.T. Cheng, supra note 352.
625 M. Fletcher, supra note 623; E. Thornton, supra note 623.
626 P. Marriage, supra note 358. About $3 billion in HK dollars. Private cars are charged HK$100 (US$12).
627 "1996 International Major Projects Survey" (October 1996) 100 PW Financing at 53.
Legal Regime

The agreement to build, operate, and then transfer Phase I of the GSZ Superhighway was concluded in April 1987. The agreements for Phases II and III were concluded in November 1992. The discussion in the section dealing with Shajiao C may therefore be referred to for the legal framework in place for Phase I, as well as Phases II and III.

Joint Venture

A joint venture to build Phase I was entered into between a Hopewell company, Hopewell China Development (Superhighway) and Guangdong Provincial Highway Construction Co. (GPHC). Wu had to accept the joint venture in order to win the contract and, in 1992, the two companies split up the project, with Hopewell taking responsibility for the 75-80 km centre section plus operation of the completed highway, and GPHC building the sections at each end. If either party failed to complete its section within the time period stipulated, it would have to pay a penalty of US$1,000 per day per kilometre.

Although Wu intended to negotiate contracts for the second and third phases which did not require Chinese partners, when he signed those contracts in November 1992, they both contracts required joint ventures, although Hopewell was to be solely responsible for construction. Phase II was a joint venture between the same two parties as Phase I; Phase III


629 C. Goldstein, "Skirting the Potholes", supra note 479 at 63; P. Baldinger, supra note 613 at 41.

630 P. Baldinger, supra note 613 at 41.

631 C. Goldstein, supra note 479 at 63.

632 "Hopewell Signs Contract to Build Highway in China", supra note 617.
was a joint venture between Hopewell and Guangzhou Freeway Co., an enterprise affiliated with the Guangzhou Municipal government.\footnote{Ibid; P. Sito & D. Clayton, "Wu team in talks on road project" South China Morning Post (February 14, 1996) in LEXIS, World Library, Allwld File.}

The Agreements

Although an agreement to build the Superhighway was signed in 1984, it took almost three more years before an agreement on Phase I was signed and eight more before the agreements for Phases II and III were signed. All agreements are BOT contracts, giving Hopewell the right to operate the highway for a period of 30 years after which property rights in the project would return to GPHC and, in the case of Phase III, the Guangzhou Freeway Co.\footnote{"Agreement on Canton-Shenzhen-Zhuhai Highway", supra note 615.} The completion date for Phase I was set for June 1994 with an early completion bonus possible of up to US$115 million, an amount equivalent to estimated toll revenues earned to completion date.\footnote{K. Chu, supra note 617; "Rain may dampen Wu's road hope", supra note 383.} The early completion bonus was to be paid out in the form of a loan which had to be applied towards reduction of debt under the financed investment agreement or otherwise used in connection with Phase I.\footnote{K. Chu, supra note 617.} Hopewell would still earn a portion of the bonus if only its section of Phase I was completed early.\footnote{C. Goldstein, supra note 479 at 63.} The Phase I agreement also gave Hopewell the right to develop a total of 6.5 hectares of property at ten interchanges along the highway, as well as 28 more hectares in Shenzhen.\footnote{K. Hamlin, "New Strategy, New Structure" (February 1994) 30:2 Asian Business 12 at 13.} Wu's plans for this property included developing 40 million square feet of shopping mall space with access to local roads as well.\footnote{A. Tanzer, supra note 603 at 41.}
Under the Phase I agreement, Hopewell would keep 40% of the toll income during the first ten years, then a declining percentage over the remaining period. However, in 1995, Hopewell entered into negotiations with GPHC for a larger share of the toll income to account for Hopewell's additional investments in interchanges and shopping malls. For Phase I of the Superhighway, Hopewell was entitled to 42.4% of toll income during the first ten years of operation and 32.8% during the next twenty years.

Under the Phase II agreement, Hopewell had three years to complete the highway and was entitled to retain 100% of revenue for the first 12 years of the thirty year concession period. Hopewell's share of revenue would then drop to 60% for the next 9 years and to 40% for the last nine years. The three year timeframe for construction does not begin until the provincial government, which has sole responsibility for land acquisition under this agreement, had acquired the 8,000 hectares of land required. The contract stipulated that land acquisition had to be completed by July 1993 and that the Chinese side would face penalties if this were delayed by more than six months.

The Phase III agreement for the construction and operation of three sections of a ring road around Guangzhou also provided for a 30 year concession period plus three years for construction. Construction was expected to begin in August 1993 and be completed before August 31, 1996. Hopewell would be solely responsible for operating the highway during the first 10 years of the concession period.

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640 E. Thornton, supra note 623.

641 A.T. Cheng, supra note 352. See also D. Clayton, "Hopewell’s asset sale plan keeps bankers on side" South China Morning Post (November 24, 1995) in LEXIS, World Library, Allwld File.

642 "Hopewell Signs Contract to Build Highway in China", supra note 617; C. Goldstein, supra note 479 at 63.

643 C. Goldstein, supra note 479 at 63.

644 "Hopewell Signs Contract to Build Highway in China", supra note 617; C. Goldstein, supra note 479 at 63.
Project Financing

Under the original agreement for the Superhighway, Hopewell would contribute about 10% of the cost, the Chinese side would contribute 25% of the cost in renminbi and the remaining 65% was to be made up of export credits and syndicated loans. Hopewell's advisors studied the traffic and economic projections of the Superhighway in order to map out the structure of the syndication. Twenty-nine international banks were involved in a syndicated loan of US$800 million to Hopewell for Phase I. Although Hopewell had factored the early completion bonus into its projections, the banks were only concerned that the project be completed by the contract deadline of June 1994. First repayments on the loan were not due until June 1995. Under the financing documentation, Hopewell was required to repay its debt first and so was not expected to make any money from Phase I until 1999. Hopewell obtained a HK $1 billion loan to develop its shopping mall properties along the Superhighway; only nine banks participated in the syndication, indicating a cool market response to Hopewell's plans. In April 1995, Hopewell sold 2.5% of Phase I to Kanematsu Corp. of Japan for US$123.6 million, funds needed to boost Hopewell's cash flow.

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645 “At the AGM of Hopewell Holdings of Hong Kong, the Managing Director, Mr. Gordon Wu, Said the Group's Debt will Peak at About HK$10 BN by 1986 or 1987” Business Times (Singapore) (November 20, 1984) in LEXIS, World Library, Allwld File.


647 “China: China's Road Project Hits Interim Snags” Euromoney Trade Finance and Banker International (November 18, 1992) in LEXIS, World Library, Allwld File.

648 C. Goldstein, supra note 479 at 63.

649 K. Chu, supra note 617.

650 Ibid.

651 “Wednesday, June 22” South China Morning Post (June 23, 1994) in LEXIS, World Library, Allwld File.

In September 1995, Hopewell and its Chinese partner signed a memorandum of understanding to refinance Phase I of the project when costs exceeded original projections.\textsuperscript{653} The memorandum verified the increase in costs and accepted that increase as additional shareholders' loans from Hopewell to the joint venture company. The proposed further financial injection by the Chinese amounted to US$722 million.\textsuperscript{654}

Phase II of the Superhighway was expected to be more difficult to finance than Phase I since traffic on that section was more difficult to predict. However, once the Boca Tigris Bridge crossing the Pearl River estuary was completed, traffic flows were expected to be more than adequate to support Phase II's economics.\textsuperscript{655} Hopewell reported that Cheung Kong Infrastructure and Sun Hung Kai Properties of Hong Kong as well as Kanematsu and Nissho Iwai of Japan were interested in taking minority stakes in Phase II, a move intended to give some comfort to Hopewell's bankers.\textsuperscript{656} Both financing and construction of Phase II have been delayed.

Phase III was initially financed by China Development Finance, part of the Bank of China. The project was suspended over a design dispute for a year and then saved by a financial injection of US$111.8 million by Cheung Kong Infrastructure in September 1996.\textsuperscript{657}

\textsuperscript{653} P. Engardio, "Is Gordon Wu Stretched Too Thin?" \textit{Business Week} (October 9, 1995) in LEXIS, World Library, Allwld File.

\textsuperscript{654} "GEC turbine troubles stall Shajiao C timetable", \textit{supra} note 497.

\textsuperscript{655} C. Goldstein, \textit{supra} note 479 at 63.

\textsuperscript{656} \textit{Ibid}.

\textsuperscript{657} P.W. Financing, \textit{supra} note 627 at 53.
Construction

The contractors for Phase I were Guangdong Provincial Highway Engineering Construction General Co. and Hopewell's Slipform Engineering. Technical advisors to the project included Ove Arup & Partners. 57 subcontractors were employed on the project. Project advisors included S.G. Warburg Securities (HK) Ltd. and Transroute International. Although the contract for Phase I had been signed in 1987, construction did not begin until mid-1991 due primarily to problems and delays in acquiring land for the road. Changes in the original design also caused delays. The original design had called for one 32km section to contain a series of bridges connected by a flat highway. After work began, the engineers found that the ground was too soft to accommodate that design without requiring much future repair, so the highway was elevated along the entire section which added some US$220 million to the cost. Design changes were also required to expand the size of nine interchanges to accommodate the large bus stations needed to attract public transport traffic. The expansion also allowed Hopewell to build bigger retail and commercial developments.

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658 K. Chu, supra note 617; E. Thornton, supra note 623.
659 P.W. Financing, supra note 627.
660 Ove Arup & Partners, supra note 608.
661 K. Chu, supra note 617.
662 P.W. Financing, supra note 627.
663 "Rain may dampen Wu's road hope", supra note 383; K. Chu, supra note 617.
664 Ove Arup & Partners, supra note 608.
665 P. Engardio, supra note 653.
666 Ibid.
667 M. Fletcher, supra note 623.
change added another US$530 million to the cost of Phase I bringing cost overrun to an estimated total of US$850 million.\textsuperscript{668} Then, torrential rains during 1992 slowed construction considerably.\textsuperscript{669} Wu blamed his frustration with the pace of construction on his Chinese joint venture partner. Right from the start, GPHC insisted on sending 300 managers to the project who were, according to Wu, more concerned with their personal comforts than with efficient operation and early completion of the road.\textsuperscript{670} Wu also complained about Chinese methods: rather than buying a machine to do certain work, the Chinese preferred to use cheaper, more labour intensive, but slower methods.\textsuperscript{671} When the joint venture partners split up in 1992, the contractors became responsible for different sections of the highway. All of these delays meant that the Phase I section of the Superhighway did not open until July 1994.

Delays in land acquisition has held up construction of Phase II which had originally been expected to commence in August 1993.\textsuperscript{672}

Phase III, the east-west-south sections of the Guangzhou Ring Road, is being built by Guangzhou Freeway Co., Hopewell, and Cheung Kong Infrastructure. After a one year delay caused by a design dispute, the project was restarted in September 1996 and is now expected to be completed in 1998.\textsuperscript{673} 

\textsuperscript{668} P.W. Financing, supra note 627.

\textsuperscript{669} P. Engardio, supra note 653. Analysts said that even a brief spell of rain could cost builders five to ten days at a stretch since they would have to wait for the ground to dry out before continuing.

\textsuperscript{670} P. Baldinger, supra note 613 at 41; C. Goldstein, supra note 479 at 63.

\textsuperscript{671} P. Baldinger, supra note 613 at 41.

\textsuperscript{672} I. Tong, "Hopewell in $5.72b highway contract" South China Morning Post (September 3, 1992) in LEXIS, World Library, Allwld File; PW Financing, supra note 627 at 53; "Hopewell Signs Contract to Build Highway in China", supra note 617.

\textsuperscript{673} PW Financing, supra note 627.
Results

To date, the Superhighway has to be viewed as a project that fell short of its predicted success. Wu's "robber baron" approach, inspired by the railway builders in the western US, charging into uncharted territory to build a toll highway and obtaining land for development at the interchanges for additional return on investment, may have been too optimistic given the hurdles presented by highway construction in China. Critics charge that Hopewell failed to do its homework before jumping into construction of the road, misjudging the speed of major civil engineering construction in China, the complexities of land acquisition and budgeting. Unspecified misunderstandings with local officials delayed land acquisition and bad weather and incompatible methods of road construction between Hopewell and its Chinese partner delayed completion, denying Hopewell the early completion bonus it was counting on to continue other project work. Design changes created huge cost overruns which the Chinese agreed, in principle, would be considered as additional investment in the form of loans from Hopewell. The Chinese also agreed to increase Hopewell's share of toll revenues. Analysts viewed this move by Hopewell as effectively asking the Chinese to bail out the project.

Hopewell was counting on its increased share of toll revenues as well as income from the shopping malls, gas stations, car parks, and bus terminals to enable it to recover its entire investment plus a favourable return. These nine commercial centres would be built and

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674 A. Tanzer, supra note 603 at 41; P. Marriage, supra note 358. See also B. Eichengreen, “Financing Infrastructure in Developing Countries: Lessons From The Railway Age” (1995) 10:1 The World Bank Research Observer 75 for an interesting discussion of the implications for today’s policymakers of infrastructure experiences from the 19th century.

675 M Fletcher, supra note 623.

676 "Rain may dampen Wu's road hope", supra note 383.

677 M. Fletcher, supra note 623.

678 Ibid.
funded by Hopewell, but profits would be split 70/30 between the Chinese partner and Hopewell. However, the commercial centres are expected to be mostly vacant for years. Few retailers have shown any interest in the commercial space even though several malls are nearing completion.

To add to Hopewell's problems, in 1994, Hopewell reported that some users of the Phase I section were failing to pay the toll, resulting in an estimated loss of 5% of revenue. Further, although Hopewell claimed that 50,000 vehicles use the highway every day, analysts believed it was closer to 26,000, resulting in still less toll income. In addition, some analysts who had travelled the road a year after it had opened, reported that it already had potholes. In December 1995, a regional newspaper, quoting a confidential loan document, reported that toll revenues were 47% below projections.

However, most observers agree that the toll road will eventually earn significant profits over the longterm. Projected profits for 1997/1998 were estimated at US$130 million. Hopewell's plans to sell 25% of its interest in Phase I in 1995, along with four other major projects, had to be shelved in the face of lukewarm investor interest. Wu estimated

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679 S.N. Vasuki, "Hopewell stalls as superhighway takes its toll" The Straits Times (Singapore) (December 3, 1995) in LEXIS, World Library, Allwld File.

680 A.T. Cheng, supra note 352.

681 "Wednesday, March 9" South China Morning Post (March 10, 1994) in LEXIS, World Library, Allwld File. Hopewell hoped the situation would improve with the installation of a computer system and improved guidelines for toll gate operators and drivers.

682 E. Thornton, supra note 623.

683 Ibid.

684 S.N. Vasuki, supra note 679.


686 K. Hamlin, supra note 638.
the project's value at between US$3.85 and $5.13 billion whereas analysts set net asset values at between US$250 million and US$1 billion. Kanematsu had been expected to buy another 2.5% in Phase I for the same amount it had paid earlier but it was the only company named as a serious buyer at the time.

Phase II of the Superhighway was threatened in 1992 by the Guangdong provincial government's announcement of plans to build a rival highway with an almost identical route to Phase II's Guangzhou to Zhuhai route, reportedly because it was frustrated by Hopewell's lack of progress on the Superhighway. The proposed US$1 billion 146 km highway was to be built and owned by Guangdong's Bureau of Communications, Guangdong Enterprise, and local governments through whose jurisdiction the highway would pass. However, the authorities later decided not to turn this highway project into a competitor of Hopewell's Phase II and determined to confine it to the northern segment of the western delta region, complementing rather than conflicting with Phase II. Phase II has still not gone ahead, however. Hopewell applied for approval for construction in the spring of 1994. In 1995, it was still negotiating with Chinese officials concerning the routes of Phase II. Wu's reaction was to comment that if the problem could not be resolved, Hopewell was prepared to carry out a massive alteration.


689 A. Ma, "Kanematsu to raise highway stake, says Hopewell" South China Morning Post (November 30, 1995) in LEXIS, World Library, Allwld File.

690 K. Chu, supra note 617.

691 Ibid.

692 C. Goldstein, supra note 479 at 62.


of related projects, and to terminate the highway at Zhongshan instead of Zhuhai. The mayor of Zhuhai had demanded that the highway circle the city's outlying islands to which demand Hopewell responded with revised plans to terminate the road outside the city limits. Phase II now requires an additional US$450 million to build and land acquisition has still not been resolved.

Phase III of the Superhighway also ran into problems early on. An inner ring road was rumoured to be planned for downtown Guangzhou, forcing Hopewell to plan to build its own road into town to protect its investment. While Hopewell negotiated for approval to build the extension and gain the right to develop land adjacent to the road, work on Phase III was suspended. The Guangzhou municipal government then agreed to build a road linking the ring road to the heart of the city. At the same time, Hopewell and the Guangzhou municipal government were discussing how to scale down the ring road to allow it to proceed without further delay. Cost estimates of the elevated tollway, including resident relocation and land acquisition for commercial and residential properties, amounted to HK$9.29 billion or about US$1.1 billion. Hopewell had planned an elevated, eight lane highway with 10 interchanges modelled on the Washington, D.C. Beltway. Although Hopewell had been rumoured to have withdrawn from the project in early 1996, Guangzhou offered better terms in an effort to keep the company involved in the project: 100% of profits for the first 15 years of operation rather than the originally agreed 10 years and an increase in Hopewell's share of the profits for the

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695 Ibid.
696 E. Thornton, supra note 623.
698 E. Thornton, supra note 623.
700 P. Baldinger, supra note 613.
remaining 20 years from 40% to 50%. Hopewell had already invested about US$100 million in Phase III.\(^\text{701}\) However, it was not until September 1996 that work recommenced with the injection of funds by Cheung Kong Infrastructure.\(^\text{702}\)

Although Hopewell's current financial troubles may be clipping its wings for road projects in China, at least in the near term, other foreign investors continue to be attracted to Guangdong by its 15 to 20% rate of return on highway projects. By the end of May 1996, Guangdong provincial entities had signed 25 highway construction contracts worth a total US$ 7 billion.\(^\text{703}\)

**Water Supply and Treatment**

It has been stated that providing an adequate amount of safe drinking water is one of the most fundamental responsibilities of a government.\(^\text{704}\) As China’s cities continue to grow, the demand for water is increasing; China currently has at least 300 cities where the demand for water is greater than the available supply.\(^\text{705}\) As demand rises, the cost of providing more water also rises, since more advanced systems become necessary or water has to be pumped in from more distant sources.\(^\text{706}\)

\(^\text{701}\) P. Sito & D. Clayton, *supra* note 633.

\(^\text{702}\) PW Financing, *supra* note 627 at 53.


\(^\text{706}\) *Ibid*. The World Bank has predicted that the cost of supplying water in one Chinese city, Shenyang will rise from just US four cents per cubic metre in 1988 to US 11 cents by the year 2000.
Given China’s population, its water requirements are huge with demand growing at 20% per year in major cities, compared to 2% or less in the UK.\textsuperscript{707} Not surprisingly, water projects are attracting more investors. A 1995 report estimated that China’s investment requirements for the water and sanitation sector from 1995 to 2004 at US$101 billion or 1% of GDP.\textsuperscript{708} However, water projects are considered to be riskier than power projects, each deal being different with few unifying characteristics.\textsuperscript{709} The greatest risk is political, water being viewed as an essential commodity to which the population considers it has a free right or at least a right not to be cut off in cases of non-payment of charges.\textsuperscript{710}

The water industry in developing countries is generally heavily subsidized and underpricing is a major issue.\textsuperscript{711} Other risks faced by developers include water loss through leakage, diversion through informal, unauthorized channels, and improper metering or billing due to the effects of unauthorized diversion systems and corruption.\textsuperscript{712} Another problem area is water pollution: for companies to improve water quality they must control the source of the water and governments do not want the responsibility of ensuring a good source of water.\textsuperscript{713} To adequately meet these risks, developers require a better rate of return than they might expect for a power project; a higher rate of return means higher costs to the user. The consequence has been that, in Asia, many water projects are stalled in the tender and planning

\textsuperscript{707} Ibid. A large water treatment plant in the UK produces 100,000 cu. m. per day, whereas, the author points out, a large plant for China is one that can produce one million cu. m. per day.

\textsuperscript{708} E. Thornton, “The Rush to Modernize”, supra note 8 at 42.


\textsuperscript{710} Ibid.

\textsuperscript{711} J. Parry, supra note 705. A World Bank study found that on average, the revenues from selling water covered only 35% of the cost of providing it.

\textsuperscript{712} Ibid. Beijing loses more than 20% of the water it treats. It has been estimated that as much as 60% of water treated in Asian cities is lost after it leaves the treatment plants.

\textsuperscript{713} “Asia Waste and Water”, supra note 709.
stage, with only ten deals concluded since 1995 and 13 in the financing stage. Many water developers have turned their attentions to selling their services as advisers or trouble-shooting specific problems with only the more ambitious looking for BOT contracts.

The involvement of the International Finance Corporation (IFC) in water development deals in China has emphasized projects where the private sector is given operating control and even the right to collect the revenues. The previous focus of privatization in Asian water projects has been on individual plants, ignoring the existing systems that they are expected to feed into which may be plagued with problems.

Observers consider the water sector to be a peculiar one since projects ideally need to be structured so that investment can be doubled every few years as the business evolves. This is done in telecommunications projects, but with water projects there are rarely clear investment plans and repayment is less certain than in either the power or telecommunications sectors.

Export credit agency involvement in this sector is rare since projects are generally smaller and most equipment is obtained locally; strong sponsors are therefore essential to get a project off the ground and attract lenders. Therefore, the limited number of good sponsors currently in the market have a near-monopoly of water deals and can afford to be very selective in their investments, which is not good news for governments that need foreign investment to develop this area.

714 Ibid.
715 J. Parry, supra note 705.
716 “Asia Waste and Water”, supra note 709.
717 Ibid.
718 Ibid.
719 Ibid.
Shanghai Da Chang Water Treatment Plant

Project Description

In the mid-1990s, Shanghai had a daily water supply capacity of 4.854 million cubic metres with annual water sales of 1.29 billion cubic metres, 46% of which went to industrial use.\(^{720}\) In the past five years, Shanghai’s industrial output has grown at an average annual rate of 17.9% indicating a similarly growing need for water.\(^{721}\) Shanghai relies primarily on the Huangpu river and Suzhou Creek for its water supply, both of which are polluted to varying degrees.\(^{722}\) Recent figures indicate that about 4.93 million cubic metres of raw sewage flow into the Yangtze River, Huangpu River, and Suzhou Creek every day and that the first phase of a sewage treatment plan designed to treat 30% of the total, is able to treat only 1.26 million cubic metres per day because some factories have yet to connect to the sewage disposal pipeline.\(^{723}\) The Municipal Government has developed a tap water supply plan which includes plans to build a number of new waterworks including those at Da Chang Village to serve the Pu Ki district of Shanghai.\(^{724}\) Shanghai, China’s second largest city, is considered by some water companies as the most important market in China given its current estimated population of 14.5


\(^{721}\) "Shanghai’s industrial output growth averages 17.9%" Agence France Presse (August 12, 1997) at C-afp@clari.net.

\(^{722}\) R.M. Ward & L. Wen, supra note 704 at 142-143. The authors note that Shanghai produces 5.4 million cu. m. of liquid waste daily with industry contributing 4 million cu. m. of which 58% is discharged directly into the Huangpu and it tributaries with the balance flowing through a series of sewer lines and open ditches into the river system, 70% of which ends up in the Huangpu with the remainder being dumped into the mouth of the Yangtze river. At 144-145.


\(^{724}\) "Shanghai: Infrastructure", supra note 720; PWFinancing, supra note 627 at 55.
million and the huge demand for quality water. In March 1994, the World Bank approved a US$160m loan to help finance a $475m water treatment programme initiated in Shanghai in 1991 to improve water quality and control pollution. Shanghai directs 2% of its local annual GDP to treat pollution, an amount that is much higher than the national Chinese average of just 0.8% and has planned to increase that amount to 3% between 1996 and 2000 in order to reach its target of having 92.8% of its drinking water up to acceptable standards.

Foreign direct investment has flowed into Shanghai in the last few years, amounting to almost $3 billion in 1995, or 7.8% of all investment into China. This has been attributed, among other things, to Shanghai’s more liberal attitude towards the outside world, which downplays the political orthodoxy of Beijing bureaucrats, something it can afford to do as a city with about 1% of China’s population that provides Beijing with 10% of its revenues.

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725 M. Fletcher, “Cities for Sale” (June 6, 1997) 23:22 Asia Week 48; however, in “Shanghai takes shape” (May 3, 1997) 343:8015 The Economist 27, a recent city government estimate of 17 million was reported. This figure was said to include so-called migrant workers in Shanghai, workers from the countryside who have come to Shanghai to find better paid work.

726 Wu, Z., “China: Lyonnaise Des Eaux to Build Waterworks” Shanghai Star (May 23, 1997) in LEXIS, World Library, Allwld File; see also M. O’Neill, “Pioneer Tibet Share Welcome As “Minority Concept” The Reuter Asia-Pacific Business Report (September 5, 1996) in LEXIS, World Library, Allwld File describing Shanghai’s need for good mineral water from areas like Tibet since its own water is polluted. One report indicates that parents in Shanghai teach their children not to drink water directly from taps and that all water for human consumption is boiled: see R.M. Ward & L. Wen, supra note 704 at 142.

727 “China: WB Okays Loan for Clean Water” Shanghai Star (March 15, 1994) in LEXIS, World Library, Allwld File; “World Bank Approves Shanghai Water Treatment Loan” Reuters North American Wire (March 9, 1994) in LEXIS, World Library, Allwld File. The loan is for 20 years, including a five year grace period at the Bank’s standard interest rate of 7.27%. See also “Shanghai companies win bid for large pumping station” Xinhua General Overseas News Service (August 26, 1991) in LEXIS, World Library, Allwld File; “Sewage works protects river”, supra note 723.

728 Q. Chen, “Rivers In Clean Up” Shanghai Star (April 30, 1996) at http://china-window.com/shanghai/ssstr/4m/4m30d1.html; Shanghai’s annual GDP is estimated at US$29.7 billion, see M. Fletcher, supra note 725 at 48.

729 “Shanghai takes shape”, supra note 725.

730 Ibid.
In 1995, negotiations were concluded between Bovis Ltd. (Bovis) and Thames Water International (Thames Water), two British companies, and the Shanghai authorities, to build a US$73 million water treatment plant at Da Chang on a BOT concession basis. The project involved the design, construction, and operation of a plant capable of treating 400,000 cubic metres of water per day, over a twenty-two and a half year period. Full production was to occur by July 1998 at which point the plant would treat about 7.5% of the city’s current clean water output. The Da Chang project is the first wholly foreign owned and non-recourse financed BOT project of its kind in China.

Legal Regime

The Da Chang project is subject to the national laws and regulations already discussed in the various preceding sections. As a project developed and negotiated at the municipal level, it is also subject to legislation passed by the Shanghai municipal government.

The Shanghai municipal government has promulgated its own Rules of Shanghai Municipality on Examination and Approval Procedures for FIEs, adopted August 23, 1996 by

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731 “China: Bovis Poised For #70M Chinese Private Finance Deal” Reuter Textline, Building (September 29, 1995), in LEXIS, World Library, Allwld File.


735 In addition to the legislation set out in the following paragraphs, see also Rules of Shanghai Municipality on Labour and Personnel Management in FIEs, adopted December 19, 1987, promulgated December 20, 1994, in CCH at 240-025.
the 29th Session of the Standing Committee of the Tenth Shanghai Municipal People’s Congress. These Rules encourage foreign investment which is able to promote the development of modernisation in Shanghai and specifically encourages FIEs which adopt advanced technology and equipment or which adopt scientific management methods.

On June 21, 1996, the Shanghai municipal government also passed measures regulating the use of land by FIEs and providing certain incentives to those enterprises. The normal land use fee payments may be deferred, reduced, or exempted where the land is to be used, among other things, for the construction of urban infrastructure facilities, such as the Da Chang water treatment plant.

Joint Venture

Bovis, a subsidiary of the Peninsular & Oriental Steam Navigation Co., acts as a building contractor and construction project manager on a worldwide scale; Thames Water is a water management company involved in international water and wastewater operations, management, and construction. In a 50:50 joint venture, the two companies created an

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736 And promulgated the same date by the Standing Committee of the Shanghai Municipal People’s Congress [English translation] in CCH, China Laws for Foreign Business Special Zones and Cities 1995 – (Sydney: CCH Australia, looseleaf) at Shanghai, 240-055

737 Article 3, Rules.

738 Administrative Measures of Shanghai Municipality on the Use of Land by Foreign Investment Enterprises, CCH at para. 240-045.

739 Ibid, Article 15(2).

740 “China: Joint Venture Contract Award for $73,000,000 Build-Operate (BO) Water Treatment Project, Bovis, Thames Water UK” ESP-Business Opportunities in Asia & the Pacific (June 1, 1996) in LEXIS, World Library, Allwld File.
offshore company to sign the contract for the Da Chang project and then subcontracted the project to a wholly foreign-owned enterprise that they created onshore to operate the project.\textsuperscript{741} This structure allowed the companies to avoid the problem that a concession contract could not be awarded to an unincorporated company and a foreign company could not be incorporated in China without a concession contract; it also allowed them to divest the project more easily, allowing potential buyers to avoid involvement with Chinese authorities.\textsuperscript{742} Bovis is largely responsible for building the plant while Thames Water will operate it under a management pact, supplying treated water to the Shanghai Municipal Waterworks Company (SMWC), a firm wholly-owned by the Shanghai municipal government, for a period of 20 years.\textsuperscript{743}

The Agreements

Under the main contract, the Bovis/Thames Water consortium is responsible for the financing, design, construction, operation, and management of the plant until 2018.\textsuperscript{744} Construction of the first phase with a capacity of 200,000 cubic metres per day was to be completed within 18 months and the second phase to be finished 12 months later.\textsuperscript{745} The

\textsuperscript{741} "China: Deals of the Year, Shanghai Da Chang, Shanghai's Surprise" \textit{Euromoney Trade Finance and Banker International} (January 27, 1997) in LEXIS, World Library, Allwld File [hereinafter "Deals of the Year"].

\textsuperscript{742} \textit{Ibid}; "Thames Water, Bovis take 51.1 mln $ir loan to fund Shanghai water plant" \textit{Exte Examirer} (April 25, 1996) in LEXIS, World Library, Allwld File.

\textsuperscript{743} G. Soledad, "Increased risk appetite for project finance" \textit{AsiaMoney} (December 1996/January 1997) in LEXIS, World Library, Allwld File; "BZW Completes Financing For Shanghai Water Project" \textit{Reuters Financial Service} (June 25, 1996) in LEXIS, World Library, Allwld File [hereinafter "BZW Completes Financing"].


\textsuperscript{745} "China: Loans Signed – Shanghai Da Chang Water Treatment Plant - $51.1M – Term Loan" \textit{Euroweek} (February 2, 1996) in LEXIS, World Library, Allwld File [hereinafter "Loans Signed"].
concession company is entitled to operate the plant for 20 years after which it is to be
transferred to the Shanghai Municipal People's Government.\footnote{Ibid; “China: Bovis Team Wins #45M China Deal”, supra note 733.} Construction of the first phase began in April 1996.\footnote{G. Soledad, supra note 743.}

SMWC signed an offtake or water purchase agreement on October 4, 1995 which will provide renminbi tariff payments to meet the project's operating and financing costs, and provide a fixed investment return to the joint venture, regardless of the quantity and quality of water produced.\footnote{“China BOT financing closes, spurring hopes of more to come” International Trade Finance (July 5, 1996) in LEXIS, World Library, Allwld File [hereinafter “China financing closes”]; “Loans Signed”, supra note 745; “China: Water Project Secures Underwriting” Euromoney Trade Finance and Banker International (November 30, 1995) in LEXIS, World Library, Allwld File; G. Soledad, supra note 743.} SMWC's obligations have been guaranteed by the Shanghai Urban Construction Investment & Development General Corporation, an investment arm of the Shanghai government, which itself provided a letter of support.\footnote{“Loans Signed”, supra note 745; “China financing closes”, supra note 748.} In addition to its letter of support, the Shanghai government also agreed to put in concession management measures to give some degree of protection to both lenders and investors, as the measures become effective when there are changes in Chinese laws which may affect the project.\footnote{G. Soledad, supra note 743.} If the project is terminated, SMWC is required to pay an amount that would be enough to cover the debt.\footnote{Ibid.}

Since all payments will be made in renminbi, the agreements stipulate that the amount must be sufficient to convert into the required amount of US dollars; this leaves the lenders with the risk of currency convertibility.\footnote{Ibid.} However, the borrower, Bovis Thames (Shanghai) will have full access to Shanghai's Foreign Exchange Swap Centre and the China Foreign
Exchange Trade System, the local equivalent of an interbank market. For the first time, a Chinese bank, the China Construction Bank will act as security agent, undertaking on a ‘best efforts’ basis to convert the renminbi revenue stream into US dollars in the market.

Project Financing

Bovis and Thames Water signed an agreement to take a US$51.1 million syndicated loan to finance part of the project on April 25, 1996. The remaining 30% of the US$73 million cost, US$21.9 million was to be provided by the two companies themselves, partly in the form of equipment for the project. On June 25, 1996, sixteen international overseas banks signed a US$53.4 million syndicated loan facility.

The syndicated loan was arranged by four banks: Barclays de Zoete Wedd Asia (BZW), Credit Lyonnais, Standard Chartered Capital Markets Ltd., and Sumitomo Bank which committed US$4.275 million each. Six other lead banks took US$3.25 million each and five other manager banks US$2.25 million each. The total loan package was divided into two tranches: the main US$51.1 million loan and a US$2.5 million standby facility to fund financing.

753 “China financing closes”, supra note 748.
754 “BZW Completes Financing”, supra note 743; G. Soledad, supra note 743.
755 “Thames Water, Bovis take 51.1 min dlr loan to fund Shanghai water plant”, supra note 742.
756 “Oversubscribed”, supra note 733.
757 “China financing closes”, supra note 748. Lenders had their commitments scaled back in March 1996 when the project financing was oversubscribed. See “Oversubscribed”, supra note 733. One report notes that the swing towards syndicated loans and away from floating rate notes which were popular fund-raising instruments over the past few years, is partly due to their treatment as trading assets, which restricts the amount banks can hold. See “Project finance specialist put focus on region” South China Morning Post (November 18, 1996) in LEXIS, World Library, Allwld File.
759 “Loans Signed”, supra note 745.
costs incurred under tranche A in the event there was significant delay in the completion of the first phase.\textsuperscript{760} The loan carries an interest rate 1.9 percentage points or 190 basis points above LIBOR and has a maturity of ten years.\textsuperscript{761} Other terms included a drawdown period of 30 months, a grace period of 3 years, and repayment in 15 semi-annual instalments.\textsuperscript{762} The loan is backed by a letter of support from the Shanghai municipal government, an assignment of project contracts, and cashflows.\textsuperscript{763} There is also an interest rate swap allowing the borrower to pay fixed rate and the lenders to receive floating rate interest.\textsuperscript{764} The financing package was one of the first limited recourse financings implemented in China without a foreign exchange guarantee from a local financial institution.\textsuperscript{765}

It has been reported that to show its commitment to the project early in the negotiations, the Shanghai municipal government passed a new BOT law which allows foreign investors to participate in the water sector for the first time and entitles the project company to prioritized foreign exchange arrangements through a facility with the People’s Construction Bank.\textsuperscript{766} It was also willing to take devaluation risks and interest rate risks through a swap structure arranged by Citic, the regional economic investment body.\textsuperscript{767}

\textsuperscript{760} Ibid.

\textsuperscript{761} “Thames Water, Bovis take 51.1 mln dir loan to fund Shanghai water plant”, supra note 742; “BZW Completes Financing”, supra note 743; “China: Deals, Update, Asia Pacific, Da Chang Pricing Released” Euromoney Trade Finance and Banker International (June 30, 1996) in LEXIS, World Library, Allwld File.

\textsuperscript{762} “Loans Signed”, supra note 745.

\textsuperscript{763} Ibid.

\textsuperscript{764} Ibid.

\textsuperscript{765} “China financing closes”, supra note 748; “Oversubscribed”, supra note 733; “BZW Completes Financing”, supra note 743.

\textsuperscript{766} “Deals of the Year”, supra note 741. This report has not been corroborated, however, and legal contacts in the PRC have been unable to find a record of such a law having been passed by the Shanghai Municipal government, suggesting perhaps that it may well be an internal guideline, or neibu, rather than a public or published law. The Shanghai Municipal government has promulgated its own Rules of Shanghai Municipality on Examination and Approval Procedures for FIEs, adopted August 23, 1996 by the 29th Session of the Standing Committee of the Tenth Shanghai Municipal People’s Congress, promulgated the same date by the Standing Committee of the Shanghai Municipal People’s Congress [English translation] in CCH, at Shanghai,
Construction

Although construction began on the first phase of the project in 1996 and completion is expected at the end of 1997, there have been no reports on its progress.

Results

Although the project has not yet been completed and put into operation, the Da Chang deal is considered to be a success by participants and observers alike, giving new confidence to project developers discouraged by the slow pace of BOT developments in China.\(^\text{768}\) The deal’s success has been attributed in part to the Shanghai municipal government’s involvement, a sound loan structure, and strong sponsorship from Bovis and Thames Water.\(^\text{769}\)

Arranging the deal from approval to signing took nearly two years, a timetable that most observers regard as ‘fast track’ since China’s lack of any standard form of project financing means each project has to be negotiated on its own terms.\(^\text{770}\) BZW found that every aspect of the Da Chang deal was difficult to agree, from structuring it, to testing the new structure, to making it acceptable to the Shanghai municipal government and the market.\(^\text{771}\) However, BZW also acknowledged that, if it had been four or five years earlier, a deal

\(^{240-055}\) It may be this law that the report refers to, although it could not be considered a law on BOT, specifically. Article 32 provides that these rules are to take effect from October 1, 1996.

\(^{767}\) *Ibid.* However, with revenue being paid in renminbi and debt servicing in US dollars, both the sponsors and lenders are still taking some currency risks.

\(^{768}\) "Oversubscribed", *supra* note 733; “China financing closes”, *supra* note 748.

\(^{769}\) "Oversubscribed", *supra* note 733.

\(^{770}\) “Deals of the Year”, *supra* note 741.

structured in this way would have been impossible, but that financial institutions in China are now starting to take risks they would have refused then.\footnote{772}{Ibid.}

Following the Da Chang project in this sector is the Chengdu water project, recently approved by the State Planning Commission, which will adopt the project structure used in Laibin B, requiring international competitive tenders.\footnote{773}{“Asia Waste and Water”, supra note 709.}
Table 1
Summary of Case Study Projects

**Energy**

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
<th>Type of Enterprise</th>
<th>Financing</th>
<th>Date Signed</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shajiao B 2x350MW Guangdong</td>
<td>US$512 m</td>
<td>Joint venture (J/V) Hopewell Holdings (HK) &amp; Shenzhen SEZ Power Dev. Co.</td>
<td>$48.22m supplier credit - Jexim bank HK$600m + Y11 bn 46 bank syndicated loan $17 m Hopewell equity</td>
<td>1984/85 Construction began July 1, 1985</td>
<td>August 1987 Due April 1, 1988 – bonus paid of US$50m</td>
</tr>
<tr>
<td>Shajiao C 3x660MW nxt to “B”</td>
<td>US$1.87 bn</td>
<td>J/V – Hopewell &amp; Guangdong General Power Co. 40/60</td>
<td>US$150m Hopewell equity US$750m synd. loan (mat. 7.5 yrs, 1.375% over LIBOR during constr. to 1% after completion)</td>
<td>December 1992 Construction began May 92</td>
<td>1995 Full commercial operation June 29, 1996</td>
</tr>
<tr>
<td>Laibin B 2x350MW Guangxi Zhuang A.R.</td>
<td>US$560m</td>
<td>Wholly foreign-owned – Edf consortium (Fr &amp; EU)</td>
<td>US$190m 10 yr syndic. loan + US$55m standby facility @ ≤ 1% over LIBOR US$300m export credit plus shareholder equity</td>
<td>approved May 95 bidding docs out Dec 95 – bid bond US$10m draft Nov 96 final May 97 – performance bond US$30m</td>
<td>end 1999</td>
</tr>
</tbody>
</table>
**Transportation**

Guangzhou-Shenzhen-Zhuhai Superhighway – 240 km dual 3 lane carriageway

<table>
<thead>
<tr>
<th>Phase</th>
<th>Cost</th>
<th>Type of Enterprise</th>
<th>Financing</th>
<th>Date Signed</th>
<th>Completion Date</th>
</tr>
</thead>
</table>

**Water**

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
<th>Type of Enterprise</th>
<th>Financing</th>
<th>Date Signed</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Da Chang Water Treatment Plant Shanghai 400,000 cu.m.</td>
<td>US$73m</td>
<td>WFOE Bovis Thames (Shanghai) Ltd. (UK)</td>
<td>US$53.4m syndic. loan – 16 banks @ 1.9% over LIBOR US$21.9m equity partly in form of equipment</td>
<td>April 25, 1996 and June 25, 1996</td>
<td>Phase I end 1997 constr. began 1996 – 200,000 cu.m.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Signed</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 23, 1992</td>
<td>Delayed – originally to be completed mid-1996</td>
</tr>
<tr>
<td>November 23, 1992</td>
<td>1998 – originally mid-1996 Suspended for 1 year over design dispute</td>
</tr>
<tr>
<td>April 25, 1996</td>
<td>Phase I end 1997 constr. began 1996 – 200,000 cu.m.</td>
</tr>
</tbody>
</table>
### Table II

**Summary of Legal Regime Affecting Infrastructure (1979-1997)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Laws in Force</th>
<th>Project Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>Joint Venture Law (Equity Joint Ventures)</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>Foreign Enterprise (FIE) Income Tax Law</td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>Regulations for Implementation of JV Law Provisional Regs for tax exemption or reduction interest earned in China Rule for Implementation of Exchange Control Regs re: FIEs Regulations for Arbitration over Economic Contracts</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td></td>
<td>Shajiao B</td>
</tr>
<tr>
<td>1985</td>
<td>Foreign Economic Contract Law</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Laws in Force</th>
<th>Project Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>Sino-foreign Cooperative Joint Venture Law</td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>Arbitration Provisions of CIETAC(^{775}) Environmental Protection Law</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>Revision of Joint Venture Law Rules Implementing WFOE Law</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>MOFERT Explanation of WFOE Law Foreign Investment Enterprise and Foreign Enterprise Income Tax Law (FIEIT) Implementing Rules of FIEIT</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td></td>
<td>Shajiao C Phase II and Phase III – GSZ Superhighway</td>
</tr>
<tr>
<td>1993</td>
<td>Peoples Bank of China Notice permitting designated forex banks to conduct RMB forex hedging MOFTEC Provisions on Examination &amp; Approval of FIEs</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>Foreign Exchange Control Regs PRC Electric Power Law</td>
<td>Da Chang</td>
</tr>
<tr>
<td>1997</td>
<td>Provisional Measures on Administration of Project Financing from Outside China</td>
<td></td>
</tr>
</tbody>
</table>

\(^{775}\) The China International Economic and Trade Arbitration Commission was established in 1954 as the Foreign Trade Arbitration Commission. The 1956 Provisional Rules of FTAC of the China Council for the Promotion of International Trade also affect foreign investment in China since, according to T.A. Steinert, supra note 774 at 4, all contracts relating to foreign investment contain an arbitration clause.
Chapter III

Efficiency or Development – finding the balance

Of the many aspects of infrastructure projects that are of concern to investor developers and to host governments, three have been selected to provide the framework against which the efficiency/development paradigm will be examined, using specific examples from the case studies presented in Chapter II. By examining and weighing the respective concerns of the foreign investor and the Chinese government as they arose and were dealt with in actual infrastructure projects, it is hoped that a clearer picture will develop as to where these concerns have balanced out, allowing the projects to go ahead and, ultimately, affecting the success or failure of each. The three aspects, rate of return, control, and risk are necessarily interrelated but will be discussed separately here, in an attempt to give the reader a clearer picture of the significance of each one in the context of an entire project and the varying effects of the paradigm in each case. There is an unavoidable overlap of data in doing so, and I beg the reader’s indulgence for what may at first glance appear simply repetitious.

To further assist the reader and to briefly restate what is meant by the terms ‘efficiency’ and ‘development’ as they are used in this paper, Table III provides a summary of the characteristics of each as listed in Chapter I.

Rate of Return

The ability to earn a rate of return that is consistent with the perceived risks and the market alternatives for their investment, is a key issue for foreign investors. For foreign investor/developers, China poses real political and regulatory risks combined with

### Table III

**Characteristics of Efficiency and Development**

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramountcy of individual autonomy and</td>
<td>Suspicion of foreigners and their motives.</td>
</tr>
<tr>
<td>freedom of choice.</td>
<td>Desire to retain state control over what are considered to be state assets.</td>
</tr>
<tr>
<td></td>
<td>Desire to achieve equality of the regions.</td>
</tr>
<tr>
<td>State function limited to passing and</td>
<td>Desire to limit foreign ownership of state assets or property to the</td>
</tr>
<tr>
<td>enforcement of laws and regulations to</td>
<td>greatest extent possible.</td>
</tr>
<tr>
<td>assist market and protect property rights.</td>
<td>Recognition that foreign capital moves to projects where the return is</td>
</tr>
<tr>
<td></td>
<td>greatest and the risk least.</td>
</tr>
<tr>
<td>No government interference or intervention</td>
<td>Desire to minimize wage gap.</td>
</tr>
<tr>
<td>in market mechanisms.</td>
<td>Encouragement of TVEs and desire to reduce urban migration.</td>
</tr>
<tr>
<td></td>
<td>Desire for full employment.</td>
</tr>
<tr>
<td></td>
<td>Preference for labour intensive over capital intensive techniques in</td>
</tr>
<tr>
<td></td>
<td>many areas.</td>
</tr>
<tr>
<td></td>
<td>Recognition and fear of the revolutionary possibilities in a dissatisfied</td>
</tr>
<tr>
<td></td>
<td>work force and peasantry combined with an overriding concern to retain</td>
</tr>
<tr>
<td></td>
<td>political power.</td>
</tr>
<tr>
<td>Rational behaviour of investors will</td>
<td>Desire to be self-sufficient while recognizing the need for foreign</td>
</tr>
<tr>
<td>achieve mutually beneficial results leading</td>
<td>investment capital, technology and expertise to achieve official goals.</td>
</tr>
<tr>
<td>to optimum social welfare for all.</td>
<td></td>
</tr>
<tr>
<td>What benefits the foreign investor also</td>
<td>Desire to provide improved access to higher education and training.</td>
</tr>
<tr>
<td>benefits the host state as unfettered</td>
<td>Desire to provide improved access to better health care.</td>
</tr>
<tr>
<td>investment contributes to economic</td>
<td></td>
</tr>
<tr>
<td>growth and results in prosperity for all.</td>
<td></td>
</tr>
</tbody>
</table>

significant development costs whereas there are attractive investment alternatives available in other parts of Asia.\textsuperscript{777} Why then, do foreign investors continue to look for projects in China?

\textsuperscript{777} Ibid.
The answer must partly be found in the rate of return that is available in any particular project. The concept of rate of return refers generally to a guaranteed minimum return on capital for investors, something that has been most contentious in the power sector in China.\textsuperscript{778} Chinese inflexibility on pricing and lack of understanding of what constitutes a commercial tariff rate for electricity sold by a project to a national grid along with the fear of being accused of giving too much away to foreign investors, meant that projects proposing a rate of return above 12% were not approved during the early 1990s.\textsuperscript{779}

Investors have argued that a high return is necessary both to offset their political risk as well as to satisfy their lenders who are providing large loans to fund projects in a weakly regulated, politically unsettled, economically turbulent environment with foreign exchange risk.\textsuperscript{780} However, since debt financing usually accounts for 60-75% of the funding for infrastructure projects, a guarantee of return of equity is usually not as important to lenders as it is often made out to be.\textsuperscript{781}

Supporting the concept of a guaranteed minimum return on equity are tools such as take-or-pay off-take agreements, indexation provisions for tariff structures, and foreign exchange 'guarantees' or comfort letters.\textsuperscript{782}

In the early days of foreign investment in the power sector, international consortia obtained guaranteed annual rates of return of between 25% and 30%, to reflect the risk being

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\textsuperscript{778} J.E. Lange & N.C. Howson, \textit{supra} note 343.


\textsuperscript{780} “Opening the Floodgates”, \textit{supra} note 779.

\textsuperscript{781} J. Leung, \textit{supra} note 8 at 48. This is due to investors leveraging equity with a high level of debt to obtain a higher return on their investment.

taken as well as the size of their capital investment. Gordon Wu’s Shajiao power plants are among these high-earning projects.

Shajiao B

With Shajiao B, the rate of return was in the range of 25-30%. This figure is very high when compared to the usual returns on power projects in the developed countries, and thus, very attractive to foreign investors in this sector.

In the 1980s, Guangdong’s great need for electricity to keep its many factories and businesses operating at full capacity, was certainly an important factor in the cooperative attitude of Chinese officials and governments at different levels. The tax holiday and preferential tax rate also contributed to Hopewell’s rate of return. Allowing the project to be written off over eight years of the ten year concession period, meant that the last two years would be even more profitable for Hopewell. This was clearly a good deal for Hopewell and, with electricity prices equivalent to what Hong Kong utilities were charging the Chinese, it was also a good deal for Guangdong.

The clause providing for an early completion bonus helped to increase Hopewell’s profit on this project. It has been suggested that Wu set a timetable he knew he could easily meet given the experience of the investor consortium in building similar types of power plants, and then demanded early completion bonuses which would be practically guaranteed with the expected saving of time on engineering and design, as well as construction. If this is true, then the Chinese would certainly have felt they had been taken advantage of, if not unfairly treated, during contract negotiations, thus reinforcing their suspicion of foreign investors. The

783 D. Ibison, supra note 577.

784 I. Tong, supra note 672.

785 M. Hernandez, supra note 779 at 53.
fact that early completion and commercial availability of power from Shajiao B allowed Guangdong industry to produce an extra US$500 million may have made the bonus easier to pay, allowing the authorities to save face, but if the Chinese had had better information and knowledge before completing the contracts, it is likely that they would not have agreed to an early completion bonus that was practically ‘in the bag’ before work even commenced. Completing a project eight months before the contracted completion date is a clear indication that either the Chinese did not have sufficient information or that they were so desperate for the power that they would have agreed to almost any terms. Considering that the Chinese were used to more labour-intensive and slower methods of construction, illustrated by the fact that Shajiao A, a similar type but smaller plant, was started earlier but completed after Shajiao B, it is likely that this was more a case of insufficient information and knowledge during the contract negotiations. Certainly the penalties included in the contract for failure to finish on time, although passed on by Hopewell to the contractors in the turnkey contract, would have posed little worry for Gordon Wu, who had begun site preparation before the financing had even closed.

Guangdong International Trust and Investment Corporation’s (GITIC) performance guarantee for the power purchase agreement and the supply or pay coal supply agreement ensured, to the greatest extent possible, that nothing would interfere with Shajiao B’s projected earnings. Since payment for electricity was to be made half in renminbi, half in Hong Kong dollars, Hopewell could service its debt. As it turned out, this was less advantageous than had been originally thought, as devaluation of the renminbi caused fairly significant losses for Hopewell later on.786

786 This has been estimated at US$87.5 million. See section on Shajiao B.
Shajiao C

With Shajiao C, Wu earned a return of about 25%. The success of Shajiao B and his personal meeting with the new power brokers in China in early 1990, Jiang Zemin and Zhou Jiahua, led to his being awarded the contract to build Shajiao C. At this time, Guangdong Province was still in desperate need of more power, requesting that Wu increase the proposed plant size by one third to twice the size of Shajiao B.

Wu again demanded and obtained provision for early completion bonuses, to increase his profit margin on the project. By this time, Shajiao B had been in operation for three years and the Chinese would have had that contractual experience to draw on. The fact that they again agreed to early completion bonuses can be attributed here to the fact that Guangdong’s economy was growing at a tremendous rate and more power was needed as soon as possible to sustain the growth rate. Lost production time due to power shortages had to be a key factor in the inclusion of the clause in Hopewell’s contract. The plant was to be similar to Shajiao B and with the experience gained from construction of that plant, it was foreseeable that construction of Shajiao C would go fairly smoothly and quickly.

The power off-take agreement was this time denominated in US dollars at a fixed exchange rate, the hard currency obligations of the buyer again guaranteed by GITIC. Hopewell was not taking any chances on foreign exchange losses with Shajiao C, and the Chinese were evidently comfortable enough with foreign exchange levels in Guangdong province that they could agree to this term.

Hopewell later argued in favour of a twenty year asset depreciation policy rather than the ten year policy currently in force in China, which would help its earnings picture with its own investors. However, it appears that the Chinese were unwilling to change the policy for Hopewell and there is no indication to date that it has been changed.
At the time Shajiao C was completed, Wu had fourteen Letters of Intent from the Chinese to build more power plants. The Chinese government, although cognizant of the need for private foreign investment to develop China's power industry, did not want to replicate the Shajiao C model, which produced returns that were too high for the government which undoubtedly viewed the situation as one where foreign investors were making too much money from Chinese assets. Wu threatened to cancel the projects unless Chinese officials guaranteed him a return of 16%; they did not give in, and Wu cancelled the letters of intent and shifted his power plant plans to other parts of Asia.

The authorities were nervous that they would be seen to be giving too much away to foreigners and, not surprisingly, it was after the Shajiao C deal went through that the unofficial cap on such returns was set at 12-15%. Wu’s self-presentation over the success of his Shajiao plants combined with the authorities’ nervousness over the generous rates of return, ultimately led to the delay in approval of applications for over fifty power deals in China. After Shajiao C, until 1996, no major power plant deals were approved. Clearly, Chinese suspicion of foreigners and their motives, and fear of political criticism and desire to retain power among the highest levels of authority, overrode the need for electricity that continued to exist in many regions of the country.

787 “China: Project Stalemate” Euromoney Trade Finance and Banker International (August 31, 1995) in LEXIS, World Library, Allwld File. A Hong Kong-based US banker commented that "It is not in the Chinese psyche to allow anyone else to make money out of them."

788 A.T. Cheng, supra note 352. Wu was quoted as saying, "We're in China to make money .. not to be altruists."

789 M. Hernandez, supra note 779.

Laibin B

Laibin B was one of the first power plants to be approved in 1996 and was also the first BOT, wholly foreign-owned power plant to be built in China. BOT is an attractive way to raise funds for infrastructure in the Chinese government's view, since it helps reduce the direct financial burden on the government as well as eliminating loan risks. Observers estimated that the rate of return, which was free of the unofficial cap, at 17.5%, although the price paid for power by the Guangxi state entity reflects an effective government guarantee of a rate of return of between 12 and 15%. If the 17.5% figure is correct, it indicates a relaxation of the unofficially capped rate of return and is undoubtedly a reflection of the Chinese government's awareness that a small plant located in a poor, more remote region of China which had questionable creditworthiness and no proven track record with respect to meeting foreign exchange obligations, would pose greater difficulty for investors in attempting to secure financing and thus would be less attractive to investors for purposes of preparing and submitting bids in the first place. In keeping with concern over rates of return, the Chinese did require that the projected rate of return be included with each bid. However, the desire to achieve some equality among the regions obviously prompted the Chinese authorities to consider bids projecting rates of return above the 12-15% levels. Furthermore, the fact that no major power projects with foreign investment had been approved for some 3-4 years highlighted the probable failure of the Chinese to meet their year 2000 planned targets and provided the impetus to the approval of Laibin B.

With a slim 12-15% rate of return guaranteed to Laibin B's investors, the companies involved in the bidding process had to be in it more for the prestige and possibility of future,

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792 J. Ma, supra note 511 [HSBC unit]. Sources believed that this 12% rate of return was much lower than the average 18 to 20% available at other Asian power plants.
perhaps more lucrative, projects in China than just the immediate returns from Laibin B.\textsuperscript{793} Competitive bidding in an increasingly competitive global power industry is also beneficial to the Chinese in that it will bring foreign investors to China and will ultimately provide the host government with more electricity at lower prices.\textsuperscript{794}

By opening the process up to international bidding, the Chinese were able to compare the information and pricing formulas offered by the various consortiums, thus reducing their suspicion and distrust of foreigners making too much money from Chinese assets. In fact, the stiff competition between international consortia caused four to withdraw and others to regroup before the final bidding even began, reducing the original number from 12 to 6. The consortium led by EdF which was eventually awarded the project quoted the lowest prices for electricity from the new plant. Some observers questioned whether EdF would break even on the project but if the unofficial 17.5% rate of return is realized, it seems likely it will do so. In any event, EdF has already been involved in building two Chinese nuclear power stations, has to be fully aware of China's electricity requirements to the year 2000, and is gambling that this possibly less remunerative project may win it more power plant projects in China.

Guangdong-Shenzhen-Zhuhai Superhighway

The completed Phase I has a projected rate of return of 15-20%. The contract to build the highway was signed the year Hopewell completed Shajiao B. Gordon Wu's star was therefore high in the Chinese heavens. Wu was again offering to build infrastructure which was desperately needed by Guangdong – a highway connecting the capital Guangzhou with the economically booming region in Shenzhen SEZ. Guangdong's need for improved access for

\textsuperscript{793}D. Clayton, \textit{supra} note 511 [officials dispute]; "IPP success not guaranteed in China", \textit{supra} note 517.

\textsuperscript{794} J. Anderson & M.T. Burr, \textit{supra} note 575.
production and distribution of goods was evident to anyone travelling the only road from Shenzhen to Guangzhou in the early 1980s.

Wu’s eagerness to profit from another Chinese project with an attractive rate of return on his equity investment, may have blinded him to some hard facts that came to haunt him later: difficult terrain would require re-engineering and re-design causing construction delays; his Chinese joint venture partner would prefer to save money by employing more labour-intensive construction methods rather than buying more efficient, but more expensive machinery, and would bring in hundreds of managers for on-the-job training in road construction which caused further construction difficulties and delays; his toll revenue projections may have been based on overly optimistic vehicle numbers for the Pearl River Delta at least for the early years of the concession; the political sensitivity inherent in raising tolls to meet additional or increased costs; and, his western business approach to his projects and his success in making considerable money in China from “Chinese state assets” would cause resentment in Chinese official circles leading to a lack of cooperation from Chinese authorities on various aspects of the highway operation, including toll collection and payment.

Even if Wu had earned the early completion bonuses provided by the contract, he would not have been able to include them in his profit as they were to be provided in the form of a loan to go to the reduction of debt only.

With Wu’s share of the toll income for the first 10 years of his concession set at 42.4% and 32.8% for the last 20 years, his profits are expected to be extremely healthy as traffic volume increases and his commercial retail centres become busier. Hopewell’s projected profits for 1997-98 are estimated at US$130 million. Toll revenues have been below projections but Hopewell indicated that it would double the highway tolls and had been given "verbal assurance" to that effect from the Chinese authorities. However, the actual introduction of higher tolls could be problematic as well as possibly reducing traffic volume on the highway.\footnote{S.N. Vasuki, supra note 679; PW Financing, supra note 627 at 53 reports that Hopewell cut tolls 20-33% to build patronage to 50,000 vehicles per day and then sought a 100% increase to offset currency losses.}
Chinese reluctance to stir up political opposition at the local level is likely to delay this move for some time.

With Phase II which has been much more difficult to finalize, Wu has negotiated 100% of revenue for the first 12 years of his 30 year concession, 60% for the next 9 years and 40% for the last 9 years. This appears to afford him a better rate of return on his investment than Phase I, however it is likely that the traffic projections for Guangzhou to Zhuhai are considerably lower than those for the Phase I stretch which also carries a lot of Hong Kong traffic.

The Phase III agreement for the partial ring road around Guangzhou provided a similar division of revenue as the Phase II agreement. Wu's tough negotiating stance on land acquisition to build commercial properties at the interchanges plainly indicate that the rate of return without these extras would not be sufficient to interest a foreign investor in building roads in China.

Da Chang

With the Da Chang water treatment plant, the developers are to receive a fixed investment return, regardless of the quantity and quality of water produced as agreed by the local waterworks company purchasing the water. Although the actual rate of return has not been disclosed, it seems likely that it would have to be in the range of at least 15% to 17% to offset the fact that the project is a municipally-approved rather than a central government-approved project, and therefore vulnerable to new national regulations or legislation that might affect investor return.
Control

Control generally refers to control over the operation and management of a project, including design and construction. Majority ownership and control will allow a foreign investor to assume less risk for the rate of return and to have more potential for increased return by operating more cheaply and more efficiently.\textsuperscript{796} Private companies usually consider the technical and managerial side of a project to be their areas of competence and responsibility and do not welcome government involvement or decisions in these areas.\textsuperscript{797} Some observers consider that the Chinese government’s unwillingness to surrender control borders on paranoia, especially when it concerns the financial side of a project where Chinese parties are involved in raising money abroad.\textsuperscript{798}

As a reflection of the government’s concern over control, by mid-1995, there were still no published guidelines governing foreign equity investments in infrastructure projects; the percentage of foreign ownership allowable was not stipulated, although there was a loosely-applied general directive providing that foreigners should not be allowed to have majority control in infrastructure projects that closely affect the daily lives of the people.\textsuperscript{799} Project advisors recommended that investors take 51\% equity in Chinese projects as they could then

\textsuperscript{796} C. Hunter & C. Lau, \textit{supra} note 21 at 20.

\textsuperscript{797} World Bank, \textit{supra} note 33 at 11.

\textsuperscript{798} This point is starkly illustrated in the recent promulgation of the \textit{Provisional Measures on Administration of Project Financing from Outside China} of April 1997. M. Hernandez, \textit{supra} note 779 at 51. The central government has, however, also told municipalities that they will be responsible for meeting their own financial needs in future. When Chinese joint venture partners are local authorities or municipalities needing to raise funds for infrastructure projects by selling floating rate notes or revenue bonds, the Chinese central government will be concerned about the inflationary potential of injecting large amounts of foreign currency into the country’s economy. In the early 1990s, China suffered a period of high inflation, reaching 27\% in 1994-95. See D. Lindorff, "India vs China: For Now, Investors’ Choice is India" (1995) 9:1 Global Finance 46 at 47.

\textsuperscript{799} D.D. Deamer, \textit{supra} note 5 at 10. The author notes that lower level governments in projects that did not need central government approval and even the central government in large scale projects that it recognized would not be done unless foreign investors were allowed more than 50\% equity often ignored the directive.
implement their own management controls, accounting methods, production and marketing plans, etc. Many prospective investors in power projects demanded majority ownership and control of the project's assets as a basic condition for participation in the early 1990s but no such projects were among the few actually approved by the Ministry of Electric Power and the State Planning Commission.  

The traditional structure in sino-foreign joint ventures, particularly in the energy sector, left majority ownership and control of the operation in the hands of the public utility. This insulated the foreign investor from the operational risks but limited it to a relatively low fixed rate of return. Take or pay agreements were usually limited to protection of debt and operation cost portions of the tariff, leaving the investors' return at risk; investors only owned a fixed return on investment. The new BOT guidelines, which are expected to become law in the near future, now allow foreign investors full control through the possibility of 100% ownership of a project. Although allowing the investor to earn bigger returns through operating arrangements that reward better-than-expected performance, 100% ownership also brings with it operation and construction risk which foreign investors did not normally have to deal with under the traditional structure and which complicates financing to a greater extent, requiring the foreign sponsor/investor to put more into a project than previously required.

800 Ibid. The author, a consultant to joint venture partners involved in Chinese projects, considers that even with minority control a foreign investor can still play a key role in managing the joint venture through virtual control at board level by assisting to shape the organizational culture and by pushing for international-style management policies and procedures.

801 J.E. Lange & N.C. Howson, supra note 343 at 23.

802 C. Hunter & C. Lau, supra note 21 at 20.

803 J.E. Lange & N.C. Howson, supra note 343 at 23. The authors note that investors see majority control as a means to protect them from downside risks while allowing for potentially substantial returns on the upside, i.e. when combined with pricing structures that would provide incentives for efficient operation.

804 Ibid.

805 Ibid.
Shajiao B

The Shajiao B project was a sino-foreign joint venture but also a BOT concession. At that time, joint ventures were often divided 50:50 or 49:51 with the Chinese party taking a majority position. However, the Chinese parties took just 45% of Shajiao B, leaving 55% for the foreign party, Hopewell Holdings Ltd. The fact that, just a few years after the Open Door policy came into effect, Guangdong Province was in desperate need of electricity to serve both its current and growing needs, and with Shajiao being located between Guangzhou and Shenzhen SEZ, probably the two biggest user areas of electricity at the time, undoubtedly had some influence on the government’s agreement to allow Hopewell to take a majority position which would allow it to obtain financing more easily.

The partnership was also spared any interference by the authorities in the design or construction process itself. Having control over this process allowed Hopewell to use its own more efficient, faster techniques, making it possible to earn the early completion bonuses stipulated in the contract.

Since this is a fairly small project by power industry standards in China, the concession period was just ten years. This alleviated some of the government’s concerns over foreign ownership rights in state assets.

BOT by definition gives the project company control over operation and management of the plant and, as such, Hopewell was better able to control plant performance and power supply availability in order to meet both its contractual obligations as well as the demand for power exceeding the contractually-set figures.

806 A.E-S. Tay, supra note 363 at 2-525.
Shajiao C

In 1990/91, Hopewell took 40% and the Chinese took 60% of Shajiao C, another joint venture, BOT project. The fact that the Chinese took majority interest may be a reflection of the size and importance of this project which was the biggest coal-fired power plant in China at the time, and the ensuing financing requirements, but it also may reflect a greater knowledge and awareness by the Chinese of their own strengths and bargaining position. A number of foreign investors were expressing interest in power projects in China, and in Shajiao C specifically, in spite of the chill in international relations that followed the Tiananmen massacre in June 1989.

Having virtual control over plant operation and management again allowed Hopewell to ensure maximum efficiency and available output in order to maximize the returns on investment. Even though the Chinese hold majority ownership in Shajiao C, there is no indication that they have attempted to exercise any control over or to interfere in the operation of the plant, although there are almost certainly a contingent of Chinese workers involved in, but not in control of, plant operation and management. As a minority owner, but with experience in all aspects of power projects, Hopewell would retain considerable influence over all major decisions.

Laibin B

The approval for the Laibin B project ended the dry spell for power projects in China in 1995. After the Shajiao project returns caused the Chinese authorities to tighten up on approvals, effectively fixing rates of return on power projects at 12%, foreign investor interest in these projects faded. The Chinese government recognized that to bring in the foreign capital needed to build projects, particularly in areas not normally attractive to foreign investment,
certain changes would have to be made. The Draft BOT Circular now provides a temporary solution to the problem. Rather than negotiating separately with interested foreign investors, the Laibin B project was the first to be put out to international bidding using standard contracts and an open, more transparent process. The location of the project, in a poorer, less accessible region of China, Guangxi Zhuang, may have encouraged the Chinese government to turn to the more transparent process and to offer 100% ownership in a power project, but it also discouraged a number of foreign investors from pursuing their original interest in the project.

The BOT concession originally gave 20 years of control to the successful bidder but this was reduced to 18 years in the final agreement, reflecting the close competition among those interested in the project, despite its apparent drawbacks. The location, anticipated low rate of return and the tight timetable for financing, construction and commencement of commercial operations, may have scared off a number of potential investors, but as an experiment, Laibin B undoubtedly confirmed Chinese opinion that foreign investors will invest in Chinese projects for a less-than-generous rate of return and at reasonable prices to Chinese utilities even where conditions are not ideal.

The option of taking 100% ownership of a project eliminates potential management conflicts but it also removes what some consider to be key operation support from having a Chinese partner.\textsuperscript{807} Certainly, the feasibility and advisability of allowing the foreign company to take a 100% interest in all cases may be questionable. For instance, although the off-take agreement might contain a pricing formula that allows the foreign investor to avoid the involvement of the pricing bureaux and offers the prospect of a more certain rate of return, having to deal directly with Chinese state entities on other issues (e.g. suppliers, utilities, grid operators) may be more difficult without another Chinese state entity as a partner.

\textsuperscript{807} D. Clayton, supra note 523 [hopes high].
The GSZ Superhighway was first proposed in 1984 and the Phase I portion agreed to in 1987, the year Shajiao B was finished. This was Hopewell’s second major project in China. Wu did not want a joint venture for this project but the Chinese government would only award the contract on those terms. In order to win the contract and earn the excellent returns on investment that the project forecast, Wu had to accept. Hopewell’s joint venture partner was involved not only in the operational side of the project but also in the construction side. In this case, Hopewell discovered that having a state entity as a joint venture partner in the transportation sector was more a hindrance than a help.

The Chinese partner sent 300 managers to work on the project, a number which Hopewell considered to be hugely inefficient but which the Chinese no doubt considered a great educational and training opportunity for these people to the ultimate benefit of the country. Their disagreements over construction methods illustrates the different attitudes towards the value of labour and machinery on a cost benefit analysis, a clear efficiency vs. development conflict. Government delay in acquiring land for the project combined with other delays outside Hopewell’s control, created some consternation in the Hopewell camp about finishing in time to collect the substantial early completion bonuses. These unresolvable differences finally caused a split in the partnership, not dissolving it, but dividing responsibilities so that Hopewell would not be “dragged down” by its Chinese partner and lose its bonuses.

The lessons learned by Hopewell during Phase I construction and the Chinese government’s recognition that insistence on sharing every aspect of the BOT project was perhaps less effective and less efficient than having one party solely responsible for at least the construction aspect, resulted in Hopewell obtaining agreements for Phase II and Phase III which gave it 100% control over construction.
Although Phase I has provided for a sharing of the toll revenues between the joint venture partners and Hopewell has control over toll collection, Hopewell has no control over toll increases or over enforcement of toll collection for those Chinese who refuse to pay the tolls. Hopewell’s requirement for management control stems from Wu’s disregard for Chinese management ability and his desire to protect his investment. However, he still needs the assistance of his Chinese partner both to intervene on Hopewell’s behalf to ensure that all highway users, whether official or otherwise, pay the toll and to seek approval from the authorities to increase tolls, usually an unpopular move. Wu’s flamboyant, more western style of operating has ruffled some Chinese feathers, particularly at the local levels where Hopewell needs official support to continue operating in a profitable manner.

Control over various aspects of a project is important to most foreign investors such as Gordon Wu. However, those aspects which cannot be controlled directly in the transportation sector, such as pricing, land acquisition, and tariff collection are very politically sensitive and must be approached carefully by the foreign side. Even with a Chinese joint venture partner to help smooth the way and obtain official cooperation, the foreign partner must still be respectful of Chinese ways and Chinese officialdom. In the GSZ project, Wu’s background and connections did not help him with the people who could actually affect the success of the project. His split with his partner over construction issues, his “I know best” attitude, and his preference for a western approach rather than an eastern, more relaxed approach to business and getting what he wanted, inevitably tarred Wu with the ‘foreigner’ brush, when he could have been hailed as a ‘local boy made good’ in Guangdong Province.

Da Chang

Compared to many BOT infrastructure projects, the US$73 million Da Chang water treatment plant is a relatively small project in a rather specialized sector.
As a WFOE with 100% control over the project, Bovis Thames can count on most development, construction, and operational risks being effectively managed. On the other side of the coin, the partnership has had to invest 31% of the cost of the project itself and obtain financing for the remainder outside of China. This reflects a substantial financial commitment to a project by a foreign investor but is a trade-off against having a free hand to develop and operate the project without government interference.

Although the Da Chang project is vulnerable to changes in national laws, an external aspect of the project over which Bovis Thames has no control, the concession management measures agreed by the Shanghai Municipal government which become effective in the event of such changes in the national laws have essentially neutralized the effect such changes might have on the partnership’s involvement in the project. As both a party to the BOT agreement and the local law-making authority, the Shanghai Municipal government is unlikely to take any steps or pass any laws that would jeopardize the success of Da Chang or affect the foreign investors’ returns.

**Risk**

Infrastructure projects, which are generally large, unmoveable, longterm projects, vulnerable to regulatory changes, and which earn revenues in local currency, have politically-sensitive tariffs and often sell to a government entity in the host country, present a number of significant risks which a foreign investor cannot realistically eliminate but which may be managed in such a way that the project can still proceed.\(^{808}\)

From an efficiency perspective, “efficient risk allocation” means that the party that is best able to manage a particular risk assumes that risk, allowing reduced costs and increased

\(^{808}\) G. Bond & L. Carter, *supra* note 41 at 15.
returns for those involved. Projects may still get off the ground even without efficient risk allocation but costs will be higher and tariffs charged will also have to be higher.

The International Finance Corporation ("IFC") has identified two general categories of risk in infrastructure projects generally:

1. commercial risks:
   a) project-specific risks, i.e. in developing and building the project, operating and maintaining the assets, and finding a market; and
   b) economic environment risks, i.e. interest rate changes, inflation, currency risk and price fluctuations in international raw material and energy markets;

2. non-commercial or policy risks:
   a) project-specific, i.e. expropriation, changes in the regulatory regime, the failure of the government or state enterprise to meet its contractual obligations; and
   b) political risk, i.e. war, civil disturbances.

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810 IFC, supra note 809 at 67.

811 China’s move to make the renminbi convertible on the trade account in December 1996 was a step in the right direction, boosting market confidence in the currency. However, China has yet to make the renminbi convertible on the capital account as well which is what it needs to do to continue to attract cheap foreign capital into its growing economy. G. Yu, “Renminbi Transparency” (1997) 160:12 Far Eastern Economic Review 27.

812 The ‘ticking time bomb’ that frightens bankers and contractors is the possibility that a government may decide to insist on renegotiating a contract rather than being blamed for politically unpopular price increases provided for in contracts allowing contractors to adjust prices when changes occur in commodity prices or exchange rates. See “The trillion-dollar dream” (1994) 330:7852 The Economist 66. See also, M. Stewart-Smith, "Private Financing and Infrastructure Provision in Emerging Markets" (1995) 26:4 Law & Policy in International Business 987 at 996-998.

813 G. Bond & L. Carter, supra note 41 at 16. The ADB may have found a new role in helping other lenders to overcome their nervousness about political risks by acting as lender of record and selling down loans to commercial banks. See H. Sender, “Mid-Life Crisis” (1996) 159:20 Far Eastern Economic Review.
Investors in China projects face additional regulatory and legal risks associated with the complexity and lack of transparency of the approval process, foreign exchange control, the lack of a comprehensive commercial legal system, the pricing control system, and caps on rates of return.  

The IFC has further identified three stages of an infrastructure project which present different risks and therefore, different financing requirements:

1. the development phase which is very high risk and where usually only equity capital is used;
2. the construction and start-up phase which is high risk, requiring large amounts of finance, usually comprising a mixture of equity, subordinated debt, senior debt and guarantees; and
3. the operational phase which present lower risks and often permits refinancing with bonds.

Although investors may be willing to undertake an infrastructure project that presents a number of risks, lenders are less willing to do so until they are satisfied that the project has been structured in such a way that risks have been managed to the greatest extent possible. Lenders’ view of the riskiness of a project is usually reflected in the rate of interest charged. Whereas commercial risks are perhaps more easily dealt with by the parties involved, non-commercial risks pose special problems given the difficulty in predicting the direction of a government, particularly in developing countries. Therefore, countries that do not present a politically stable environment together with an investor-friendly government will find it difficult to attract foreign

814 Clifford Chance, supra note 6 at 63; see also M. Bociurkiw, “China to lay foundation for BOT in public works” Asia Times (April 11, 1996) in LEXIS, World Library, Allwld File; “China Survival of the Fittest”, supra note 473. The report notes that if specific legal points are a worry, all the more so is the perceived arbitrariness of the Chinese government. Investors remain unsure whether the concept of legality, as distinct from that of political authority, has really been made in the minds of China’s leaders.

815 G. Bond & L. Carter, supra note 41 at 18-19.
investors to build infrastructure projects.\textsuperscript{816} Most foreign investors do not have the personal resources to develop and build projects without external financial backing and if the lenders balk, the project will not get done. It should be noted however, that in the current competitive global financial climate, many financial institutions are eager to obtain new lending opportunities and may be more willing to take on a riskier project than they had been previously.

The World Bank has noted that one reason for the long drawn-out negotiations and frustrations on all sides in infrastructure projects is a shared misunderstanding about the degree of perceived and real risks in a particular project; who should bear these risks; and what returns are reasonable.\textsuperscript{817} Needless to say, host countries tend to perceive much lower risks than do investors and lenders in the private sector.\textsuperscript{818}

\textbf{Shajiao B}

With the Shajiao B project, there were several factors present to reduce the risk during all three phases of the project.

The acute shortage of electricity in Guangdong province in the early 1980s which had a detrimental carry-on effect for industrial production, not only indicated that there would be a market for all the power that Shajiao B could generate but also suggested that Chinese officials would be co-operative in providing the necessary approvals with a minimum of delay. Gordon Wu's knowledge of the conditions in Guangdong, gained through his personal business

\textsuperscript{816} See "The law of the market" (1997) 343:8013 The Economist 78. Although economists have had difficulty proving that countries which treat investors poorly have a harder time attracting their money, two recent articles link a country's legal system to the size of its capital markets and conclude that systems based on the civil law, particularly the French system which is least protective of shareholders and creditors, tend to have smaller markets. They conclude that investors who have been demanding legal reforms in many countries now have some evidence to support their argument.

\textsuperscript{817} World Bank, supra note 33 at 11.

\textsuperscript{818} Ibid.
involvement there, Hopewell’s creditworthiness and good reputation with lenders and Wu’s personal connections with members of the Chinese leadership, tipped the balance in Hopewell’s favour in winning the project over Hopewell’s competitors. Wu’s offer, made to Premier Li Peng personally, for Chinese interests to take 45% of the project company and its profits also appears to have been a key factor in winning the project. By selling another 5% of the project to a Japanese company, Hopewell reduced its overall risk by 50%. Although the project company was responsible for everything from design to construction to commissioning and operation of the plant, with the risk of delay and cost overruns that that responsibility brings, it passed these risks onto the subcontractors through fixed price, fixed completion, agreed quality, turnkey contracts.819

The project company reduced its market and revenue risks by obtaining a power off-take agreement at a fixed price and on a take or pay basis from the local utility.820 A fuel supply agreement, also at a fixed price and on a supply or pay basis, reduced the risk that inadequate fuel supply would jeopardize the plant’s availability to the utility, thereby reducing the risk of penalties or reduced revenues. Since the creditworthiness of both the local power utility and the fuel supplier were not ascertainable, a performance guarantee was provided by the local state-owned investment body, GITIC. The fact that the Chinese authorities were able to come to a compromise over the governing law of these agreements, which would directly

819 C. Walker & A.J. Smith, supra note 347 at 213.

820 Although there were reports that, in year 8 of the concession, Shajiao B was operating below the minimum off-take level of 60% and that there was an oversupply of power in the Guangdong grid at that time, the Chinese agreement to “take or pay” for electricity produced by the plant would compensate the project company for any loss of revenue. See “Report punctures Wu profit claims”, supra note 499. Demand for electricity appeared to be slowing in Guangdong Province in the mid 1990s and the transmission and distribution facilities to enable the power surplus to be transferred to areas experiencing power shortages have not yet been completed. A large portion of these facilities were expected to be completed by 1996-97. Meanwhile, unit sales from Shajiao B fell by 25.7% from fiscal year 1995. see E. Thornton, “Peaked Capacity” (October 24, 1996) 159:43 Far Eastern Economic Review 58 at 59. Chinese plans to close expensive, less efficient oil-fired power stations and a major restructuring of the Ministry of Electric Power in 1996 were expected to resolve the oversupply problem and would benefit the Chinese utility tied to the take or pay agreement. These smaller, oil-fired plants account for an estimated 40% of Guangdong’s total generated output. See “Report punctures Wu profit claims”, this note.
affect the revenues of the project company and therefore its ability to service its debt, is an indication of Chinese recognition of the realities of foreign lender requirements and a further indication of the Chinese need for the power generated by the project.  

Other sweeteners offered by the Chinese were early completion bonuses and tax concessions for what amounted to at least half of the ten year BOT period. The Shajiao B plant was a repeat design which reduced design, engineering and construction time. By building in such bonuses to the agreement, Hopewell managed to increase its profit margin on Shajiao B and to reduce the risk that might have been created by any delay.

The Chinese government avoided any financial risk by not taking any direct financial responsibility for the project but it did agree to provide an emergency loan facility to provide funds to the project in case of force majeure thus lessening Hopewell’s sovereign risk to a certain extent. The Chinese also provided certain guarantees to protect against exchange rate fluctuations which, with China’s non-convertible currency, would fall solely within government control. That these guarantees were limited in their reach and effect is apparent from the fact that Hopewell still swallowed 70% of the foreign exchange losses when the government devalued the renminbi in the early 1990s.

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821 Although the Chinese government wanted the Chinese version of the loan documentation to prevail in the event of a dispute, it agreed that both the Chinese and English versions would be equally authoritative. "Conventional Project Financing", supra note 371. In the legal opinion from the Hong Kong law firm a statement was included that the Chinese versions were fair translations of the English. This can be seen as a further indication of its recognition of the realities of international project finance and its desire for the project to go ahead.

822 The Chinese government’s reluctant acceptance of, if not angry reaction to, Hopewell’s earning the full bonuses, must be taken as an indication that the Chinese did not consider the timeframe for construction that they agreed to in the contract to be excessive and that they, therefore, were not on a level playing field when the contract was negotiated. Although Wu claims that the Chinese reaction was softened when he pointed out to them that extra power generated ahead of schedule allowed US$500 million worth of extra production by Guangdong factories (a figure that greatly overshadowed his US$50 million bonus), the fact that approvals of foreign-invested power plants were stalled after Shajiao B and C were built, has to be a fair indication that the Chinese reaction to Wu’s profits on those two plants had not softened at all and was effectively being reinforced by traditional Chinese suspicions of foreign investors and their motives.
The Chinese did insist on a requirement that the subcontractors and labour force be local or, at least, Chinese nationals, in order to meet its desire for training and educational opportunities as well as employment opportunities for its own people. Although this posed a number of problems during the construction phase which could have created serious delays for the project, the Chinese were more than willing to increase the size of the workforce as soon as the work fell behind schedule. As already noted the project finished well ahead of its stipulated completion date.

Although the joint venture contract was governed by Chinese law, the Chinese did agree to have any disputes dealt with by Hong Kong courts, but only after friendly consultation or conciliation had been attempted. This raised the risk that any judgment obtained in Hong Kong might not be enforced by Chinese courts. The Chinese government refused to give any guarantees or promises as to enforcement and since Chinese law is not clear on this point, the project company had to rely on a legal opinion from a Hong Kong law firm regarding the enforcement of foreign judgments in China to satisfy its lenders. Without much precedent on this point, those involved were essentially counting on Chinese judicial recognition of legal process elsewhere and Chinese willingness to stand by their own laws and not change them to suit their political needs. They were also counting on Chinese recognition that non-transparent legal conditions might discourage further investment. However, there was nothing concrete that could have given either the lenders or the project company a great deal of comfort on this point. That being said, it appears that all concerned were willing to accept the legal risks involved in order to go ahead with what was considered a very lucrative project.

823 "Conventional project financing", supra note 371.
GSZ Superhighway

After Shajiao B, the next project signed by Gordon Wu was the Guangdong-Shenzhen-Zhuhai Superhighway. Factories in Guangdong and Shenzhen SEZ were producing large amounts of goods that needed to be transported to the areas from where they would be exported. An increasing number of vehicles were using an inadequate and outdated road system. But when Gordon Wu proposed the building of the GSZ, Guangdong was still considered to be an economic backwater despite the international success of the annual Canton Trade Fair during this period. Can Wu be considered a visionary or simply a gambler? The proximity of Guangdong province to Hong Kong and the historical connection of the Chinese people in both places make Guangdong a natural place for Hong Kong investment ventures and, in fact, Hong Kong interests represent the largest percentage of foreign investment in Guangdong. Wu evidently considered the risks, as he perceived them, to be worth his involvement in such a huge long term undertaking.

The Shajiao B experience was one that both Wu and the Chinese considered to be successful and with one success behind him, Wu’s personal stock was high. In fact, although the GSZ project had been on the drawing board for several years and had run into difficulties in both planning and negotiating the project, the agreement for Phase I of the GSZ was signed the same year that Shajiao B was completed. However, one successful project does not guarantee another in Chinese infrastructure, particularly when it is in another sector.

Highway construction in China presents not only hurdles common to such projects in other countries, such as difficult terrain and uncooperative weather, but also a significant obstacle in the process of land appropriation. With Phase I, and indeed, Phase II which has not yet been started, delays in land acquisition by the Chinese authorities put off the construction start date by almost 4 years. This was something over which Hopewell had no direct control but which had to be completed before Hopewell could begin. Land for Wu’s planned
interchange shopping malls, auto service stations and bus stations had to be acquired before the engineering of the highway could be finalized. There is nothing in the case studies themselves that would indicate why it took the Chinese so long to acquire the necessary land for this phase of the project, but one might surmise that political considerations such as whose town the road would link with the important distribution network, where less arable land might be found for development and the least number of people disturbed or uprooted by the new route, would have played a significant part in the process.

Even with the success of Shajiao B, Wu had to agree to a joint venture with a Chinese partner in order to win the contract for the GSZ project. A developer's reputation may be important in Chinese eyes, but it is no guarantee that future deals will be forthcoming or that they will be as beneficial as the last one. Each project appears to be judged and negotiated on its own basis. While this may reduce the risk of better informed foreign investors taking unfair advantage of Chinese negotiators, it also slows the process and reduces the potential returns and benefits to the Chinese themselves by delaying the availability of new infrastructure.

It might be said that with GSZ, Wu took on more risk than he needed to, primarily because of his own shortcomings during the planning or development stage in misjudging the speed of road construction in China, the complexities of land acquisition, and even budgeting. Hilly terrain and marshy areas along the Phase I route required elevation of an entire 32 km section of the road creating not only re-engineering of the design but also delays and extra cost as a result. The tropical climate of Guangdong province should also have provided a warning to Wu of the possibility of rain delays which he could have factored into his proposal. The torrential rains that fell in 1992 in the second year of the Phase I construction was, however, probably impossible to predict. However, it is possible that local Chinese road builders may have been better prepared for this eventuality.

Wu's traffic and economic projections were more optimistic than warranted for a project of this nature. An estimate of 50,000 vehicles compared with 26,000 actual user
vehicles, resulting in tolls being 47% below projections, points to considerable weakness in Hopewell’s development phase. Although Wu had agreed on the percentage of toll revenues to be earned and had obtained the right to develop property at each interchange along the highway, he and his advisors had either disregarded other factors such as probable demand for retail space and the actual number of paying users of the highway or had been swayed by optimistic forecasts and estimates that had no basis in reality. This was a risk that Wu was more able to manage although, to be fair to him, the effect of Chinese attitudes towards further foreign investors coming in to lease retail space and Chinese officials’ attitudes towards paying tolls or even collecting tolls from Chinese in more senior positions may have been difficult to predict if not completely unforeseen.

If having a joint venture partner can reduce some of the risks involved in infrastructure projects in China, Wu did not take advantage of that possibility in the GSZ project. Rather than treating his partner with respect and obtaining its cooperation in return, Wu alienated the Chinese state partner and then expected to carry on with business as usual. Wu is a good example of the type of foreign investor the Chinese remain wary of, even with his Chinese background and family ties and his connections to the holders of power in China. In fact, this background may well have been a detriment to Wu on this project giving him the sense that he was the city cousin who had to show the country cousin the right way to do things, charging in without concern for the country cousin’s ways or views on it, then publicizing the problems to the business world and, in doing so, effectively embarrassing his country cousin. Politicians and officials are often reluctant to risk local opposition by setting tolls at levels that allow foreign investors to maximize profits.\footnote{A.T. Cheng, supra note 352. PW Financing, supra note 627 at 53 reports that Hopewell cut tolls 20-33% to build patronage to 50,000 vehicles per day and then sought a 100% increase to offset currency losses.} Official cooperation has been slow to encourage toll payment and collection and there is some resentment towards Wu in Guangdong province as an outsider who always seems to get his own way, something that Wu probably was unable to foresee.
given his somewhat patronizing attitude towards mainland Chinese officials.\textsuperscript{825} Hopewell’s insistence on managing its projects and its assertive role in operating Phase I has caused some resentment among Guangdong officials who say Hopewell does not understand the environment there.\textsuperscript{826} Although Wu has a Chinese background and family ties with Guangdong Province, he is a civil engineer graduate of Princeton who takes a more western approach to doing business, eschewing the Chinese preference for building \textit{guanxi} or favourable relationships by socializing with Chinese officials before talking business.\textsuperscript{827} The highly publicized dispute with his Chinese state partner probably did not help Wu’s cause either.

Although roads are probably riskier projects than power plants, in the case of the GSZ Phase I, Wu, instead of taking steps to decrease his risks, appears to have contributed to the increased risks he ended up taking on the project. Although observers consider that the project will earn a great deal of money eventually, one might speculate that it may not be soon enough to give Hopewell the returns it had expected or even for it to show a profit.

The agreements for Phase II and Phase III of the GSZ project were finally signed in 1992 but Phase III has not yet been completed, and Phase II has not even been started at the end of 1997. The Phase I experience undoubtedly has contributed to the stalling and delay of these other two phases and clearly, the risks appear to be, if not higher than those associated with Phase I, at least recognized as risks from the outset.

Hopewell’s revenues from Phase II will amount to 100% of tolls for the first 12 years of the 30 year concession period, 60% for the next 9 years and then 40% for the last 9 years. This

\textsuperscript{825} Reports that Chinese officials, including officers of the People’s Liberation Army and the Public Security Bureau often refuse to pay the $12 toll for the round trip on Phase I, has also meant loss of revenue for Hopewell. Hopewell asked its Chinese partner to intervene but action from Guangdong officials has been slow partly because they apparently resent what they perceive to be as Hopewell always insisting on getting its own way: A.T. Cheng, \textit{supra} note 352.

\textsuperscript{826} \textit{Ibid.}

\textsuperscript{827} \textit{Ibid.} Wu considers the Chinese to be mediocre managers and, as such, he feels he has to maintain control to protect his investment. However, one of Hopewell’s competitors, New World Development Co., takes a different approach, turning management over to its Chinese partners while retaining the right to audit projects.
redistribution of toll proceeds from what was agreed to in Phase I reduces Hopewell’s risk of reduced revenues from problems with toll payment and collection.

Hopewell blames the delay in construction start-up on the government which has to acquire 8,000 ha. of land for Phase II. Under the agreement, however, Hopewell’s timeframe for construction does not start until this task has been completed. Hopewell also negotiated for payment of penalties by the Chinese if land acquisition were delayed by more than six months but it is not known whether such penalties have ever been paid.

Although Hopewell may lay the blame for the delay at the government’s door, the Guangdong government’s threat to build a rival highway in the face of Hopewell’s lack of progress on Phase II, seems to indicate that all the blame for delay is not the government’s but that Hopewell’s negotiating strategy, no doubt to improve its position after its experience with Phase I, may also be responsible. Hopewell apparently continues to negotiate with Chinese officials concerning the route that the road is to follow. The risk of a competitor highway was probably not foreseen by Wu when this agreement was originally made but governments are not immune from using hardball negotiating tactics and the Guangdong government’s frustration with the lack of progress on Phase II no doubt justified it doing so. The fact that the government changed its plans from a competing highway to a highway running north of Phase II and therefore complementing it, is an indication that the Chinese recognize the warning such a move sends to prospective foreign investors and that they are not willing to take the risk of discouraging future foreign investment, particularly in such large, difficult and expensive undertakings as highway projects.

Although Wu intended the Phase III six lane elevated toll ring road to imitate the Washington, D.C. Beltway, the high costs of the venture required the design to be scaled down. The design dispute with Guangzhou Municipal government suspended the project. Again, here was a project that appears not to have been completely thought through during the planning and development stage. Whether this was a result of Wu’s rushing into things too quickly in
order to win the project or whether it was the Guangzhou Municipal government which had second thoughts, is not clear. In any case, the risks involved in redesigning and renegotiating the deal on Phase III, which evidently had been perceived differently by each side, were not foreseen.

The Guangzhou Municipal government's threat to build a competing, inner ring road forced Hopewell to divert its attentions from its ring road project to making plans and negotiating to build an extension to its ring road that would link the ring road to the city centre and to obtain the right to develop the adjacent land. By the time the crisis was over, however, Hopewell had spent large amounts on both plans for the extension and the design problem and only a financial injection from Cheung Kong Infrastructure, ("CKI") a competitor of Hopewell in the infrastructure business, allowed it to restart the project.

Although the risk that Phase III would be cancelled, awarded to another company, or threatened by local competition was finally resolved and managed by the parties, it should have been dealt with before problems arose creating extra cost and delays. That the risks involved were finally overcome seems to be less a result of the parties' willingness to compromise than the result of Guangzhou's need for the ring road, Hopewell's interest in making money in China and obtaining future projects there, and CKI's willingness to become involved in a deal that was rapidly going sideways. That CKI agreed to inject US$1 million into a project where the parties were fighting over various aspects of the project is an indication that there is considerable value in the project and that Hopewell was justified intaking on the risks involved in such a project.

The ongoing negotiations over Phase II, a project that was originally intended to have been completed by 1996, indicate that, although the road is still needed, this area is less desperate for the superhighway, whether because of smaller vehicle numbers or less need for better distribution facilities in a perhaps less industrial area than the Guangzhou -- Shenzhen region. Hopewell, which is now better able to recognize the risks involved after its Phase I
experience, is probably negotiating more carefully and running into more sticking points with the Chinese who are not as motivated to make concessions on this Phase as they were on Phase I. Until Hopewell is satisfied that those risks have been managed to an extent that would allow it to complete and operate the project with a certain rate of return, or until the conditions in the western Pearl River Delta require some definite action by the Chinese, Phase II will remain in limbo.

Even though the risks encountered in the transportation sector appear greater than those in the energy sector and despite the problems encountered in all three phases of the Superhighway project, Wu and Hopewell remain interested in transportation projects in China. A bus service jointly owned by Hopewell, Kowloon Motor Bus and Guangdong Provincial Transportation Bureau was set up to run on Phase I in 1996.828 In the early 1990s, Wu had also hoped to extend the Superhighway from Guangzhou through Guangdong and Hunan to the Yangtze River, some 1,000 km away, including major cities such as Shanghai and Wuhan.829 Wu had confidently expected work to begin on the highway by 1997 or 1998.830 However, the Superhighway's problems and resulting effects on Hopewell's cash flow and performance, probably means this new project will not land in Hopewell's lap unless it can turn the Superhighway project around in the near future.831 Furthermore, Hopewell needs to continue to work on and pay for Phases II and III, as well as the 102 km Shunde road project832 and the Boca Tigris bridge spanning the Pearl River Estuary, while facing limited refinancing options.833

828 J. Ma, supra note 699.

829 A. Tanzer, supra note 603 at 42; "Hopewell's 8-B.-Dollar Highway Rolls Ahead", supra note 614.

830 E. Luce, supra note 607.

831 S.N. Vasuki, supra note 679.

832 See I. Tong, supra note 672.

833 S. Kennedy, "Long road ahead for HK's Hopewell" Asia Times (February 11, 1997) in LEXIS, World Library, Allwld File. The report indicates that some of Hopewell's biggest backers have been Japanese banks which are now having problems of their own with bad loans and a stagnant economy. As such they were expected to far less aggressive lenders outside Japan at least for the medium term.
Shajiao C

Hopewell’s 40% minority position in the Shajiao C joint venture meant it would take less risk at the outset. By planning to sell 12% of Hopewell’s interest to other investors, Wu hoped to limit his exposure even further. For the Chinese, retaining majority interest in such an important project reduced the risk to national security in allowing a foreign interest to control a key national asset. For Wu, Chinese majority ownership also meant a reduced risk of interference from the pricing bureau.

As with Shajiao B, the take-or-pay power purchase agreement and the supply-or-pay fuel supply agreement, at fixed prices, reduced Hopewell’s risk of the effects of pricing changes later on in the concession period. The Shajiao C power purchase agreement was denominated in US$ at a fixed exchange rate making debt financing possible for Hopewell and reducing the risk that devaluation would cause future losses in profits.834 Since the Chinese utility buying the electricity had unknown creditworthiness, GITIC again guaranteed its currency obligations under the agreement. In fact, it was GITIC’s performance guarantee of payments in US dollars under the offtake agreement that made debt financing possible.835

To reduce the risk that the project’s completion and availability might be delayed, causing further production losses in the economically surging Guangdong province, the Chinese insisted on a turnkey contract with a tight schedule and heavy penalties for delay as well as the requirement that imported coal be used during the initial operating period. This would reduce their risk under the fuel supply agreement given the difficulties involved in transporting

834 C. Goldstein, supra note 441 at 72. To reduce the risk of similar losses, Hopewell set 80% of the price of Shajiao C in hard currency at a fixed HK dollar price.

adequate amounts of coal from northern China. Early completion bonuses were again offered as an incentive, further reducing the risk of delay.

Wu passed the risk of penalties for delay in construction and completion of the project onto an experienced consortium led by GEC Alsthom through subcontracts.

Chinese insistence on the employment of Chinese nationals as subcontractors increased the risk of delay given the lack of experience of many workers. Hopewell was able to offset this by the use of construction techniques and experience gained on Shajiao B. The Chinese also cooperated to reduce the risk of delay by increasing the number of workers on site if the work fell behind schedule.

A Chinese government policy on asset depreciation over ten years instead of a more beneficial twenty years, reduced Hopewell's creditworthiness and attractiveness to its investors. This is a good example of the type of non-commercial or political risk that a foreign investor has little or no control over or effect on. Although Hopewell lobbied to have the policy changed, Chinese reluctance to be seen to be giving too much away to foreigners no doubt explains the lack of action on this issue.

Laibin B

The initial negative reaction to this project from bankers was attributed to Laibin B's remote location, low rate of return, and the lack of confidence generally in BOT power projects in China. The World Bank has deemed Chinese infrastructure projects to be risky because of a lack of sufficiently strong, efficient, and clear frameworks governing regulatory and investment processes.

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836 J. Ma, supra note 549 [finance delays]. The expected complexity of the financing package was another hurdle in arranging the syndicated loan: J. Ma, supra note 511 [HSBC unit].

837 S. Kohli, supra note 559.
Another concern is that the State Council has not yet approved a national BOT law, leaving this project and others to be negotiated on the basis of the draft BOT Circular only. The BOT law, once it is passed, is expected to remove doubts such as those held by the World Bank by regulating the procedures and framework for BOT projects, including the roles of the central and local governments, as well as by specifying how foreign investors would obtain guarantees of access to foreign exchange and be protected against inflation.

Although the construction of Laibin B commenced in September 1997, it is not yet known how construction and operational risks are to be dealt with by the parties, but the initial agreements do give an indication of how risks have been managed in the development phase.

When compared to Guangdong Province on a geographical, financial, and political basis, Guangxi Zhuang Autonomous Region presents a much riskier proposition, right from the outset. The desire of the Chinese government to experiment with draft BOT rules before actually committing them to the status of law as well as its desire to promote equality among the regions, are evidently at the heart of the decision to choose Laibin B as the trial project. Guangxi Zhuang’s average economy by Chinese standards, its independent power grid, and the presence of an existing plant which could be expanded with less capital investment, were all factors viewed with favour by the Chinese. Allowing the project to be built by a wholly foreign-owned enterprise (“WFOE”) reduced the government’s risk but increased the investor’s risk. With greater control over most aspects of the project, the investor is able not only to reduce the risk of delay from construction or management disputes and the penalties associated

\[838\] M. Miller, supra note 539.


\[840\] M. Miller, supra note 539.
with it, but also provide opportunities for increased returns on investment through more efficient management and operation of the plant.

The open and transparent bidding process following international standards allowed investors to better judge the risks to be undertaken. The tight schedule of 28 months for completion, including financing time imposed a risk of late completion penalties on the successful bidder. With no approved national BOT law, the final bidders were negotiating on the basis of draft regulations only, with no clear assurance from the Chinese that once the BOT law is finalized and approved, if it is different from the draft regulations, it would have no effect on projects approved under the draft regulations. With the requirement that the successful bidder post a US$30 million performance bond, many investors were unwilling to accept the risks involved.

China’s requirement for a US$10 million bid bond reduced its risk of lost time and money spent in considering bids which were less fully prepared and perhaps less serious than others. The Chinese also retained the right to begin negotiations with the second group on the short list if they were not happy with the progress of the first group, giving them more leverage in negotiating the terms of the final agreement. In fact, the concession period was reduced from 20 to 18 years over the course of negotiations with the EdF consortium.

The requirement that the bidders post a US$10 million bid bond and the successful bidder to post a US$30 million performance bond can be seen as an indication of the government’s concern in dealing more openly with foreign investors than had been previously the case. International bidding processes must be transparent in order for the bidders to be able to make their proposals properly – in other words, to have full and complete information. In previous deals, negotiations were conducted with various levels of officialdom, all of whom have their own neibu or ‘unpublished rules or policies’ which could affect a project’s approval.

841 "IPP success not guaranteed in China", supra note 517.

842 C. Gailey, supra note 569.
and the terms of any contract. Without *neibu* to fall back on, bid bonds and performance bonds were apparently an acceptable substitute.

Lenders prefer to evaluate projects on their own according to their own standards but the non-transparent nature of China’s legal structure does not allow this. The opinion of the World Bank that Chinese infrastructure projects are risky because they lack a sufficiently strong, efficient, and clear legal and regulatory framework, could only have reinforced the fears of certain investors and lenders that the possible rewards from a project such as Laibin B did not offset the risks involved. Other risks that worry investors include China's refusal to permit foreign banks to install a receiver to run a power plant if the foreign developer cannot meet its loan obligations and China's legal structure, which is not transparent enough to allow banks to evaluate projects on their own and does not allow international arbitration.843

However, the amount of interest shown in the Laibin B tender would have sent a signal to the Chinese authorities that they need not rush into a wholesale revision or strengthening of the legal system as it concerns commercial foreign investors in order to attract the necessary foreign investment even for projects deemed less attractive than others.

Chinese caution in dealing with foreign investors and the desire to ensure that there is no disproportionate advantage or benefit to foreign investors in any project where state assets are concerned can be seen as an attempt to reduce China’s perceived risks in allowing foreign investment in China and in allowing foreign investor involvement in sectors considered sensitive for national security. The fact that the Chinese agreed to put Laibin B to international tender following standard international bidding practice is indicative of Chinese recognition that foreign investors prefer an open and transparent process before committing significant amounts of capital to preparing and developing their proposals. It may also reflect a growing awareness by the Chinese that such a process can reduce the time spent previously in negotiating

843 "IPP success not guaranteed in China", supra note 517.
separately with a number of interested parties to obtain similar results and avoid the risk that the project would become bogged down in a long, drawn-out approval process.

As with the other power plant projects examined here, Laibin B included off-take and fuel supply agreements with the obligations of the buyer being guaranteed by the Guangxi government. Since the creditworthiness of the regional government was effectively unknown to investors, this guarantee was worth less to investors and their lenders than those given by a government with a proven track record such as Guangdong. The cooperation of both the Ministry of Electric Power (MOEP) and the State Administration for Exchange Control (SAEC), however, worked to reduce the foreign exchange risk of the investor. By allowing Laibin B's prices to be set according to a formula that included a foreign exchange indexing component based on renminbi with US$ hedging, the Ministry of Electric Power appeared to be indicating that the power of the pricing bureaus which generally have to approve all price increases, thereby clouding the potential rate of return on power projects, could be circumvented thus reducing the risk on that front. Further, SAEC's provision of a letter of support reinforced the Guangxi government's pledge to ensure there was an adequate supply of foreign exchange to allow the investors to service their debt. This is an area that has become increasingly less risky as China's foreign exchange reserves now exceed $140 billion.

EdF, which headed the Laibin B consortium, had been involved in two other power projects in China, although both were nuclear power projects. The successful nature of those projects would have given EdF at least a recognition factor with Chinese officials. However, as Gordon Wu found, recognition is not everything and the bottom line for the Chinese is the price. With Laibin B, the regional government guaranteed a rate of return of between 12 and

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844 Ibid.
845 J. Ma, supra note 548. [agreement near]; N. Driver, supra note 550.
15% - in line with Chinese unofficial policy. Observers estimated that the prices charged for the power produced could raise that figure to 16%. However, unofficial estimates have placed the return at around 17%. Having just said that the bottom line for the Chinese is the price, it must be noted that the commitment of the investor is an important factor in assessing risk in the development phase. EdF's strong international reputation, its attractive bid, and its pursuit of this project in the face of some serious risks and difficulties in financing, undoubtedly encouraged the Chinese to hold off going to the runner-up bidder for as long as possible.

**Da Chang**

The Da Chang water treatment project presents an almost ideal picture of efficient risk management allocation: the party best able to manage a particular risk, assumed that risk. The project-specific commercial risks were assumed by a WFOE created by the joint venture between Bovis and Thames Water whose reputation and financial strength considerably reduced the risk to the Shanghai authorities that the project would not progress past the development phase.

Bovis Thames was able to manage the project-specific policy risk involved in attempting to divest itself of the project at some point in the future by structuring the deal so that the offshore joint venture company which signed the contract, subcontracted it to the WFOE which was set up in China under Chinese law. This meant that a potential buyer would not have to deal directly with the Chinese authorities making such a transaction more attractive.

The development phase of the Da Chang project presented fewer risks to either side partly because the project is smaller and could be approved at the municipal level reducing the

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847 Although Laibin B is the first project to be granted provincial government guarantees, some observers see a need for China to commission credit ratings of its provinces from internationally recognized agencies such as Moody's or Standard & Poor's in order to give solid and credible support to the provincial concessions policy. See D. Clayton, *supra* note 555. [hopes high].
time and effort spent in the approval process common to larger, more sensitive projects. Da Chang shows how much smoother the whole process can be when the government responsible for the project is cooperative on all aspects of the project, whether it is at the municipal level or the regional or national level. Gordon Wu’s GSZ Phase III shows what can happen when the municipal government is not fully cooperative, but, it must be noted, that Guangzhou municipal government may not have been fully and properly informed as to the extent of Wu’s plans for the ring road at the outset. One might conclude that the contract concessions granted to Bovis Thames by the Shanghai municipal government is indicative of the different perspectives among the different levels of government in China – the municipal government does not have to be as concerned about the political fallout from an infrastructure project, even where it might be said to affect broader social or political concerns, particularly as it is usually a smaller undertaking, affecting local rather than national interests. Municipal governments in China tend to be more aware of and interested in their own business needs as opposed to national needs or concerns which fall within Beijing’s purview. In this respect, a municipal government can be said to be more receptive to, if not actually a member of, the efficiency side of the debate. Nevertheless, concerns over citizen welfare and standards of living still form a large part of even a municipal government’s decision-making.

Although the project required only local level approval which shortened the time required for approval, the low level of approval meant high political risk to those involved. However, the Shanghai Municipal government accepted the regulatory and legal risks as reflected in the terms of the agreements where, for example, the Shanghai government agreed to concession management measures that would become effective if ex post facto changes in the national laws occurred and further agreed that if the project were terminated the Shanghai water utility buying the treated water would cover the project company’s debt.

Political and economic conditions in China at the time gave Bovis Thames’ lenders sufficient confidence in the project that they were willing to assume a share of the risks as well.
Representatives of the lead bank on the project financing expressed the view that the structure of the Da Chang deal would have been impossible in China just 4 or 5 years earlier, i.e. the early 1990s. Lenders on China projects now appear willing to take more risks reflecting increased confidence in the Chinese economy and the availability of US dollars in the system. The banks also recognize that China's need for foreign investment has made the Chinese less willing to jeopardize the attractiveness of China to investors. This realization greatly reduces perceived political or non-commercial risks which are the most problematic for banks involved in lending in developing countries. The fact that the project obtained the necessary financing at a reasonable rate of interest without a foreign exchange guarantee which many felt was required in previous transactions, reflects the increasing confidence in China's plans for full renminbi convertibility as well as the availability of foreign exchange in the system to foreign investor developers.

The fact that the deal was concluded without a foreign exchange guarantee for which most BOT developers, especially equity investors, have perceived a need, points to increasing confidence in China's plans for full renminbi convertibility as well as the availability of foreign exchange to the developers. In fact, BZW pre-empted the pledge of the governor of the People's Bank of China to make its currency convertible on the current account by the end of 1996 by completing the Da Chang financing in June 1996.

If a new BOT law has, in fact, been promulgated by the Shanghai municipal government, this move will give the project validity and support which previous projects in

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848 "China financing closes", supra note 748; "BZW Completes Financing", supra note 743. Despite the lack of guarantees, the loan facility was oversubscribed during general syndication; reasons given for this were the reputations of Bovis and Thames Water as well as bank confidence in the Chinese economy and the availability of US dollars in the system. See G. Soledad, supra note 743; "Deals of the Year", supra note 741: Other observers pointed out that the Chinese water industry is now generating sufficient revenues to satisfy lenders and that the banks are aware that China's need for foreign investment has made the Chinese less willing to jeopardize their position as an attractive place to invest.

China have not had. However, there is a recognition that Chinese projects are generally only as secure as the authorities want them to be, and with Da Chang being sanctioned at the local level, sovereign risk is high. Nevertheless, the Shanghai municipal government did its part to relieve some of this risk and the international banks accepted the remaining risks, recognizing that the Chinese are not willing to jeopardize their position by creating a hostile investment environment. Da Chang was a learning process for both sides: the banks and sponsors discovered the complex links between the Chinese economy, politics, and society and the Chinese authorities learned about the requirements of international finance. The foreign investors and their lenders concluded that there is a need for creative project financing in China’s still unpredictable market to deal with the many risks involved, since each project is a one-off and the only benchmark for both investors and the government remains the last deal done.

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A quick review of the characteristics listed in Table III above suggests that, on the efficiency side, the foreign investor’s primary concern lies with the rate of return and risk involved in a project, while on the development side, the government is primarily concerned with control of a project. Where control has played a significant factor in a project, such as with the GSZ Superhighway, problems have arisen for both sides, increasing the risk for the investor, delaying income, and, thus, return on investment, and preventing the Chinese side

850 “Deals of the Year”, supra note 741.

851 Ibid.

852 Ibid, see also “Asia Waste and Water”, supra note 709.

853 “Deals of the Year”, supra note 741.

854 Ibid.
from having the use of badly needed transportation or other facilities. In smaller projects such as Laibin B and Da Chang, the Chinese appear to be less concerned with control, allowing 100% ownership for the life of the BOT concession. However, where Chinese concerns about control have been alleviated either by taking a majority ownership position in a joint venture or by the foreign partner taking on all financial obligations for the project, the projects, such as Shajiao B, can be not only successful but very lucrative.

This opposition of risk and rate of return on the one hand, and control on the other, may be a too simplistic view of a complex subject. Certainly, there are many other factors which play a significant part in the success or failure of a project, some of which are set out in Table IV below.

The sector into which a project falls seems to be the most obvious factor, since the projects that are most needed to help the economy continue to grow are those which will be built first. Not surprisingly, power plants have received a great deal of government support at various times and in various locations.

The size of a proposed project will determine not only the level of government approval required and the probable length of the added delay that higher approval levels require, but also the level of political interest in the project. It might be trite to say that the greater the level of interest, the more difficult the negotiations, but it appears that, except for Wu’s connections at the highest levels of the Chinese leadership, Hopewell may never have won the contracts for Shajiao B, Shajiao C, or the GSZ Superhighway. The relative ease with which the Da Chang agreements were concluded with the Shanghai Municipal Government would appear to support this proposition.
The location of a project is also significant. For the Shajiao power stations and the GSZ high
way, economic conditions in Guangdong Province not only made their construction
necessary but also offered the prospect of attractive rates of return. The Da Chang water
treatment plant project is located in China’s largest city, thus requiring only municipal level
approvals which shortened the negotiation period, providing a ready buyer for everything
produced by the plant, and assuring the investors of recovering their investment and profit.
Laibin B is admittedly a test case for the Chinese government but its location in a more remote,
much poorer province may have encouraged the Chinese to allow 100% foreign control of a
power plant, something which had not occurred before, in order to attract foreign investment to
a less desirable region of the country.

Given the number of economic reforms introduced in China since 1979 and the political
and social reaction to them, resulting in what might be termed an on-again, off-again approach
to continued reform, the time period during which a project is proposed and negotiated is also
key. Both Shajiao B and the GSZ highway were approved during the heady days of the mid-
1980s when China’s economy was booming and the outside world seemed less of a threat to its
institutions. Shajiao C was approved after the Tiananmen Square massacre had chilled western
interest in investing in China and China’s were anxious to renew economic relations with
foreign investors. The Chinese approved Laibin B after a two to three year drought in
approvals of foreign-invested power plants but only after the Chinese government had passed
an Electric Power Law and prepared draft BOT rules which it was interested in putting to the
test. At this stage, China recognized not only that many more power plants would have to be
built if China is to reach its official targets by the year 2000, but also, that it had to encourage
foreign investment in Chinese regions that had been ignored or avoided by foreign investors.
The government also felt perhaps more in control of the political and social situation some six years after Tiananmen Square.

The reputation of the foreign investor/developer or its relationship with important Chinese officials can also be a significant factor in the success or failure of an infrastructure project. Gordon Wu's connections and his relationship with senior Chinese leaders helped him win the contracts for the Shajiao plants as well as the GSZ highway. One might also point to his poor or deteriorating relationship with lesser officials in Guangdong Province as the basis for his difficulties with uncollected toll charges and problems with acquiring land for his planned commercial enterprises along Phase II of the highway. With Da Chang, Bovis and Thames Water are two internationally known firms in the water business with stellar reputations. Their ability to commit to investing almost 30% of the cost of the project in their own equity and equipment not only reassured their lenders but also had to impress the Shanghai authorities with the seriousness of their bid to win the contract.

Without the financial backing of banks and other lenders, most investor/developers would be unable to take on an infrastructure project of the size of any of the projects studied in this paper. Lender attitude toward a project and the participants is therefore a significant factor as well. Given their concerns about risk, the time period and conditions then present in the country must necessarily influence these attitudes. With Da Chang, the presence of strong investor/developers combined with co-operative municipal authorities and a greater confidence in China's economic health and political stability, allowed the lenders to commit to a financing agreement not thought possible five years before. With Laibin B, on the other hand, lenders were more difficult to bring on side, no doubt frightened by the location and questionable creditworthiness of the Guangxi Zhuang Provincial government. The fact that it was a very
solid consortium of reputable international power generation firms involved in the project had to have influenced the lenders who finally committed to finance the project at just 1% over LIBOR.

Government attitudes are equally important as a favourable attitude towards an investor and the proposed project can result in cooperative officials, shortened delays, and better contractual terms for investors. The Shajiao power plants are examples of favourable government attitudes at work – towards not only the project but also the investor/developer. This aspect is also influenced by the time period and reputation and relationship with the investor/developer. Phase II and Phase III of the GSZ highway exemplify the difficulties that occur when government attitudes, here at the provincial and municipal levels, are less favourable. Da Chang shows how much smoother the process can be when a government is fully behind the project and its sponsors.
Table IV

Significant Factors in Project Result

<table>
<thead>
<tr>
<th>Project</th>
<th>Sector</th>
<th>Size</th>
<th>Locale</th>
<th>Time Period</th>
<th>Sponsor Rep/Rel</th>
<th>Lender Attitude</th>
<th>Gov't Co-op</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shajiao B</td>
<td>Power</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X nat/prov.</td>
</tr>
<tr>
<td>Phase I GSZ Hwy</td>
<td>Power</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Shajiao C</td>
<td>Power</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X nat/prov.</td>
</tr>
<tr>
<td>Phase II GSZ Trnsprt</td>
<td>XX</td>
<td>X</td>
<td>X</td>
<td>1987/92*</td>
<td>XX</td>
<td></td>
<td>XX prov.</td>
</tr>
<tr>
<td>Phase III GSZ Trnsprt</td>
<td>XX</td>
<td>X</td>
<td>X</td>
<td>1987/92</td>
<td>X</td>
<td></td>
<td>XX city</td>
</tr>
<tr>
<td>Da Chang Water</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1995</td>
<td>X</td>
<td>X</td>
<td>X city</td>
</tr>
<tr>
<td>Laibin B</td>
<td>Power</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X nat/prov.</td>
</tr>
</tbody>
</table>

Key: X denotes positive effect. XX denotes negative effect.

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\[\alpha\] post Tiananmen Square. China anxious to renew economic relations with foreign interests. Also, the end of an economic retrenchment that took place during 1988-89.

\[\beta\] In the summer of 1992, Deng Xiaoping toured Guangdong Province and gave a boost to economic development and the reforms he had begun.

\[\gamma\] draft BOT rules in effect. More open, fairer process in awarding project – international bidding.
Although this paper has looked at the efficiency vs. development tension from three aspects of importance to those involved in infrastructure projects, there are others that may also be influential in finding the balance of interests. For instance, the existence of appropriate sector policies and a transparent legal and regulatory framework, the stage of development of domestic capital markets, the existence of mechanisms to provide long-term debt to finance a project, and the availability of an open, competitive process to award projects will influence potential participants in an infrastructure project.\textsuperscript{855} In addition, by identifying certain characteristics with the foreign investor "efficiency" side and others with the host government "development" side, the paper has set each side effectively in opposition to the other when there are doubtless other characteristics common to both which might make it easier for them to achieve the right balance in any particular project. However, the scope of this paper has been such that it was not possible to deal with every aspect or every characteristic that might exist. It is felt that those chosen and discussed here provide an accurate picture of how the tension affects the success or failure of a foreign-invested infrastructure project.

The simple fact that infrastructure projects have been and continue to be built in China is evidence that both sides have managed to find the balance between their respective interests, at least for these particular projects. It seems however, that there is no single identifiable point at which these interests will always balance out but rather, different projects will find this balance at different points on the spectrum. It is the uncertainty about where the balance may be reached for a particular project that may diminish foreign interest in China and

\textsuperscript{855} World Bank, \textit{supra} note 33 in chapter V, at 12, 14-16.
proportionately, the amount of foreign investment funds that China requires to build the infrastructure it wants.\textsuperscript{856}

\textit{Some Lessons from the Case Studies}

The overall success of Shajiao B has shown that when a product is desperately needed, the wheels of government will turn faster and more concessions will be made. When the price is right for both sides, a project will go ahead. From Shajiao C we have seen that, in China, one successful project is not an automatic guarantee that China will award the foreign investor another one, and that personal connections and business relationships are invaluable and must be carefully developed. In both, the presence of government-backed performance guarantees of the off-take and coal supply agreements was a key factor in winning lender support and confidence. In both projects, new technology, adapted to build the plants, increased the speed of construction, earning significant bonuses for the foreign investor and provided education and training opportunities for scores of Chinese construction workers and managers.

The GSZ Superhighway project illustrates that a foreign investor’s success in one sector does not necessarily translate to success in another sector. The hesitancy of the international banks to become involved in China’s first major highway project was reflected in the fact that only 9 banks participated in the syndicated loan even though Shajiao B had been a great success for Hopewell. Personal connections were again invaluable to obtain the project but did not

\textsuperscript{856} Foreign investment is still encouraged for the infrastructure sector and, as an added incentive, tax-free benefits for foreign-invested enterprises, eliminated in April 1996, were reintroduced on January 1, 1998. See “In Asia” \textit{The [Toronto] Globe and Mail} (December 31, 1997) B4; “China reveals its need for foreign investments”, \textit{supra} note 803. However, China’s reliance on its export sector to drive its growth will undoubtedly cause problems in the future unless it takes steps to deal with its bankrupt state-owned enterprises and ailing banking system and the huge overproduction of manufactured goods much of which is currently sitting in warehouses unsold. C.S. Smith, “Inventories clog Asia’s path to recovery” \textit{The Wall Street Journal} reprinted in \textit{The [Toronto] Globe and Mail} (December 26, 1997) B13. The author notes that China has US$360.9 billion in goods stockpiled at the end of 1996 and has begun liquidating stocks built up before 1995 and writing off the losses against profits or capital.
dictate the terms of the agreements themselves. This project clearly demonstrates the particular problems that arise when there are numerous buyers of the infrastructure project’s product, as reflected in the political sensitivity in setting toll charges, enforcing, or increasing them, in acquiring land for the project and the additional commercial centres planned for highway interchanges, as well as in the anticipated profits to be made by the foreign investor from such separate commercial enterprise, can make or break a project at any stage. Certainly, the deteriorating relationship between local Chinese officials and Wu, a direct result of their differing perspectives, did not help Wu in trying to resolve the problems that arose during the course of this project with toll collection and enforcement. However, the Chinese did agree to bail out the project when actual costs exceeded the original projections and refinancing was needed.

Laibin B is the first BOT power project by a WFOE in China. As previously described, this project went forward on an experimental basis, with very little in the way of a legal framework on which the investors or their lenders could rely. There were no government-backed guarantees, simply a letter of comfort from the SPC and lenders were understandably hesitant, given the untried location, the unknown creditworthiness of the provincial government, and an anticipated low rate of return, even though the developers/investors are well known and respected internationally in power projects. The exemption from import tax on equipment and machinery, the bidding process, and the opportunity to increase their profit by increasing efficiency in the operation of the plant attracted the investors. The tariff rate formula satisfied the Chinese concern that foreign profits not work to the detriment of the Chinese end-user. As this project illustrates, an open and transparent process with recognizable international standards and the opportunity to take 100% ownership and control for the

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concession period will do much to overcome the fears of investors and lenders with respect to the risks involved in undertaking an infrastructure project in China.

Da Chang is a smaller project which did not require state approval, and which reflects the moral liberal attitude of local governments toward foreign investment than is evidenced by the national government. The Shanghai municipal government agreed to the structuring of the off-shore and on-shore companies which permits the foreign investors to divest the project at some time in the future without having to go through the Chinese approval process, making the project more attractive to prospective buyers. Further, the municipal government not only guaranteed the performance of SMWC under the offtake agreement, it was also extremely cooperative in agreeing to concession management measures that would take place if there were changes in the national laws affecting the project and in agreeing that SMWC would pay the investors’ debt if the project had to be terminated. In addition, the presence of a Chinese bank as security agent to convert the renminbi revenues into US dollars could only have occurred with the municipal government’s backing.

Certainly, the location of the project in Shanghai was a key factor as well. With 14.5 million citizens and a pollution problem, Shanghai municipality has a desperate need for more clean water, virtually assuring the government’s cooperation. The improved economic conditions in China and its leaders’ attitudes toward continued reforms and encouraging foreign investment in infrastructure, allowed the foreign lenders to change their attitudes towards lending where risks are still present to some extent. Even without a foreign exchange guarantee, 16 banks were involved in the syndicated loan.

For the earlier projects studied, the importance of being in the right place at the right time with the right connections and the right product was key to the approval and award of those projects. With Laibin B, that has all changed. In the twelve years between Shajiao B and Da Chang, the Chinese have been on a steep learning curve. The “on again, off again”, cautious approach to foreign investment in infrastructure projects, has meant that each project
has virtually been a new experiment from which the Chinese have learned and applied to the next one.

**Obstacles and Solutions**

China has introduced and implemented many economic and legal reforms since 1979, but that time has been insufficient to transform many Chinese attitudes, or to fully educate the Chinese in how law and policy ought to assist rather than deter investment. Although China continues to bring in reforms on paper and officially encourages foreign investment in the country, in practice, foreign investors are still faced with a maze of bureaucracy and lack of transparency in much of the approval process as well as the regulatory and legal framework within which they are expected to operate. For example, the draft BOT Circular was published in August 1995 as information guidelines to guide and direct officials and investors alike but, over two years later, has not yet been finalized and promulgated as law. This only adds to the uncertainty surrounding a foreign investor/developer's legal rights and obligations in any infrastructure project built under those draft guidelines. Removal of uncertainty in the commercial sphere has been the focus of contract law in the common law countries for over a century. From the point of view of an investor from these countries therefore, constructing an enormously expensive project in conditions where much is uncertain and where even a contract may not be viewed as the final word on the matter, has to be a daunting prospect, if not an absolute deterrent.

All of the projects examined were, of course, approved. However, many more have stalled in the approval process or were not approved at all. As discussed in the paper, some
foreign investors have been deterred from investing in these longterm, expensive, and higher risk projects by such things as difficulties and delays in obtaining approvals, difficulties in obtaining financing due to lenders’ inability to assess the financial strength of a Chinese buyer or partner, the availability of more attractive investments in other Asian countries, and the doubts that remain as to an investor/developer’s legal rights and the enforcement of those rights by a Chinese court. Foreign investors who have agreed to take on infrastructure projects have run into problems from the Chinese side with land acquisition, a reluctance to adjust tariffs charged when circumstances change, a reluctance to change official policies to provide some benefit to investors, the lack of official co-operation to assist in the operation of the project and ensure projected revenues, and the uncertainty associated with looser Chinese attitudes toward contracts and their contractual obligations, all of which serve to delay or reduce returns on investment and increase the risk associated with that investment.

However, the parties have employed certain techniques that have proved to be useful in reaching a successful agreement for a project, at least in the projects where they were used. Some of these techniques include: the Chinese government changing from the usual non-transparent negotiating process to an open bidding process governed by international standards (Laibin B); the government allowing a politically sensitive project to go to a wholly foreign owned enterprise rather than forcing a foreign investor to take a Chinese partner in a joint venture (Laibin B, Da Chang); the government agreeing to early completion bonuses to provide the foreign investor with the possibility of a better return on investment and the government with the early use of badly needed infrastructure (Shajiao power plants, GSZ highway); the foreign investor agreeing to pay penalties for late completion of a project when construction is under its control (Shajiao power plants, GSZ highway); the government allowing road builders
to have the use of land at various locations along the road to set up and earn income from various commercial enterprises as part of their return on investment (GSZ highway – Phase I and III: although this has become somewhat problematic due to difficulties in official land acquisition for this purpose as in Phase II), the foreign investor spending time to develop and maintain official and other influential contacts in China since guanxi still plays an important role in Chinese commercial life (Shajiao plants and Wu’s connections with more senior level people; with lesser officials, Wu failed to do this in Phase I of the GSZ highway); and, the foreign investor/developers, where they are able to, agreeing to invest large amounts of their own equity in a project (Da Chang). Nevertheless, it seems unlikely that any or all of these techniques can be heralded as general, multi-purpose techniques to be applied to any infrastructure deal in China. They will be useful insofar as they can be tailored to a particular project and it is in this tailoring that the various factors set out in Table IV will come into play.

A recent development in the law, which did not affect any of the projects but will have considerable effect on future projects, occurred with the promulgation in April 1997 by the State Planning Commission and the State Administration for Foreign Exchange of the Provisional Measures on the Administration of Overseas Financing of Projects.858 What these rules mean for project sponsors is that they must now incur substantial expense in finalizing all the major project contracts and securing the commitment to financing before the feasibility study report is even approved.859 Financing must also be completed within one year of obtaining approval of the feasibility study report. This is similar to the time constraints faced by


859 E. Lam, supra note 527.
the developers of Laibin B. Where export credit agencies or the World Bank are involved, this
timetable will be extremely difficult to meet, since project financings with those agencies have
usually taken two or three years. Some observers believe that these new rules were designed
to stop the provinces from sidestepping the requirements that projects over a certain value be
approved at the national level. Some see this move as the central government taking tighter
control in order to curb inflation and others argue that it is laying the framework for
legislation. In any event, foreign investor/developers may be reluctant to spend time and
energy on a well-developed financing plan for a project that has not yet been approved by the
government and with the knowledge that the government has changed regulations in the past
while projects were in progress.

Efficiency vs. Development – a conflict of norms

The individual infrastructure projects studied in this paper leave us with the sense that,
although the tension between the efficiency and development perspectives was able to be
resolved to the practical satisfaction of the participants in most of these projects, that tension is
a deep rooted one that reveals a fundamental conflict of norms between the two sides which
cannot simply be left to be dealt with on a case-by-case basis, if China is to obtain the amount
of infrastructure that it wants.

860 Ibid.

861 C. Gailey, “Foreign-funded projects come in for scrutiny” AsiaMoney (June 1997) in LEXIS, World Library,
Allwld File. Some provinces have routinely flouted their limited autonomy on project approvals by dividing a
large project into smaller parts to avoid “Beijing’s radar screen”.

862 Ibid.

863 Ibid.
During the last 20 years, China has learned much about the west and the west has learned much about China. However, ingrained ideology and historic cultural differences cannot change overnight. Foreign investors continue to trumpet the value of the marketplace and fail to understand why the Chinese are slow to embrace it in the same fashion. The financial crisis in east Asia that emerged in late 1997 has further illustrated the gap between the efficiency and development perspectives.

Many western investors have pointed to the crisis as an indication that western “efficiency” values had triumphed over “Asian values” and supported the IMF’s imposition of its liberal-based policies on countries it agreed to bail out. Malaysia’s Prime Minister Mahathir, however, placed the blame for the crisis on foreign currency speculators and attacked free market ideals as being as extreme as the communism and socialism of the past. Neither side, of course, is correct but the two views starkly illuminate the lack of true understanding that exists between those at the extreme ends of the two camps.864

It seems unlikely that the range of international multi-lateral options available to assist and support foreign investment, such as the alternative dispute resolution processes offered by the International Chamber of Commerce or the UN, or the investment guarantees offered under the Multilateral Investment Guarantee Agency, are able to do much at this point to resolve the fundamental conflict between the efficiency and development perspectives, since most of these options can be viewed by the development side as products of the western-controlled, efficiency side and, therefore, somewhat suspect. A similar argument can be made concerning the WTO’s efforts in the field of foreign investment and the Multilateral Agreement on Investment (MAI)

864 China has managed, at the time of writing, to avoid a similar fate, thanks partly to the non-convertibility of the renminbi and other government-imposed controls. See D. Coxe, “Some stories to move the market this year” The [Toronto] Globe and Mail (January 2, 1998) at B19. European firms at least, still view China as the number one choice for their investment funds despite the difficulties in doing business there: see S. Islam, supra note 804. China has officially promised not to devalue the renminbi to keep its exports competitive with those of its crisis-hit neighbours, but it is not clear whether such a promise can be maintained indefinitely unless its competitors’ economies soon start to improve. “China rules out devaluation of yuan as concerns over depreciation rise” Agence France Presse (January 5, 1998) in C-afp@clari.net.
which has been a project of the OECD. China is neither a member of the WTO nor of the OECD, thus limiting its participation in talks at the WTO and preventing its participation in MAI talks. The view of the MAI from the perspective of many developing countries appears to be that it is an exercise in neo-colonialism designed to give the rich-world investors the upper hand in the field of investment.865

China, with its historical, and self-designated, position in the world as the "middle kingdom", insulated for most of the past two thousand years from foreign interference and influence, then humiliated by more technologically advanced foreign nations in the last two hundred years, has not yet emerged from the shadows of its traditional xenophobia. This suspicion and distrust of the "foreign devils" and their motives and China's desire to regain its "proper" place in the world hierarchy, has strongly influenced its leaders. However, the education and training of many young Chinese abroad, the increasing contact between many Chinese and foreigners through the media and personal business or academic connections, and the further gradual removal of obstacles to the inflow of foreign investment, trade, and ideas to China, are all steps along the way to an improved understanding on the part of the Chinese of who the foreign investors are, what they believe, how they think, and what they expect from a developing nation that needs their investment funds.

For the typical efficiency-driven foreign investor, there is still little recognition that there is anything to consider beyond their own bottom line. George Soros' view that laissez-faire free market ideology is dangerous in its economic and social effects is not one that is shared by many foreign investors at this time. Where Soros has welcomed the prospect of government action to make laws and rules to regulate the marketplace, other investors still maintain that government should only be involved to the extent that it protects their rights to operate within the free market. Foreign investors appear to accept the right of the Chinese to educate and train their people, to improve their skills and acquire the technology that will advance the

economy and improve standards of living, but only to the extent that it not adversely affect the terms of a particular contract or project agreement in which they are involved. For example, if such a concession on their part will not affect the profits expected from a project, then they are unlikely to complain. If it is expected to do so, then the foreign investor may well not proceed even though there is some profit to be made, although not in the amounts desired. The mutuality of understanding that is required here, will require both sides to make major adjustments in their beliefs, attitudes, and approaches about and to each other, in order to find the necessary common ground upon which to build useful, longlasting relationships, not just on the foreign investor/Chinese government level but on the international level as well, as between peoples of different nations and cultures.866

As seen in the previous Chapter, timing will likely continue to be a key factor when it comes to official attitudes, laws, and policies. There is nothing to indicate that the “on-again, off-again” Chinese approach to introducing further reforms to economic policies, laws and regulations, will be abandoned in the near future in favour of a wholesale reformation of the system.867 Its concerns about foreign ownership and control of state assets, its leaders’ desire to maintain a socialist political state, and the fear of popular unrest or rebellion from reforms that are too quickly implemented, will continue to slow and steady the hands of change. Although the pace of China’s development may be diminished because of this cautious approach to adoption of more free market mechanisms, it is unlikely to stall altogether; the momentum appears to be too great.

866 H. Cheng in “Opening the door to a New World” The [Toronto] Globe and Mail (March 13, 1998) at C1, describes the Hong Kong infrastructure development company, New World Development’s success in China in a variety of infrastructure projects and its recognition that such endeavours often carry great value and deep meaning for local communities because of the considerable impact such projects have on improving the daily lives and future prospects of the millions of people in each region. Cheng notes that the key to NWD’s success is that they have made it their business to fully understand what China’s needs are and focus their efforts on helping national and city governments to meet their most critical goals and priorities.

867 The appointment of Zhu Rongji as Premier in March 1998 may quicken the previous pace of government and financial reform. However, Zhu may be Premier, but the rest of China’s leadership is unlikely to abandon Chinese preference for caution and care in further development and growth of the country. See R. Mickleburgh, “China’s Zhu rides winds of change” The [Toronto] Globe and Mail (March 20, 1998) at A9.
Foreign investor attitudes that it should be the Chinese who ought to “come into the 20th century” or pull up their socks and “get with the efficiency program” fail to recognize any validity in the Chinese development perspective at all or that the Chinese have made great strides in implementing more “efficient” market practices and reforms as they follow their own, rather unique path of development. The welfare of one fifth of the world’s population cannot reasonably be ignored by the rest of the world in this era, but it is evidently not something the ordinary foreign investor considers other than in the context of a huge and ready market for the product the foreign investor intends to sell. If the tension between the two perspectives is to be resolved, there must be movement, not just from the Chinese, but on both sides. This will never happen so long as the efficiency side thinks it is negotiating from an unassailable position. In the medium term, therefore, it is unlikely that there will be any resolution to this conflict.

The theories produced by the non-liberal, non-capitalist development economists recognize that not only is development more than just economic growth but there must be a more humane, more equalizing approach to promoting development in the developing world. The efficiency side has latched onto Smith’s concept of the “invisible hand”, ignoring his concerns about wealth disparity and the state’s role in remedying it. Those foreign investors who turn away from China in favour of other “more open” countries must recognize that their actions affect more than just their own bottomlines. Foreign investors must recognize and acknowledge that they also have duties to others who are not their shareholders or financial backers – moral duties, if not strictly legal or financial ones. Funding and building infrastructure projects not only on the basis of the amount of profit possible for the investor, but also on the basis that they will improve the lives and opportunities of millions of people, will bring together the efficiency and development perspectives. This is the commonality of purpose that must be achieved by those with the funds to invest and those with the projects that need the funds. We, the fortunate few in the developed world - the 20% of the world’s population who consume 80% of its resources - must recognize, along with the World Bank and others,
that we live in a global community where the rich must give greater consideration to the needs of the poor in the developing nations or be dragged into a global economic maelstrom which the rich have created themselves. The efficiency perspective when put forward at its most extreme, is a shortsighted one, one that, if allowed to reign unchecked and untempered by a concern for the welfare of the world’s peoples, can only bring about the downfall of its proponents on a global scale in the not-so-distant future. In the near term, however, if China’s desire to attract sufficient levels of foreign investment to its infrastructure sector leaves it with the sole option of instituting wholesale ‘efficiency’-based reforms in all areas of its economy, then China is unlikely to reach the targets it has set for itself for the 21st century.
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