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**INTERNATIONAL TRANSFER PRICING  
IN A DEVELOPING ECONOMY CONTEXT:  
PERSPECTIVES FROM THE TAXPAYERS AND THE TAX AUTHORITIES**

by  
**LO Wai Yee Agnes**

A thesis  
submitted in partial fulfillment  
of the requirements for the Degree of  
**Doctor of Philosophy**

**Lingnan University**

**2004**

**Abstract**  
**International Transfer Pricing in a Developing Economy Context:  
Perspectives from the Taxpayers and the Tax Authorities**

by

**Lo Wai Yee Agnes**

**Doctor of Philosophy**

Since the 1979 economic reforms, China has been characterized by a rapid increase in international trade and an inflow of foreign direct investment. Foreign investment enterprises (FIEs) play an increasingly important role in the Chinese economy and are substantially engaged in transactions with affiliates outside China. Therefore, international transfer pricing in China has become a significant issue.

Empirical research on international transfer pricing has focused on multinational corporations (MNCs) operating in developed countries. However, it is difficult to generalize their findings to MNCs operating in developing countries as the business environment of developing countries is quite different from that of developed countries. Existing literature identifies that due to differences in the business environment between developed and developing countries, the tax factors which are important in developed countries should not be over-emphasized in developing countries. Some nontax factors such as foreign exchange control and restrictions on profit repatriation which may not be important in developed countries are nevertheless important in developing countries. However, empirical studies on international transfer pricing in developing countries are relatively scarce. Furthermore, there have been no empirical studies that examine the relationships between management's perception of the importance of environmental variables and management's choice of international transfer pricing methods in developing countries, or which analyze the tax and nontax cost trade-off for tax evasion via international transfer pricing in developed or developing countries.

The objective of this thesis is to provide a comprehensive empirical study on international transfer pricing in China from the perspectives of both taxpayer and the tax authority. The results of this thesis indicate that the more important the management perceives the interest of local partners and the maintenance of a good relationship with host government to be, the more likely it is that the FIE will adopt a

market-based transfer pricing method. On the other hand, the more important the management perceives foreign exchange controls in transfer pricing decisions to be, the more likely it is that the FIE will choose a cost-based transfer pricing method. The research results also reveal that based on a tax and non-tax cost trade-off analysis, wholly foreign-owned enterprises, cooperative joint ventures and export-oriented FIEs are more likely to be selected for transfer pricing audits in China than equity joint ventures and domestic-market oriented enterprises. Some explanations for this result are the lack of monitoring by Chinese local partners in certain FIEs and the opportunity for transfer pricing manipulations.

The results of this thesis have important policy implications for foreign investors carrying on business in China, the Chinese tax authorities as well as academic researchers. My research results should help foreign investors to have a better understanding of the tax and the nontax factors in formulating transfer pricing policies in China. The results should also help tax authorities tackle tax audit problems more effectively and in setting tax audit guidelines on related party transactions. Further, this thesis should contribute to the establishment of a more comprehensive theoretical framework of international transfer pricing in developing countries. It also empirically demonstrates the applicability of the tax and nontax cost theory in the context of international transfer pricing.

**I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.**

---

**Agnes Wai Yee LO**  
**11 June 2004**

International Transfer Pricing in a Developing Economy Context:  
Perspectives from the Taxpayers and the Tax Authorities

**Abstract**

**Declaration of Originality**

**Approval Sheet**

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## **CHAPTER 1**

### **INTRODUCTION**

#### **CHAPTER SUMMARY**

As the world economy becomes more globalized, transfer pricing has become increasingly challenging to multinational corporations in planning and implementing their global operations. The growth of the Chinese economy is characterized by rapid increases in inflows of foreign investment and international trade. For many years, China has been the largest recipient of foreign direct investment (FDI) among developing countries. China's entrance into the World Trade Organization in late 2001 has further accelerated the trend of inflows of foreign investment. In 2002, China became the second largest recipient of FDI in the world. This situation is likely to persist in 2003. Also, in 2002, China has become the number four trading nation in the world, just behind the US, Japan and Germany. Foreign investment enterprises (FIEs) which include Sino-foreign joint ventures and wholly foreign-owned enterprises play an increasingly important role in the Chinese economy and trade. They are substantially engaged in transactions with affiliates outside China. Therefore, international transfer pricing in China has become a significant issue. In recent years, a large number of these FIEs have reported accounting losses, which prompted the Chinese government to examine potential transfer pricing abuses.

## CHAPTER 1

### INTRODUCTION

#### 1.1 MOTIVATION FOR THE RESEARCH

##### 1.1.1 Importance of International Transfer Pricing

International transfer pricing is the pricing of goods, services or intangibles that are transferred between members of the same group that cross national boundaries (Elliott and Emmanuel 2000). Inter-affiliate trades include exports and imports of raw materials, products and capital equipment, transfer of proprietary technology, royalties for the use of trademarks or copyrights, provision of technical and management services, and inter-affiliate financing. As the world economy becomes more globalized, transfer pricing has become increasingly challenging to multinational corporations (MNCs) in planning and implementing their global operations. A survey of accounting educators by Sands and Pragasam (1997) finds that transfer pricing is ranked as one of the most important topics in international accounting. Another survey conducted by Ernst & Young (2001) finds that transfer pricing is rated by MNCs as the most important international tax issue.

Under relevant laws and regulations, prices for related-party transactions should be set according to comparable market prices similar to other arm's length transactions. However, in practice, MNCs treat international transfer pricing as a mechanism to manoeuvre funds internationally and to choose the countries in which they wish profits to be reported (Chan and Chow 1997a). They strategically select transfer prices so as to maximize global tax savings, minimize operating risks and circumvent restrictions imposed by host governments.

Transfer pricing manipulation has adverse effects on the jurisdictions where the MNCs operate (Lall 1973; Natke 1985). Outward income shifting by MNCs reduces tax revenue of the governments and results in a loss of legitimate share of

profits to local shareholders. It deprives local staff of higher remuneration because of distorted operating results. It can also worsen the foreign exchange situation which may in turn trigger the government to impose stringent restrictions on imports. More importantly, low profitability reported by MNCs may deter market entrance of prospective local competitors and this results in the economy's over-dependence on MNCs. Transfer pricing problems can also be a threat to the capital market. For example, Enron used a loophole in transfer pricing disclosure rules to hide for many years transactions with a major employee-run partnership, called Chewco, whose eventual disclosure played a large impact in the company's collapse (Emshwiller 2003). To monitor the transfer pricing practices of MNCs, a great number of fiscal authorities have enacted regulations and taken increasingly aggressive measures against tax evasion through transfer pricing manipulation.

### **1.1.2 Significance of International Transfer Pricing in Developing Economies**

The business environment in developing countries is distinctly different from that in developed countries. The importance of environmental variables for transfer pricing in developing countries relative to developed countries is perceived differently by the management of MNCs. Existing literature notes that the inducements for MNCs to resort to transfer pricing manipulation in developing countries are stronger than that in developed countries and the threat of fiscal losses is persistent in less developed countries (Brean 1979; Plasschaert 1985; Al-Eryani 1987). MNCs shift profits from developing countries to circumvent the adverse impact of relatively stringent regulations on foreign investment imposed by these governments and to minimize the perceived financial risks of operations in relatively uncertain environments. Developing countries are also more vulnerable to transfer pricing manipulation due to inadequacies in their institutional framework and the

lack of expertise and resources to monitor the intricacies of this issue. Also, they are concerned that rigorous audits may drive foreign investors to other jurisdictions.

A few studies attempt to provide empirical evidence on trading statistics to assess the extent of transfer pricing manipulation by MNCs operating in developing countries. Lall (1973) finds that, compared with world market prices, MNCs in Colombia over-price their imports into Colombia by 33 percent to 300 percent in the pharmaceutical sector, and by 24 percent to 81 percent in the rubber and electrical industries. Natke's (1985) study of the import prices of MNCs operating in Brazil during 1979 reveals that MNCs pay higher prices on imports than local firms and the prices of MNCs' imports also exhibit greater variability. Rahman and Scapens (1986) investigate the import prices of ten pharmaceutical items in Bangladesh, and find that MNCs over-price imports from affiliates by between 78 percent and 600 percent. They conclude that transfer pricing abuse accounts for the low profitability of MNCs' operations in that country. Chan and Chow (1997a) find that MNCs in China over-price imports and under-price exports in the audio/video equipment, garment, plastic and chemicals industries. The above studies provide valuable evidence of an international transfer pricing problem in emerging economies.

### **1.1.3 Significance of the Chinese Economy**

This research examines the international transfer pricing issue in China. I chose to look at transfer pricing in China because of that country's increasing importance in the world economy and the significant volume of inter-company trade by MNCs with their affiliated companies there.

Since the 1979 economic reforms, China has outperformed major industrial countries in terms of growth in real GDP. Table 1.1 summarizes GDP growth rates in China and other major industrial countries. The average annual growth of China's

GDP for 1993-2002 was 9.3 percent, more than four times the average growth of the G-7 countries. The situation is similar in 2003. China's economy, in terms of total GDP (purchasing power parity base), is already the second largest in the world, behind the USA, but ahead of Japan and Germany.

[Insert Table 1.1 here]

China's influence on the world economy can also be seen in the rapid growth in China's foreign trade. As a result of an average annual growth rate of 19.5 percent in foreign trade from 1993 to 2002, China was ranked among the world's top 4 trading nations in 2002, representing 5.0 percent of total world trade, as opposed to 15.4 percent for the US, 9.0 percent for Germany and 6.1 percent for Japan (United Nations 2003). China's foreign trade is expected to continue to increase rapidly due to the economic momentum generated from its entry into the World Trade Organisation (WTO) in November 2001. In 2003, China's foreign trade amounted to US\$851.21 billion, a 37.1 percent growth from 2002. Table 1.2 shows the volume of China's foreign trade from 1993 to 2003.

[Insert Table 1.2 here]

Since its entry into the WTO, China lowered the tariff barriers on a broad range of imports, ranging from agricultural goods to industrial products. The average import tariff for industrial products was reduced from 16 percent in 2000 to 12 percent in 2002 and will be further reduced to 10 percent by 2005. The average import tariff for agriculture products was reduced from 21.3 percent in 2000 to 18.9 percent in 2002 and will be reduced to 15.6 percent by 2005. Import tariffs for vehicles will be reduced from 80-100 percent in 2001 to 25 percent by mid-2006. In addition, import quotas and license grants applicable to over 400 categories of import

products will be phased out by 2005 at the latest.

Apart from the reduction of import barriers, China also provides trading rights to foreign investors due to its accession to the WTO. Before entering the WTO, China restricted the trading rights (the right to import and export) of foreign firms and prohibited them from distributing products by themselves. Under the WTO agreement, trading rights and distribution services of foreign companies will be progressively phased in over three years. Thus, all foreign enterprises in China will be granted the right to trade most products by 2005. They can also import and distribute products without going through a state-owned enterprise or a middleman (Panitchpakdi and Clifford 2002). Attributable partly to the reductions in import tariffs and the gradual provision of trading rights, China's imports increased by 21.2 percent in 2002 and by 39.9 percent in 2003 while the total imports for the world only increased by 3.4 percent in 2002. Furthermore, as explained later, foreign investment in China increased rapidly. Many investors aim to take advantage of low operating costs in China which enable them to export goods at a more competitive price to other countries. As a result, China's exports also increased dramatically in 2002 and 2003 due to the growth of the export of labor-intensive products. Such upward trends in imports and exports are expected to continue due to the opening of markets in China under the WTO agreement.

China has recently entered into a free trade agreement with a number of jurisdictions. In order to facilitate trading between Hong Kong and mainland China, on 29 June 2003, China and Hong Kong signed the Closer Economic Partnership Arrangement (CEPA). Under the CEPA, no import tariff will be imposed on 273 categories of goods from 1 January 2004 if the goods are of Hong Kong origin. These 273 categories of goods include electrical and electronic products, plastics, paper, textiles and clothing, chemical and pharmaceutical products, clocks and

watches, jewelry, cosmetics, metal products, and miscellaneous appliances and accessories. This agreement provides significant cost savings for importing certain products such as jewelry and cosmetics whose current tariffs range from 18.3 to 35 percent. Therefore, CEPA will further accelerate the increase of imports into China. Other goods of Hong Kong origin not included in these 273 categories will also enjoy zero import tariff by 2006. CEPA will benefit not only Hong Kong companies, but also other foreign investors as they can arrange to carry out certain production procedures in Hong Kong to enjoy the zero tariff arrangement. Transfer pricing plays an important role in determining whether there is sufficient local (i.e. Hong Kong) content to qualify for tariff exemption. China also signed a similar CEPA with Macau in 2003. For the Asia Pacific region, China and the Association of South East Asian Nations (ASEAN) signed a framework agreement in late 2002 which commits them to establish an ASEAN-China Free Trade Area by 2010 (ASEAN 2002). The establishment of an ASEAN- China Free Trade Area would increase intra-regional trade and investment.

China has also experienced a sharp rise in the inflow of foreign direct investment (FDI) since 1990, a trend that has been accelerated by China's entrance into the WTO. Despite a global decline of FDI inflows by 21 percent in 2002, FDI inflows to China increased by 13 percent and China became the second largest recipient of FDI in the world in 2002 (Table 1.3). FDI inflows to China reached US\$52.7 billion in 2002, a new record reinforcing its position as the largest recipient of FDI inflows in the developing world (UNCTC 2003). It was reported that FDI in China reached US\$57 billion in 2003, just behind Luxembourg and the United States (UNCTAD 2004).

[Insert Table 1.3 here]

Foreign investment enterprises (FIEs), which include Sino-foreign joint ventures and wholly foreign-owned enterprises in China, play an increasingly important role in China's foreign trade. Table 1.4 shows that in 2003 total imports and exports by FIEs were US\$231.9 billion and US\$240.3 billion respectively, which represents 56 percent and 55 percent of China's total imports and exports. Among these imports and exports, a large proportion of transactions was related-party transactions where the FIEs in China traded with their overseas affiliated companies. Chan and Chow (1998) find that 88 percent of the export-oriented FIEs in China purchased and sold 70 percent or more of their total imports and exports to their affiliated companies. This means that many MNCs operating in China engage in substantial related-party transactions. Due to the rapidly increasing investment by MNCs in China and the significant amount of related-party transactions involved, transfer pricing is an important issue for the Chinese tax authorities, for MNCs investing in China and indeed for the world economy.

[Insert Table 1.4 here]

Given the increasing importance of foreign investment in the economy, China has made remarkable strides in formulating relevant policies and a legislative framework to attract foreign investment, some of their policies tempt foreign investors to engage in transfer pricing manipulation. The Chinese tax authorities estimate that over 80 percent of MNCs operating in China engaged in tax evasion, and that resulting losses in tax revenue were at least US\$3.6 billion in 2002. Transfer pricing manipulation is the most common method used by MNCs for tax evasion (PRN 2003). To protect government revenues, transfer pricing audits are regarded as one of the most important tasks by the State Administration of Taxation (SAT). Accordingly, the SAT provides guidelines and resources for transfer pricing

audits. In 2001, the Chinese tax authorities adjusted and increased FIE assessable profits by a total of US\$49 million due to transfer pricing manipulation, which was more than half of the total amount adjusted for the previous five years combined (Chinese Tax News 2002). Since China entered the WTO in 2001, tariff rates have also been rapidly reduced, resulting in a significant decline in government tariff revenue. The SAT aims to increase their efforts on transfer pricing audits to collect more escaped tax to partly compensate for this loss of tariff revenues. Therefore, transfer pricing audits have become a significant issue for both the Chinese tax authorities and the MNCs in China.

## **1.2 OBJECTIVES AND CONTRIBUTIONS OF THE THESIS**

This thesis investigates the international transfer pricing issue from both the taxpayer and the tax authority perspectives. First, I conduct a literature review and study the institutional framework of transfer pricing in China. Second, I investigate the association between management's perception of the importance of environmental variables (including tax and nontax factors) and management's choice of international transfer pricing methods in China. This part of the research is based on field interviews of management of MNCs in China. This is a significant issue given the large amount of investment flowing to China and other developing countries and the amount of foreign exchange that occurs through foreign investment in these countries. Third, I evaluate how nontax factors are being considered against tax factors and influence MNCs' decisions on profit shifting through transfer pricing manipulation. I then proceed to investigate empirically via multivariate statistical analysis the relationship between firm characteristics and the probability of being selected for transfer pricing audits by the Chinese tax authorities. Based on an analysis of tax and nontax costs for firms with different characteristics, I hypothesize

that certain types of enterprise are more likely to be audited given China's institutional framework, regulations, and business environment. To test the hypotheses, I examine the likelihood of an international transfer pricing audit for a random sample of FIEs in China. These FIEs include those actually being audited on transfer pricing by Chinese tax authorities and FIEs which have significant inter-affiliate transfers but have not been audited.

The results of this paper should have significant implications for tax authorities as well as for foreign investors operating in China and other developing economies. By examining the environmental characteristics pertaining to China, this study sheds empirical light on how the management perception of these characteristics influences the choice of transfer pricing methods. The findings of this study are of particular relevance to public policy makers and investors in developing countries in enhancing their understanding of environmental influences on transfer pricing decisions, and thus contribute to the building of a more comprehensive theoretical framework of transfer pricing in developing economies.

The analysis of tax audit cases should help tax authorities tackle the tax audit problems more effectively and set transfer pricing auditing guidelines for related-party transactions. For example, given low nontax costs of shifting profits out of China by export-oriented FIEs, tax authorities could prioritize investigation of this type of FIE. My research results should also help foreign investors gain a better understanding of tax and nontax costs for transfer pricing manipulation in China. Empirical studies on tax compliance are rare due to difficulty in data collection. As this is the first empirical study of tax and nontax cost trade-offs in an international transfer pricing and tax audit context, the results provide academic researchers with an interesting perspective in studying the effect of nontax costs on transfer pricing manipulation and tax audits. Finally, although China is unique in terms of its size

and history, it is in essence a developing economy according to the IMF (2003). Thus, the research results should provide a useful reference for other developing countries. For example, countries that have similar forms of investment as China can make reference to how different types of investment affect transfer pricing compliance.

### **1.3 ORGANIZATION OF THE THESIS**

In the next chapter, I review the relevant literature. Aspects of the business environment in China which relate to international transfer pricing and current transfer pricing regulations are explained and discussed in Chapter 3. Chapter 4 examines the relationship between management perceptions of the importance of various environmental variables and the transfer pricing methods used by analyzing the results of an interview survey with management of MNCs in China. Chapter 5 discusses the tax and nontax cost trade-off theory and examines how Chinese tax authorities implement international transfer pricing legislation. Relationships between firm characteristics and the probability of being selected for transfer pricing audits by Chinese tax authorities are also analyzed in depth in that chapter. Finally, Chapter 6 provides a summary of the research findings as well as an analysis of the limitations and future research implications.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **CHAPTER SUMMARY**

Empirical research on international transfer pricing has focused on MNCs operating in developed countries. However, it is difficult to generalize their findings to MNCs operating in developing countries as the business environment of developing countries is quite different from that of developed countries. Existing literature reveals that due to differences in the business environment between developed and developing countries, tax factors which are important for developed countries should not be over-emphasized for developing countries. Some nontax factors such as foreign exchange controls and restrictions on profit repatriation which may not be important in developed countries are nevertheless important in developing countries. Therefore, empirical studies in developing countries that examine the effect of the perceived importance of environmental variables on transfer pricing decisions, and the trade-off between tax and nontax factors on transfer pricing decisions can enhance our understanding of MNC's transfer pricing behavior in developing economies.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

Empirical research on international transfer pricing focus on multinational corporations (MNCs) operating in US, Japan and other developed countries. Much of the research investigates the effects of environmental variables on transfer pricing decisions. However, the business environment in developing countries is distinctly different from that in developed countries. Thus, the importance of environmental variables for transfer pricing in developing countries relative to developed countries is perceived differently by the management of MNCs. I will first discuss prior international transfer pricing research on the importance of environmental variables in developed and developing countries. Then, I will discuss prior empirical research on tax compliance. Finally, I will summarize prior studies on the tax and nontax cost trade-off theory.

#### **2.2 PRIOR EMPIRICAL RESEARCH ON INTERNATIONAL TRANSFER PRICING IN DEVELOPED ECONOMIES**

Empirical studies on transfer pricing mainly focus on developed countries and much of these prior studies examined the relative importance of environmental variables that constitute market imperfections to the choice of transfer pricing methods. Most of these studies surveyed MNCs operating in the US (Tang and Chan 1979; Burns 1980; Borkowski 1992, 1997a, 1997b; Tang 1993, 2002). A few studies surveyed MNCs in other developed countries including Japan (Tang and Chan 1979; Borkowski 1997a), UK (Tang 1981; Mostafa et al. 1984) and Canada (Tang 1981; Borkowski 1997b). Other studies deal with MNCs' income shifting behavior through international transfer pricing (Klassen et al. 1993; Jacob 1996; Oyelere and

Emmanuel 1998; Conover and Nichols 2000), transfer pricing objectives (Cravens and Shearon 1996), and transfer pricing methods (Kachelmeier and Towry 2002).

*Tang and Chan (1979), Tang (1981, 1993, 2002)*

Tang and Chan (1979) determine the important environmental variables considered by large US and Japanese MNCs in formulating their transfer pricing policies. They also identify the environmental variables which discriminate between US and Japanese MNCs on international transfer pricing practices. By analyzing the results of their questionnaire survey provided by 76 and 50 large industrial corporations in the United States and Japan, they find that overall profit to the company, restrictions on profit remittances imposed by host countries, competitive position of foreign subsidiaries, differentials in income tax rates and income tax legislation among countries, and performance evaluation of foreign subsidiaries are the five most important variables rated by US firms. On the other hand, overall profit to the company, competitive position of foreign subsidiaries, devaluation and revaluation of foreign currencies, restrictions on repatriation of profits imposed by foreign countries and performance evaluation of foreign subsidiaries are rated as most important variables by Japanese firms. They find that interest of local partners, devaluation and revaluation of foreign currencies, anti-dumping legislation, import restrictions imposed by foreign countries, and differentials in income tax rates and income tax legislation among countries contribute most to the different perceptions between the rating of US and Japanese firms.

Tang (1981) discusses the similarities and differences among four national groups of MNCs (the US, Japan, Canada, and the UK) in their consideration of environmental variables for transfer pricing decisions. Their results show that overall profits to the company and the competitive position of subsidiaries in foreign

countries are considered the most important variables by all four national groups. The interest of local partners in foreign subsidiaries is ranked substantially higher by UK and Japanese companies than by Canadian and US companies. Compared with the other national groups, Japanese companies place significantly greater importance on the devaluation and revaluation of foreign currencies.

Tang (1993) finds that overall profit to the company is still the most important environmental variable for US MNCs' transfer pricing decisions. Compared with Tang (1979), management ranked differentials in income tax rates and income tax legislation among countries, maintaining good relationships with host governments, the need of subsidiaries in foreign countries to seek local funds, and antitrust legislation of foreign countries as more important to transfer pricing decisions.

Tang (2002) updates Tang (1993). Some environmental variables used in Tang (1993) are replaced by new environmental variables in Tang's (2002) study. For example, the old variable "differentials in income tax rates and income tax legislation among countries" is not used, and new variables including "transfer pricing and other tax regulations in the United States", "transfer pricing and other tax regulations of foreign countries", and "differentials in income tax rates among countries" are added. The results of the study show that transfer pricing and other tax regulations in the United States is the most important variable for transfer pricing decisions, followed by overall profit to the company.

#### *Burns (1980)*

Burns (1980) aims to find the extent to which firms' transfer pricing decisions are influenced by various environmental factors. He analyses the responses from financial executives of 62 US-based MNCs. The financial executives

were asked to rate the importance of each environmental variable on their firms' transfer pricing decisions and to select five environmental variables which are most important to their firms' transfer pricing decisions. The results show that market conditions in foreign countries, competition in foreign countries, reasonable profit for foreign affiliates, US federal income taxes, and economic conditions in foreign countries are rated as the five most important variables among the others.

*Mostafa et al. (1984)*

Mostafa et al. (1984) use discriminant analysis to test whether the environmental variables including overall profit of the company, divisional autonomy, and compliance with foreign tax and tariff regulations would affect the choice of transfer pricing methods by MNCs. The paper collects data from 46 UK companies using a questionnaire survey. The results show that the perceived importance of the variables, including overall profit of the company, divisional autonomy, compliance with foreign tax and tariff regulations, and performance evaluation of divisions, are significantly related to the international transfer pricing methods used. However, the study does not rank the importance of each variable on the transfer pricing decision, nor does it test the relationship between the transfer pricing methods used and the environmental variables individually.

*Borkowski (1992, 1997a, 1997b)*

Borkowski (1992) studies the organizational and environmental variables that affect transfer pricing decisions through a questionnaire survey for 247 US-based MNCs. Findings suggest that the choice of a transfer pricing method is affected by specific organizational and environmental characteristics, including ease and cost of implementation, use of subsidiary profit as the primary performance evaluation

measure, degree of decentralization in the MNC, tax and tariff regulations, and the economic stability of the parent MNC country. The results also show that stability and favourableness of the parent company's economic circumstances are significant environmental factors affecting transfer pricing decisions.

Borkowski (1997a) attempts to determine whether organizational factors, environmental factors, and financial factors affect the choice of transfer pricing methods using univariate tests. A questionnaire survey collected data from 39 Japanese MNCs and 28 US MNCs. Findings suggest that Japanese and US MNCs utilize different transfer pricing methods, where Japanese MNCs are more likely to use non-cost-based methods than the US MNCs. Findings also suggest that the choice of transfer pricing methods is affected by differences in environmental (including the risk of audits by tax authorities and the market conditions in subsidiary countries) and financial factors (including return on equity and return on assets), but not by organizational factors (including industry and performance evaluation criteria). Environmental variables have a significant impact on the choice of transfer pricing methods.

Borkowski (1997b) analyzes the importance of environmental factors on transfer pricing decisions using similar statistical methods as Borkowski (1997a). Her sample includes 28 Canadian MNCs with US subsidiaries and 62 US MNCs with Canadian subsidiaries. The findings suggest that Canadian and US MNCs have similar views on the importance of different environmental variables on transfer pricing decisions, and "economic conditions of Canada" and "risk of audits by US tax authorities" are significant factors affecting the choice of transfer pricing methods.

*Klassen et al (1993)*

Klassen et al. (1993) evaluate changes in the reporting of taxable income by US MNCs in response to the changes in income tax rates. They analyze accounting data of 191 US MNCs and find evidence of income shifting by MNCs in response to tax rate changes in Canada, Europe and the US. They find that with increasing Canadian tax rates, MNCs shift income to the United States from Canada, whereas with decreasing rates in Europe, they shift income to Europe from the United States.

*Cravens and Shearon (1996)*

Cravens and Shearon (1996) examine whether transfer pricing policies affect financial consequences by using 82 responses to a questionnaire survey of US MNCs. They find that the number of countries of operation and the dollar value of transfers are significant factors that explain the total tax burden of MNCs. They also find that the value of transfers and the foreign sales percentage have an effect on the financial outcomes of the firm as measured by return of assets.

*Jacob (1996)*

Jacob (1996) investigates the relationships between the volume of intrafirm sales, differential tax rates and tax payments. He collects data from annual reports of 260 US firms from 1982 to 1984 and 289 firms from 1988 to 1990. He finds that firms with substantial intrafirm transfers paid lower global taxes, lower US taxes in the period of 1982-1984 (i.e. when foreign tax rates were lower than US tax rates) and higher US taxes in the period of 1988-1990 (i.e. when US tax rates were lower than foreign tax rates). These results are consistent with his hypotheses.

*Oyelere and Emmanuel (1998)*

Oyelere and Emmanuel (1998) examine the possible use of international transfer pricing as an income shifting mechanism by foreign-controlled enterprises operating in the UK. They compare the profitability and dividend distributions of a sample of 36 foreign-controlled enterprises and 36 UK-controlled enterprises over a two-year period. They find that foreign-controlled enterprises have lower profitability and higher dividend distribution than UK-controlled enterprises. This provides evidence that foreign-controlled enterprises in the UK shift income through international transfer pricing.

*Conover and Nichols (2000)*

Conover and Nichols (2000) evaluate the effect of firm size on income shifting between tax jurisdictions through the use of transfer prices both before and after the passage of the US Tax Reform Act of 1986. They expand the sample of Jacob (1996) by including 127 additional observations in the pre-1986 period and 136 additional observations in the post-1986 period. By doing so, their study extends prior studies by including smaller and financially distressed firms in the sample. They find that smaller and financially distressed firms are less likely to shift income through transfer pricing than larger firms.

*Kachelmeier and Towry (2002)*

Prior study reveals that transfer price negotiators expect fairness-based price concessions that moderate the influence of an outside market price when the outside market price strongly favors one of the parties. Based on an experimental study, Kachelmeier and Towry (2002) examine whether the expectations of fairness-based price concessions extend to the actual prices that result from real-cash negotiation. They find that expectations of fairness-based price concessions do not survive actual

negotiations when participants negotiate over a computer network with no communication other than bids, asks, and acceptances. Conversely, both expectations and actual negotiated outcomes reflect fairness-based price concessions when participants negotiate in a face-to-face setting with unrestricted communication.

In conclusion, prior studies in developed countries find that environmental variables have a significant impact on the choice of transfer pricing methods. Differentials in income tax rates, income tax and transfer pricing regulations among countries, and competition in foreign countries are ranked as important environmental variables for transfer pricing decisions. Other studies detect significant income shifting due to tax rate changes and other tax considerations as well as the volume of transfer. Transfer pricing may also be affected by the nature of negotiations. Key aspects of the above studies are summarized in Table 2.1. However, it is difficult to generalize their findings to MNCs operating in developing countries, as the business environment of developing countries is quite different from that of developed countries. For example, more stringent rules on movement of capital, and higher financial and political risks of operations are typically expected in developing countries.

[Insert Table 2.1 here]

### **2.3 PRIOR INTERNATIONAL TRANSFER PRICING RESEARCH IN DEVELOPING ECONOMIES**

The business environment in developing countries is distinctly different from that in developed countries. Thus, the importance of environmental variables for transfer pricing in developing countries relative to developed countries is perceived differently by the management of MNCs. Existing literature notes that the

inducements for MNCs to resort to transfer pricing manipulation in developing countries are stronger than in developed countries and the threat of fiscal losses is persistent in less developed countries.

*Lall (1973), Natke (1985), Rahman and Scapens (1986), Chan and Chow (1997a)*

Some studies attempt to use empirical evidence on trading statistics to assess the extent of manipulation of transfer pricing by MNCs operating in developing countries. Lall (1973) finds that, compared with world market prices, MNCs in Colombia over-priced their imports by 33 percent to 300 percent in the pharmaceutical sector, and by 24 percent to 81 percent in the rubber and electrical industries. Natke's (1985) study of the import prices of MNCs operating in Brazil during 1979 reveals that MNCs pay higher prices on imports than local firms and the prices of MNCs' imports also exhibit greater variability. Rahman and Scapens (1986) investigate the import prices of ten pharmaceutical items in Bangladesh, and find that MNCs over-priced imports from affiliates by between 78 percent and 600 percent. They conclude that transfer pricing abuse accounts for the low profitability of MNCs' operations in that country. Chan and Chow (1997a) find that MNCs in China over-priced imports and under-priced exports in the audio/video equipment, garment, plastic and chemicals industries. The above studies provide valuable evidence of international transfer pricing problems in emerging economies.

*Kim and Miller (1979), Plasschaert (1985)*

Limited studies investigate the effect of environmental variables on transfer pricing decisions of MNCs in developing countries. Kim and Miller (1979) collect survey and interview data from 30 US parent firms with at least one subsidiary in two of the eight specified developing countries (i.e. Korea, Malaysia, Philippines,

Taiwan, Brazil, Colombia, Mexico and Peru). Each of the firms is asked to indicate the degree of importance they attached to the nine factors which have potential influence on transfer pricing decisions. The results show that profit repatriation restrictions and exchange control within the foreign subsidiary country are most important for transfer pricing decisions in these developing countries. The tax variables, that is, income tax liability within the host country and within the US, which are important for MNCs in developed countries, only rank fifth and the sixth in the developing countries.

Another transfer pricing study in developing countries, Plasschaert (1985), aims to explore whether policies and regulations in less developed countries are such that the temptations for the MNCs to practice transfer pricing manipulation are stronger than is the case in more developed countries. Based on his analysis, less developed countries typically impose more restrictions on the MNCs than is the case in more developed countries. Import duties and exchange controls are also important environmental variables to induce transfer pricing manipulation in less developed countries. Moreover, less developed countries generally operate fewer measures to uncover and to redress transfer pricing manipulation since they are less well equipped for the task. Therefore, inducements for MNCs to resort to transfer pricing manipulation in developing countries are stronger than in developed countries. MNCs would shift profits from developing countries to circumvent the adverse impact of relatively stringent regulations on foreign investment imposed by governments and to minimize the perceived financial risk of operations in relatively uncertain environments. Table 2.2 summarizes prior international transfer pricing research in developing economies.

[Insert Table 2.2 here]

Both Kim and Miller (1979) and Plasschaert (1985) find that due to differences in business environment between developed and developing countries, tax factors which are important in developed countries are not so important in developing countries. Some nontax factors such as foreign exchange control and restrictions on profit repatriation which may not be important in developed countries are perceived as important factors in developing countries. However, Kim and Miller (1979) did not test how the importance of environmental variables affects the choice of transfer pricing methods. They also ignore the trade-off between environmental variables when making transfer pricing decisions. Plasschaert (1985) provides a good analysis but does not provide empirical evidence on how the environmental variables affect the transfer pricing decisions in developing countries. Therefore, empirical studies in developing countries examining the effect of the perceived importance of environmental variables on transfer pricing decisions, and examining the trade-off between tax and nontax factors on transfer pricing decisions can enhance our understanding of MNC's transfer pricing behavior in developing economies.

## **2.4 PRIOR RESEARCH ON TAX COMPLIANCE**

The empirical research of tax compliance is limited due to the difficulty in data collection. Compliance research mostly employs the judgment and decision-making paradigm, but also includes some analytical and archival-empirical studies. The research in this area is concerned with what factors determine compliance with the tax code (Shevlin 1999).

*Mills (1998)*

Mills (1998) uses data from tax returns and tax audit results for both private and public firms to test whether firms can manage tax and financial accounting income separately (i.e. no trade-off between tax and financial reporting). Mills (1998) finds that Internal Revenue Service (IRS) proposed audit adjustments increase as the excess of book income over taxable income increases. The implication here is that the larger the book-tax difference, the larger the tax evasion and the corresponding IRS audit adjustment. The paper provides evidence that firms cannot costlessly maximize financial reporting benefits and tax savings independently. This evidence justifies the general assumption in financial accounting research that firms face a trade-off between book and tax incentives for reporting income. Thus, firms cannot manage tax and financial accounting income separately and cannot have an unlimited level of book-tax differences because the larger the book-tax difference, the higher the risk of audit adjustment made by IRS. Therefore, researchers can use financial information to estimate tax-compliance behavior.

*Chan and Mo (2000, 2002)*

Chan and Mo (2000) study the tax compliance issue in China. Under tax incentives, production FIEs with operation period of more than ten years can enjoy a tax holiday (i.e. FIEs are exempted from tax for first two profit-making years and have a 50% tax reduction in the following three years). Chan and Mo (2000) examine corporate noncompliance during tax holidays by analyzing 585 audit cases in China. They find that a company's tax-holiday position affects noncompliance. Companies are least compliant before entering a tax holiday because FIEs have incentives to exaggerate losses during the pre-holiday period to delay the start of the tax holiday. They also find that companies are most compliant while in the tax-

exemption period because FIEs do not have an incentive to evade tax since they are exempted from tax.

Chan and Mo (2002) further decompose the noncompliance into book-tax conforming and book-tax difference noncompliance, and analyze how company characteristics differentially affect the incentives and opportunities for different forms of tax noncompliance (i.e. book-tax-conforming or book-tax-difference). Based on 256 tax audit cases, they find that export-oriented and high-tech companies have significantly larger book-tax-conforming tax audit adjustments than domestic-market-oriented and non-high-tech companies. Export-oriented FIEs have special tax incentives and priority in obtaining loans. Thus, they have greater tax benefits and lower financial reporting costs of underreporting book and tax incomes. High-tech FIEs have less reliance on reported profits for performance evaluation and obtaining loans. Thus, they have lower financial reporting costs of underreporting book and tax incomes. Domestic-market-oriented and non-high-tech companies have significantly larger book-tax-difference audit adjustments than their counterparts, because domestic -market-oriented firms incur large entertainment expenses for keeping a good relationship with distributors which may exceed the deduction limit and non-high-tech companies rely more on accounting income than high-tech companies. However, Chan and Mo (2000, 2002) specifically exclude transfer pricing noncompliance in their studies as their data were based on China's annual tax audits.

*Chan and Chow (1997b)*

Chan and Chow (1997b) was the first and only empirical study on transfer pricing noncompliance in China by using the tax audit cases in the early 1990s. By comparing the firm characteristics of FIEs being selected for transfer pricing audits

by the Chinese tax authorities and national data, they find that a higher proportion of wholly foreign-owned enterprises, cooperative joint ventures and Hong Kong sourced FIEs are selected for transfer pricing audits than the national distribution of FIEs. However, Chan and Chow (1997b) do not provide any multivariate analysis, nor do they specifically analyze the tax and nontax cost trade-off for the MNCs. As explained later, they also do not study the effect of activity orientation on transfer pricing noncompliance. My research extends the Chan and Chow (1997b) study by analyzing via multivariate statistical methods how firm characteristics, including activity orientation, affect the incentive for transfer pricing manipulation and the probability of being audited under the tax and nontax cost trade-off theory. I also analyze the effects of two important variables (i.e. audit costs and possible tax amount that can be recovered by tax authorities) on audit selection. Table 2.3 summarizes prior research on tax compliance.

[Insert Table 2.3 here]

## **2.5 RESEARCH ON TAX AND NONTAX COST TRADE-OFF THEORY**

A growing body of empirical tax research examines the coordination of taxes and other factors in business decisions (Shackelford and Shevlin 2001). As discussed, Mills (1998) and Chan and Mo (2002) study the trade-off between tax and financial statement income through tax audit cases. Other studies on tax and nontax cost trade-off are summarized below.

*Cloyd (1995)*

Cloyd (1995) examines the effects of tax and financial accounting conformity on tax preparers' recommendations of tax treatment. The author hypothesizes that when there is ambiguity regarding the tax treatment, conformity or nonconformity of

the financial accounting treatment affects expected tax benefits of the treatment through its effect on the subjective probabilities of (i) an IRS audit and (ii) successfully defending the tax position if challenged by the IRS.

By conducting an experiment with 72 experienced tax professionals as subjects, Cloyd (1995) finds that (i) conformity of financial accounting and tax accounting treatments increases tax preparers' subjective probabilities of successfully defending aggressive tax positions, and (ii) more preparers recommended aggressive tax positions in the presence of book-tax conformity and when the client is described as aggressive with respect to tax matters. Therefore, the findings suggest that book-tax conformity reduces the tax cost predicted by tax preparers.

*Cloyd et al. (1996)*

Based on a mail survey of corporate financial executives, Cloyd et al. (1996) examine whether management is more likely to choose conformity when expected tax savings increase, and is less likely to choose conformity when financial reporting costs relating to ownership structure increase (i.e. for public firms). They suggest that if the appropriate financial accounting and tax treatments are ambiguous and the firm has chosen an aggressive tax treatment, it is likely that management may choose a financial accounting method that conforms to the tax choice (i.e. conformity) in an effort to increase the probability that the IRS will allow the tax treatment. However, despite an expected tax saving, it is unlikely that management always chooses conformity because the choice results in lower reported income and incurs higher nontax costs due to the market reactions of the low reported income. Therefore, there is a trade-off between tax and nontax costs. They find that conformity is more likely as its effect on successfully defending the aggressive tax position increases,

and public-firm managers are less likely to conform than are private-firm managers because public firms have higher financial reporting costs.

*Guenther et al. (1997)*

Guenther et al. (1997) examine the impact of book-tax conformity on firms' financial reporting and tax planning activities. Due to the Tax Reform Act of 1986, many large publicly traded firms in the US were forced to change from the cash method of accounting to accrual method of accounting for tax purposes. The change would increase book-tax conformity because the same method is used for recognizing income for tax and financial reporting purposes. They investigate the behavior of the "cash method" firms (i.e. the firms forced by statute to adopt accrual method from cash method for tax purpose) in reporting their accounting income and cash flows in the pre- and post-1986 period.

They find that "cash method" firms accrued more income for financial reporting than "accrual" firms (i.e. the firms used the accrual method for both tax and financial purposes pre- and post-1986 periods) before the Tax Reform Act because the year-end acceleration of financial statement income imposed no tax costs if cash were not collected for the accrued income. However, the "cash method" firms reduced accruals after the Tax Reform Act. The results indicate that increasing book-tax conformity (i.e. using accrual method for both tax and financial reporting) causes firms to defer income recognition for financial statement reporting purposes (so as to defer tax payment) after considering the trade-off between tax and financial reporting objectives.

*Klassen (1997)*

Klassen (1997) uses inside ownership concentration as a proxy for capital market pressure. This study examines whether inside ownership concentration influences the trade-off between financial reporting and tax reporting incentives, since financial reporting is an important nontax consideration for many managers who rely on capital markets to raise investment funds. But at the same time, these managers may not wish the company to appear as profitable when preparing tax returns. The results show that firms with lower levels of inside ownership concentration realize larger financial reporting gains or smaller financial reporting losses than firms with higher levels of concentration. Such a relationship is weaker for low tax-rate firms. Thus, the findings support the hypotheses that lower inside ownership will lead to increased emphasis on financial reporting, and thus result in larger realized gains or smaller realized losses. This implies lower inside ownership firms have lower levels of tax evasion as they are more likely to report larger income rather than underreport income to reduce tax payments.

*Mills and Newberry (2001)*

Mills and Newberry (2001) examine whether nontax financial-reporting costs (such as debt constraints, and bonus plan threshold) influence book-tax conformity decisions. In particular, this paper conducts empirical tests on the potential influence of nontax financial-reporting costs for firms with different ownership types (public vs. private) on firms' book-tax conformity. They find that public firms report higher book earnings relative to taxable income than private firms when they are in profitable positions because public firms have higher financial reporting costs, and report larger book losses relative to tax losses when they are in loss positions in order to increase the probability that they can improve their financial results next year. In addition, Mills and Newberry (2001) find that higher debt levels impose greater

nontax costs on firms that are privately held or more financially distressed. They also find that bonus plan thresholds and book income patterns influence public firms' book-tax reporting. Public firms have higher nontax financial-reporting costs because the diffused ownership results in greater reliance on compensation plans that use reported book income. Public firm managers are more likely to believe that reported income determines the market values of their firms. Besides, accounting theory posits that firms subject to greater monitoring by lenders are more likely to use income-increasing accounting procedures.

*Hodder et al. (2003)*

After the change of US tax law in 1996, banks are permitted to become S-corporations which can avoid the double tax burden imposed on C-corporations. C-corporations' earnings are taxed at the corporate level and dividends are also taxed at the individual-shareholder level, whereas S-corporations' shareholders are taxed individually but the S-corporations are not taxed at the corporate level and dividends are tax free. Given the tax benefits, banks are expected to convert to S-corporations. However, in fact, only 19.2 percent of banks did so by 1999 due to nontax cost considerations. Hodder et al. (2003) examine tax and nontax factors that influence commercial banks' conversion decision from taxable C-corporations to nontaxable S-corporations.

The results show that banks are more likely to convert to S-corporations as the tax benefits of conversion increase (i.e. when conversion saves dividend taxes, avoids alternative minimum taxes, minimizes state income taxes, and when conversion causes loss of corporate tax-loss carry forwards and potential penalty taxes on unrealized gains), and are less likely to convert as the costs of conversion

increase (i.e. when banks have high demand of capital but conversion causes restricted access to equity capital).

*Smith (2002)*

None of the above empirical studies on tax and nontax cost trade-off deal with transfer pricing. Smith (2002) provides an analytical study on transfer pricing dealing with the trade-off between tax minimization and managerial performance evaluation. Some studies argue that firms do not face a meaningful trade-off between tax minimization and performance evaluation because the firms can use multiple transfer prices to eliminate the trade-off. For example, different transfer prices can be used for tax and performance evaluation purposes, or performance measures which are independent of the transfer prices can be used for eliminating the trade-off between taxes and incentives. Smith (2002) addresses the potential trade-off between tax minimization and managerial performance evaluation in setting multinational transfer prices. He analytically proves that the trade-off between tax and performance evaluation still exists because audit risk will be increased if the firms (i) set separate transfer prices for tax and performance evaluation or (ii) use a performance measure other than profit. He finds that the possibility of discovery of a second price by tax authorities may lead to penalties and additional tax which would thus limit the value of using separate prices for transfer pricing. Besides, sophisticated regulators could correctly infer that income shifting motivates a firm's choice of an idiosyncratic, non-profit-based compensation scheme and thus decide to audit the firm more closely. However, no empirical results are provided in his study. Table 2.4 summarizes prior research on tax and nontax cost trade-off analysis.

[Insert table 2.4 here]

In conclusion, my thesis is different from the previous studies on tax and nontax cost trade-off because I study transfer pricing behavior based on actual tax audit cases and the “tax and nontax cost trade-off” analysis, whereas the other studies in this area mainly focus on the trade-off for book-tax reporting decisions with no specific reference to transfer pricing. Smith (2002) is the only study that addresses the potential trade-off between tax minimization and managerial performance evaluation in setting multinational transfer prices. However, no empirical results were provided in his study.

**CHAPTER 3**  
**BUSINESS ENVIRONMENT AND TRANSFER PRICING LEGISLATION**  
**IN CHINA**

**CHAPTER SUMMARY**

China has recently experienced a sharp increase in the inflow of foreign direct investment. Hong Kong, the United States, Japan and Taiwan are considered the four major sources of foreign investment in China. These four jurisdictions account for 70.1 percent of the total foreign direct investment of China as at the end of 2002. The business environment in China gives rise to a mixed inducement on MNC's transfer pricing decisions. With generous tax incentives, China's corporate income tax rates are generally lower than most of the developed countries. However, import tariffs in China, though declining, are still generally higher compared with its major trading partners. When setting transfer prices, FIEs will face a trade-off between minimization of corporate income tax and minimization of import tariffs. In addition, the foreign exchange control risks and the political risks in China are strong inducements for FIEs to shift profits out from China through transfer pricing. Other environmental factors such as interest of local partners and restrictions on repatriation of profits may also impact international transfer pricing decisions by MNCs in China. MNCs should also pay attention to transfer pricing legislation in China. The regulations require all related-party transactions to be at arm's length price, otherwise, the tax authorities are empowered to adjust the transfer prices adopted using methods such as the comparable uncontrolled price method, resale-minus method and cost-plus method.

**CHAPTER 3**  
**BUSINESS ENVIRONMENT AND TRANSFER PRICING LEGISLATION**  
**IN CHINA**

**3.1 INTRODUCTION**

Transfer pricing is regarded as a mechanism available for MNCs to maximize profits by exploiting the market imperfections arising from a set of economic and sociopolitical factors that vary from country to country (Leitch and Barrett, 1992). Like most developing countries, China offers preferential policies to attract foreign investment, while at the same time imposing controls on outflows of capital. As analyzed by Chan and Chow (1997b), the business environment in China gives rise to mixed inducements affecting MNC's transfer pricing decisions. This chapter reviews various aspects of the business environment in China which is relevant to international transfer pricing considerations including (i) sources of foreign investment, (ii) forms of investment, (iii) corporate income tax laws, (iv) import and export tariffs, (v) foreign exchange control and risks, (vi) repatriation of profits, royalties, interest and other inter-company charges, and (vii) political and social pressures. Finally, transfer pricing regulations in China will be explained and discussed.

**3.2 ASPECTS OF THE BUSINESS ENVIRONMENT IN CHINA**

Decisions on international transfer pricing are motivated by a number of environmental factors. Sources of foreign investment and forms of investment affect the background and structure of management and would thus affect the operations of FIEs including the setting of transfer pricing policies. Other environmental factors including corporate income tax laws, import and export tariffs, foreign exchange control and risks, repatriation of profits, and political and social pressures would

trigger different costs and benefits for shifting profits through transfer prices. I will discuss these environmental variables as follows:

### **3.2.1 Sources of Foreign Investment in China**

As elaborated in Chapter 1, China has recently experienced a sharp rise in the inflow of foreign direct investment. Foreign investment has increased from US\$27.5 billion in 1993 to US\$46.8 billion in 2001. China's entrance to the WTO in late 2001 has accelerated the trend of inflows of foreign investment. Foreign direct investment in China reached US\$52.7 billion in 2002 and China became the second largest recipient of foreign direct investment in the world just behind Luxembourg, but ahead of the United States.

Foreign direct investment in China comes from more than 50 countries or regions. Hong Kong remains the leading source of foreign direct investment in China, accounted for 45.7 percent of accumulated FDI during 1979-2002, followed by investment from the United States which accounted for 8.9 percent of total contracted investment in those years (SSB 2003). Japan and Taiwan are also major sources of investment in China. As shown in Table 3.1, these four jurisdictions (i.e. Hong Kong, the United States, Japan and Taiwan) account for 70.1 percent of the total foreign direct investment as at the end of 2002. However, it is worth noting that many Hong Kong companies investing in China are not owned by bona fide Hong Kong residents (Pomfret 1989; Khan 1991). A number of MNCs invest in China through their Hong Kong subsidiaries (Plummer and Montes 1995). Some small- and medium-sized investors from Western countries form joint ventures with Hong Kong companies to invest in China in order to capture the experience and expertise of these firms in the China market (Plummer and Montes, 1995). This trend is expected to continue as China signed The Closer Economic Partnership Arrangement (CEPA)

with Hong Kong in 2003. Under the CEPA, Hong Kong companies are allowed to establish operations in China for certain restricted sectors including management consulting, advertising, accounting, distribution, freight forwarding agency, storage and warehousing, logistics, tourism, audio visual, construction and real estate, legal services, banking services, securities services, and insurance. Some non-Hong Kong companies will take advantage of opportunity from CEPA and thus invest in China through their Hong Kong subsidiaries or through the acquisition of Hong Kong companies. Unfortunately, no official statistics are available to gauge the magnitude of the foreign ownership of Hong Kong companies investing in China.

[Insert Table 3.1 here]

### **3.2.2 Forms of Investment**

The Chinese government allows FIEs to operate in China in the form of joint ventures or wholly foreign-owned enterprises. Two types of joint venture are in operation, namely, equity joint ventures and cooperative joint ventures.

Equity joint ventures (EJVs) are governed by the Law on Joint Ventures Using Chinese and Foreign Investment and must be formed as a limited liability company. Foreign investors share profits and bear risks in proportion to their equity ownership. The highest authority of an equity joint venture is the board of directors, which decides all major issues concerning the joint venture. The board consists of at least three directors appointed by the partners according to each partner's capital contributions. In handling major issues, the board of directors reaches decisions through consultation with the joint venture partners. EJVs are now the most common form of foreign investment in China as shown in Table 3.2. An advantage of investing in the form of EJVs is the benefit of having a Chinese partner equipped with local market information. However, the participation of local partners restricts

the freedom of the foreign partners in making business decisions. For example, when making transfer pricing decisions, foreign partners need to ensure fair profits are reported by the EJVs in order to avoid conflict with the local partners.

Cooperative joint ventures (CJVs) are governed by the Law on Chinese-foreign Cooperative Enterprises. They can be registered as a legal person or a non-legal one. Their establishment is based on a contract between the venture partners. Unlike in the EJVs, Chinese and foreign investors are able to contractually specify their profit-sharing ratios. The management structure for CJVs is also more flexible. It is usually managed by a management committee comprising representatives from both partners. If it is managed by a board of directors, the chairman can be appointed by either the Chinese or foreign partners. It is also common to have a management contract granting the foreign partners exclusive authority for running the venture. CJVs are also more flexible in terms of capital investment requirements and repayment of capital. In most cases, foreign partners provide machinery, raise funds and offer management and technical expertise, while Chinese partners provide land, labor and a network of local contacts. The foreign partners are allowed to recover their investment during the contractual period. At the expiry of the contract, the production facility reverts to Chinese partnership without compensation to the foreign partners. Therefore, transfer pricing is an important mechanism to accelerate the return of investment to foreign partners. CJVs are popular for projects that have a limited duration and a specific objective, such as an infrastructure programme.

Wholly foreign-owned enterprises (WFOEs) are governed by the Law on Sole Foreign Investment Enterprises. WFOEs always take the form of a limited liability company and they are restricted from operating in certain industries such as telecommunications, utilities and transportation. WFOEs must be export oriented to achieve a foreign exchange balance or surplus, or they must utilize advanced

technology to develop new products or improve products that may serve as import substitutes. However, as China enters the World Trade Organization (WTO), the trend is to further relax the restrictions on WFOEs. As a result, WFOEs are becoming popular for foreign investment in China.

Investment options available to foreign investors have been expanding. Since 1995, the Chinese government has allowed large MNCs with multiple ventures in China to set up Chinese holding companies (CHCs) by uniting their existing projects and fully integrating the production, marketing, and investment functions under one corporate roof. The establishment of CHCs can provide foreign investors with ease of financing while holding their investment interests including EJVs and WFOEs. CHCs are regarded as foreign entities which hold and invest in second-level FIEs and provide certain administrative services to their subsidiaries. Effective from 1 September 2001, foreign investors can also set up a new form of business vehicle called foreign funded venture investment enterprises (FFVIE). FFVIEs can take the form of WFOE, EJV or CJV. The business scope of FFVIEs include investing in high and new technology sectors, providing venture capital consulting services, providing management consulting services to their foreign invested enterprises, and engaging in any other business approved by the Ministry of Foreign Trade and Economic Corporation. However, neither CHCs nor FFVIEs are commonly used in China.

[Insert table 3.2 here]

### **3.2.3 Corporate Income Tax**

The income tax laws for foreign investment were first enacted in 1980 and 1981, respectively, for joint ventures and foreign enterprises. Under these laws, different forms of foreign investment were taxed at different rates with different tax

incentives. In 1991, these laws were unified. All foreign investors in China are taxed under the Income Tax Law of the People's Republic of China Concerning Foreign Investment Enterprises and Foreign Enterprises (Income Tax Law). Under the Income Tax Law, FIEs are liable for income tax based on their income derived from production and business operations inside and outside China at a rate of 30 percent plus a local tax of 3 percent, resulting in a total effective rate of 33 percent. However, a host of tax incentives is offered by the central government to attract or retain foreign investment, and some of the tax incentives available to FIEs in China are discussed as follows:

- (1) FIEs can enjoy a reduced tax rate of 15 percent if their establishments are located in the five Special Economic Zones (Shenzhen, Zhuhai, Shantou, Xiamen and Hainan Island) or if they are of a production nature established in Economic and Technological Development Zones of the fourteen open coastal cities (Behai, Zhanjiang, Guangzhou, Fuzhou, Wenzhou, Ningbo, Shanghai, Nantong, Lianyungang, Qingdao, Yantai, Tianjin, Qinhuangdao and Dalian). Enterprises of a production nature generally refers to all manufacturing and agricultural industries and a few servicing industries. The reduced rate of 15 percent also applies to FIEs engaged in other preferred projects in some selected areas as approved by the State Council. These projects are usually related to infrastructure development including energy, transportation, and port or pier projects.
- (2) FIEs of a production nature established in the five Coastal Open Economic Zones (Pearl River Deltas, Southern Fujian Province, Changjiang Deltas, Shandong Peninsula and Liaodong Peninsula), open cities along the Yangtze River and in the so-called 'old urban districts' of cities where Special

Economic Zones and Economic and Technological Development Zones are located can enjoy a reduced tax rate of 24 percent.

- (3) FIEs of a production nature which are scheduled to operate for a period of 10 years or more can enjoy income tax exemption for the first 2 profit-making years and a 50 percent tax rate reduction for the subsequent 3 years. For enterprises engaged in low-profit operations and projects in economically underdeveloped areas, a further reduction of 15 to 30 percent is available for 10 years after the expiration of the 5-year tax holidays.
- (4) Export-oriented FIEs can enjoy a 50 percent tax reduction (subject to a minimum tax rate of 10 percent) in any particular year which they export more than 70 percent of their total production (in value terms). Similarly, technologically advanced FIEs can enjoy a 50 percent tax rate reduction for an additional 3-year period beyond the normal 5-year tax holiday, so long as they remain technologically advanced.
- (5) FIEs located in the central western district, which consists of 19 provinces of inner China and FIEs engaging in businesses categorized as Encouraged Projects in the Foreign Investment Directive issued by the State Council are taxed at a reduced rate of 15 percent for the period 2001 - 2010.

The policy of granting extensive tax concessions to foreign investors is currently under re-consideration by SAT because the WTO requires that there should be equal conditions for both foreign and domestic investors. The existing policies governing the granting of tax holidays to FIEs may be completely revamped and may be replaced by granting tax holidays to companies in certain designated or encouraged industries, regardless of whether they are FIEs or domestic enterprises. Incentives previously granted to FIEs may be grandfathered during a transitional

period (Mo 2003). It is also anticipated that a new type of enterprise income tax applicable to both FIEs and domestic enterprises will be introduced in the future to unify the existing two corporate taxes. A common tax rate of 25 percent for both FIEs and domestic enterprises has been discussed (Mo 2003).

When setting transfer prices for international related-party transactions, FIEs will consider the tax rate and tax incentives applicable to them. They can minimize corporate income tax by shifting profits from high tax jurisdictions to low tax jurisdictions. For example, an FIE which is taxed at 33 percent in China can shift profits to its Hong Kong associates (which is taxed at 17.5 percent) through transfer pricing. If so, for every US\$100 transferred, the group can save corporate income tax of US\$15.5. On the other hand, if the FIE is exempt from tax in China, shifting profits to China through transfer pricing can help the group to save corporate income tax.

#### **3.2.4 Import and Export Tariffs**

The Chinese government has adopted a tariff escalation policy whereby nominal tariffs vary with the degree of domestic processing. Nominal tariffs are lower for raw materials and semi-processed materials than for final goods. Preferential policies are granted to FIEs on import and export tariffs. Machinery and equipment imported as part of capital from foreign investors in selected industries are exempt from import tariffs. In addition, the import of raw materials, knock-down components, parts, accessories and packaging materials for producing export products is duty free. Goods manufactured by FIEs are also exempt from export duties. In general, import duties in China are substantially higher than those in more developed countries. However, since its entry to the WTO, China lowered the tariff barriers on a broad range of imports, ranging from agricultural goods to industrial

products. The average import tariff for industrial products was reduced from 16 percent in 2000 to 12 percent in 2002 and will be further reduced to 10 percent by 2005. Having said that, the average tariff rate in China is still higher than that in the United States, Japan and Europe. Therefore, to reduce tariff payments, MNCs can under-price their goods imported to China. However, by doing so, profits are shifted to the FIEs in China and this may increase the corporate income tax payment if the corporate tax rate in China is higher than the tax rates in the home countries. Thus, when setting transfer prices, management should consider the potential trade-off between corporate income tax and tariff payments.

In recent years, China has signed certain free trade agreements with other jurisdictions which have great impact on China's tariff system. For the Asian Pacific region, China and the Association of South East Asian Nations (ASEAN) signed a framework agreement in late 2002 which commits them to establish an ASEAN-China Free Trade Area by 2010 (ASEAN 2002). China also signed the CEPA with Hong Kong and Macau in 2003. Under the CEPA, no import tariff will be imposed on 273 categories of goods from 1 January 2004 provided that the goods are of Hong Kong or Macau origin. These 273 categories of goods include electrical and electronic products, plastic articles, paper articles, textiles and clothing, chemical products, pharmaceutical products, clocks and watches, jewelry, cosmetics, metal products, and other appliances and accessories. Other goods of Hong Kong or Macau origin not included in these 273 categories will also enjoy zero import tariff by 2006. The Hong Kong Trade Development Council estimates that annual savings in tariffs for Hong Kong, as a result of CEPA and the WTO, will amount to approximately US\$96 million. To enjoy the tariff exemption offered by CEPA, MNCs may consider relocating some production facilities from other jurisdictions to Hong Kong or Macau. Transfer pricing is also a major consideration in satisfying

the criteria of “rule of origin” (i.e. how Chinese government determines the country of origin for imported products). In order to increase the amount of production in Hong Kong or Macau, MNCs may reduce their import transfer prices of intermediate goods by changing the terms of trade. They may also increase the amount of value-added in Hong Kong and Macau by renaming the terms of production functions. By manipulating the transfer prices, a higher portion of the production profits can be reported in Hong Kong or Macau.

### **3.2.5 Foreign Exchange Control and Risks**

China’s foreign exchange policy has been characterized by a high degree of centralization although China has undergone various reforms for its foreign exchange system. On 1 January 1994, China unified the official exchange rate with the swap rate, determined daily by the People’s Bank of China, the central bank of China, through a managed float system. In late 1996, China announced that the Renminbi can be freely convertible for current account items. However, strict control is still imposed on capital account items. As shown in Table 3.3, the average exchange rate of Renminbi to US dollars for the past 10 years remained stable within the range from 8.277 to 8.619. Many economists agreed that the capital control did help protect the Renminbi from the currency crisis emerging in Asia during the second half of 1997 (EIU 1998; CCH 2003).

[Insert Table 3.3 here]

In China, items under the current account are fully convertible. The current account covers trade and labor service receipts and payments as well as one-way transfers in foreign exchange. Upon approval by the State Administration of Foreign Exchange (SAFE), an FIE can open a foreign exchange settlement account with a

designated bank by presenting its Foreign Exchange Registration Certificate and other supporting documents. When receiving the foreign exchange, the FIE should notify SAFE by presenting the foreign exchange receipts on export verification forms, export declarations, invoices, and foreign exchange receipts on the export verification counterfoil. FIEs are allowed to go through the verification procedures on a monthly basis. For foreign exchange received under the current account, FIEs can retain a certain amount of the foreign exchange received within the limit prescribed by SAFE. Any excess portion has to be sold to designated banks. When FIEs have to make external payments within its business scope, they may draw the required amount from its foreign exchange settlement account and any shortage can be purchased at designated banks with the supporting documents specified by SAFE.

Unlike the current account, strict control is exerted over the capital account. The capital account covers foreign exchange receipts and payments in respect of direct investment, loans of all kinds, securities investment, etc. In accordance with the Regulations for Foreign Exchange Control of the People's Republic of China, all foreign exchange receipts and payments under the capital account have to be approved by SAFE. For foreign exchange receipts under the capital account, FIEs must comply with the relevant regulations and open foreign exchange accounts at designated banks. For example, for investment capital in foreign exchange contributed to an FIE, a capital fund account must be opened. The foreign exchange deposits in the account can be used to pay for current account expenditures as well as SAFE-approved capital account expenditures. For external debts and foreign exchange loans extended by domestic financial institutions in China to an FIE, a loan account must be opened, and the foreign exchange deposited into this account must be the contracted amount registered with SAFE. Any withdrawals from this account must be used for the purposes stipulated in the loan agreements, whereas an approval

by SAFE is not required. For repayment of loans, SAFE will only approve the repayment of external debt which has been properly registered. When applying to SAFE for approval to make repayment of external debt principal and interest, an FIE should present proof of external debt registration, the external debt contract, and notice by creditor on repayment of principal and interest (the notice should state the respective amounts of principal and interest, interest rate, method of interest computation, and number of interest-bearing days, etc.). Upon approval by SAFE, the FIE may make payment through its foreign exchange account or at designated banks.

The non-convertibility of the Renminbi complicates the investment environment in China. Foreign exchange control is always a concern for FIEs and their investors when dealing with China. For example, in practice, it is difficult for FIEs to obtain foreign exchange to pay off service fees to an overseas company (CCH 2003). The various ever-changing rules and internal policies made by SAFE (some of which are not made available to the investors) make foreign exchange a very difficult issue for foreign companies to deal with while doing business in China. Transfer pricing manipulation would be a good mechanism to tackle the strict control on foreign exchange. By over-pricing imports and under-pricing exports, profits and thus the foreign currencies will be shifted to their associate companies located overseas.

### **3.2.6 Repatriation of Profits, Royalties, Interest and Other Inter-company Charges**

To reduce capital outflow and to improve their balance of payments, many developing countries have introduced measures to restrict MNCs in the repatriation of profits, royalties and other inter-company charges, or have imposed high

withholding taxes on these remittances. China does not impose restrictions on foreign investors repatriating their share of profits in foreign exchange, provided that the FIEs have enough foreign exchange for such remittances and the remittances are supported by a written resolution of the board of directors. Remittance of dividends is subject to a withholding tax of 10 percent for equity joint ventures and 20 percent for foreign enterprises. However, dividends paid by FIEs to their foreign investors have been exempted from withholding tax since 1991.

Royalties paid to foreign companies for licensing of trademarks, copyrights, know-how and other technical transfers are deductible for tax purposes provided that the amounts are reasonable, and are subject to 20 percent withholding tax. However, the royalties paid by a branch to its foreign head office are not deductible and there is no issue of any withholding tax since both of them are treated as the same entity. Interest paid on loans to overseas holding companies is deductible subject to thin capitalization rules and an arm's length rate test. Interest income is also subject to the basic withholding tax of 20 percent. As in the treatment of royalties, interest paid by a branch to its foreign head office is not tax deductible and there is no withholding tax charged. The withholding tax rate for royalties and interest can be reduced under a tax treaty. Under a tax treaty, the withholding rate is reduced to 10 percent or less in most cases. The withholding tax paid in China can be treated as tax credits in foreign countries under tax treaties. Currently, China has signed tax treaties with the US, Canada and most European and Asia Pacific countries including UK, France, Germany, Japan, and Sweden. Therefore, the withholding tax payment should not be an additional cost for the MNCs. However, if the Chinese tax authorities are of the opinion that the transfer prices for the royalties and interest payments are not at arm's length, they are empowered to adjust the prices

accordingly. The withholding taxes already paid on the royalties and interest are not refundable. Thus, these amounts would be double taxed in China.

For management services fees, general management fees allocated by overseas associate companies are not deductible for tax purposes. However, genuine charges paid to affiliates for provision of specific services relevant to production and business operations such as marketing and advertising service fees are deductible. No withholding tax is charged on the payment of such service fees.

### **3.2.7 Political and Social Pressures**

Risk of expropriation and nationalization is a critical concern for foreign investors. To reassure investors that China offers a safe and hospitable environment for investment, China has enacted laws for joint ventures and for wholly foreign-owned enterprises which state that China shall protect the lawful rights and interests of foreign investors in China, including their rights to remit profits abroad (NPC 1979, 1986, 1988). The State has thereby promised not to nationalize or expropriate FIEs except under special circumstances where such an action is in the national interest. Commensurate compensation is assured under Chinese law in the event of nationalization.

In relation to social pressure, labor unions are an important concern. FIEs' employees have the right to establish grassroots labor unions if more than 25 employees are members of the All-China Federation of Trade Unions. If there are less than 25 labor union members, workers may select a representative on their own. The Ministry of Labor has made rulings to strengthen the role of labor unions in collective bargaining procedures. However, in practice, labor unions in China are less confrontational and seldom represent employees' interest. In most cases, they

simply organize various social activities for employees. Therefore, FIEs need not to be too concerned about the power of labor unions.

### **3.3 REGULATIONS FOR TRANSFER PRICING IN CHINA**

#### **3.3.1 General Legal Environment in China**

One of the risks for FIEs in China is the uncertain regulatory environment. Regulatory consistency and certainty are crucial to long term investment plans and operations by FIEs. It was reported that an uncertain regulatory environment in China was a major difficulty confronting foreign investors (US-China Business Council 1992). Companies have cited the lack of transparency and clarity of regulations, and the lack of uniformity and consistency in interpreting and implementing regulations as obstacles for successful business operations in China. However, improvements have been made over the years; for example, the Tax Administration and Collection Law was issued in 2001 which clarifies the powers of tax authorities and the rights of taxpayers.

#### **3.3.2 Transfer Pricing Legislation in 1991**

Transfer pricing provisions were first introduced in national legislation under Article 13 of the Income Tax Law adopted in 1991 by the National People's Congress. The Income Tax Law stipulates that the payment or receipt of charges or fees in business transactions between a FIE in China and its associated enterprises shall be made in the same manner as the payment or receipt of charges or fees in business transactions between independent enterprises. Where the payment or receipt of charges or fees is not made in the same manner as in business transactions between independent enterprises and results in a reduction of taxable income, the tax authorities shall have the right to make reasonable adjustments.

According to the Income Tax Law, the China tax authorities are empowered to make adjustments of transfer prices which are not in accordance with the arm's length principle. The operational rules and regulations of Article 13 of the Income Tax Law are provided under Article 52-58 of the Detailed Rules and Regulations on Implementation of Income Tax Law for Enterprises with Foreign Investment and Foreign Enterprises (Detailed Rules). The Detailed Rules provide the definition of associated enterprises, categories of related-party transactions and pricing methods, etc. However, the definitions and guidelines under the Detailed Rules are not detailed enough. Thus, the SAT issued two other circulars as supplements in 1992.

### **3.3.3 Transfer Pricing Legislation in 1992**

The Implementation Measures on Tax Administration of Business Dealings between Associated Enterprises [i.e. Guoshuifa (1992) No. 237] was issued in 1992 for the implementation of the 1991 Income Tax Law and the Detailed Rules. Circular No. 237 (1992) provides a more detailed definition of associated enterprises as compared to the specifications in the Detailed Rules. It states that a foreign enterprise and another company are associated in the following circumstances:

- (i) where an enterprise directly or indirectly owns 25 percent or more of another enterprise;
- (ii) where two enterprises are directly or indirectly owned by a third enterprise with 25 percent or more capital interest;
- (iii) where an enterprise borrows more than 50 percent of its loans from another enterprise, or where an enterprise guarantees 10 percent or more of another enterprise's loan;

- (iv) where one of the managing directors or half or more of the board of directors or the executive managers of an enterprise is/ are appointed by another enterprise;
- (v) where the raw materials and parts used by an enterprise for production are supplied or controlled by another enterprise;
- (vi) where the sales of the commodities of an enterprise are controlled by another enterprise; or
- (vii) where the production, trading activities and profits of an enterprise are effectively controlled by another enterprise which has a mutual interest, such as the existence of family relationship.

Circular No. 237 (1992) also imposes information-reporting requirements on every FIE taxpayer. FIEs are required to disclose their related-party transactions in a form called the Declaration Form for Transactions Between Related Parties (“Declaration Form”). This form is an integral part of the Annual Foreign Enterprise Income Tax Return. Without this form, the tax authorities will consider the annual tax filing incomplete and thus reject the tax return submitted.

Apart from Circular No. 237 (1992), the Implementation Rules and Procedures on Tax Administration of Transfer Pricing among Associated Enterprises [i.e. Guoshuifa (1992) No. 242] was issued in 1992. This publication provides a detailed set of implementation rules and procedures which serves as an internal operational manual for tax authorities. Circular No. 242 (1992) sets out the procedural aspects in dealing with transfer pricing, including selection of enterprises for investigation, scope of investigation, audit techniques and procedures, scope of adjustments and selection of adjustment methods, collection and inquiry of price information, procedures and authority for approving adjustments, appeals,

compilation and report of audit cases, and audit documentation and administration. However, in practice, local tax authorities did not place much emphasis on enforcing these transfer pricing rules. In 1998, a more detailed implementation rule was issued for guiding the audits for related-party transactions and for stressing the importance of transfer pricing compliance.

### **3.3.4 Transfer pricing legislation in 1998**

Circular No. 59 (1998) [i.e. Guoshuifa (1998) No. 59] contains 52 articles aimed at setting the criteria for selecting target FIEs for tax audits, standardizing transfer pricing examination procedures and strengthening internal coordination between the local tax authorities and the State Administration of Taxation. Thus, Circular No. 59 (1998) provides detailed methodologies and procedures for tax authorities to follow when carrying out a transfer pricing audit.

#### *3.3.4.1 Filing requirement*

Circular No.59 (1998) specified two types of declaration form to be used in declaring related-party transactions. A separate form needs to be filed for each affiliated enterprise. An “A” type form is used by enterprises with a single category of transactions with an affiliated company, and a “B” type form is used by enterprises with multiple categories of transactions with an affiliated company. Enterprises failing to file the required forms are subject to penalties of up to RMB 10,000.

Four types of related-party transactions are identified by Circular No. 59 (1998), including (i) purchases, sales, transfers and use of tangible assets like buildings, transportation vehicles, machinery and equipment, tools, and merchandise; (ii) transfers and use of intangible assets like land use rights, copyrights, trademarks,

brands, patents, proprietary technologies, industrial property rights and the provision of services relating to such transfer or right to use; (iii) financing of short-term and long-term loans and guarantees, sales of securities, and all kinds of interest bearing prepayments and deferred payments; and (iv) provision of services such as provision of market research, marketing, management, administration, technical services, repairs, design, consulting, agency, research and development, and legal and accounting services.

#### *3.3.4.2 Selection of FIEs for tax audit*

The Forms A and B together with the financial reports of the companies will serve as the initial documentation that the tax authorities use to identify transfer pricing audit targets. Circular No. 59 (1998) extends Circular No. 242 (1992) to include ten types of potential audit targets. They include:

- (i) enterprises that are controlled by related parties in respect of management and business operations;
- (ii) enterprises that have significant amounts of transactions with related parties;
- (iii) enterprises with continuing losses (i.e. reporting losses for more than two consecutive years);
- (iv) enterprises that increase their scale of operations continuously while consistently reporting losses or small profits;
- (v) enterprises with a fluctuating pattern of profits and losses (e.g. enterprises making profit every other year or in an irregular pattern);
- (vi) enterprises that have business dealings with related parties established in tax havens;

- (vii) enterprises whose profit levels are lower than those of other enterprises in the same industry based on a comparison with the regular profit level obtained by similar enterprises in the same region;
- (viii) enterprises whose profit margin is lower than that of other enterprises within the same group of enterprises based on a comparison with related parties within the group;
- (ix) enterprises that pay unreasonable expenses to related parties using various schemes; and
- (x) enterprises that report a sharp decrease in profits after the expiration of their tax holidays, and other enterprises that are suspected of tax avoidance.

In practice, enterprises with continuing losses and enterprises that have low profits compared to their scale of operation or industry average are the more important selection criteria for transfer pricing audit. Circular No. 59 (1998) requires an audit coverage of at least 30 percent of the identified audit targets for each year. However, due to a shortage of manpower, it might be difficult for the tax authorities to achieve this coverage. Nevertheless, the statistics show that the number of actual transfer pricing audit cases is increasing (Nelson et al. 2003). There were 1,230 transfer pricing audits conducted in 2001, which represented a 11.6 percent increase from year 2000, and the tax authorities recovered US\$40 million from these transfer pricing adjustments (Chinese Tax News 2002).

#### *3.3.4.3 Audit procedures*

Transfer pricing tax audits are generally conducted within three years commencing in the year following the relevant tax year and adjustments may be made retrospectively for a period up to ten years. Transfer pricing audits are

generally divided into desk audits and field audits. The tax authorities conduct desk audits at their office first. They issue a notice to the target companies and request them to provide relevant documents and transfer pricing information within 60 days. The information requested includes business and tax certificates, investment and operation contracts, articles of association, feasibility studies, annual financial statements, audit reports, account books and vouchers, commercial contracts, and other relevant documents. Based on the information provided by the target companies, tax authorities conduct a systematic analysis to evaluate the profit or loss on sales, rates of return on investments, and the reasonableness of costs, expenses and prices. Subsequently, the tax authorities conduct a field audit to resolve any issues arising from the desk audit. They issue notices to the target companies three to seven days before the field audits, and at least two auditors will be on site to conduct the field audit. During the visit to the enterprise, the auditors will obtain further evidence of transfer pricing manipulation and the taxpayer's explanations of these. The burden of proof that the transfer prices are at arm's length prices is on the taxpayers being investigated.

#### *3.3.4.4 Transfer pricing adjustments*

If the tax authorities are of the opinion that the related-party transactions are not conducted in an arm's length manner, an adjustment to taxable income will be proposed. The transfer pricing adjustments for tangible goods are based on the comparable uncontrolled price method, the resale-minus method, or the cost-plus method.

Under the comparable uncontrolled price method (CUPM), the arm's length price should be the price charged in comparable sales to unrelated third parties. When using the CUPM, the tax authorities consider the comparability of purchase

and sales procedures, comparability of logistics arrangements at each of the purchase and sales links, comparability of products transferred, and comparability of environment.

Under the resale price method (RPM), transfer prices are determined by reference to the profit margin realized in transactions between two unrelated enterprises. This method is only used in the situation where the reseller performs simple processing work or pure buy-and-sell trading activities. This method is not appropriate if the reseller adds substantial value to the tangible goods by materially altering or processing the products such as changing the appearance, function, structure or trademark of the product.

Under the cost plus method (CPM), transfer prices are determined by reference to the profit mark-up realized in a transaction between two unrelated enterprises. The tax authorities would first consider whether the cost and expenses are calculated in accordance with the China tax law. Then, they would apply a reasonable deemed profit margin, with reference to similar business in China, to arrive at an arm's-length price.

Under Circular No. 59 (1998), the comparable profit method, profit split method, net profit method, and deemed profit margin method are allowed as other reasonable methods for adjusting transfer prices in case if the CUPM, RPM and CPM are not applicable. However, Circular No. 59 (1998) does not provide any definitions of these other methods.

For financing related-party transactions, adjustments to interest charges between associated enterprises is made based on prevailing interest rates with reference to the comparability of the financing transactions between the associated enterprise transactions and non-associated enterprise transactions (i.e. factors such as the loan amount, type of currency, loan terms, term of guarantee, borrower's credit,

repayment terms, interest calculation method, etc, would be taken into account). If the funds of lender are borrowed from other parties, the prevailing interest is the actual interest payment made by the lender plus costs, expenses and a reasonable profit margin.

For adjusting service fees or rentals, the tax authorities refer to the normal service fee or rental charges between unrelated parties under the same or similar circumstances. They take into account the type of services provided, nature of the business, technology requirements, professional standards, responsibility assumed, payment terms and conditions, and direct and indirect expenses for determining arm's length services fees. They would take into account the function, specifications, structure, type, depreciation methods of the rental property, the time and place of the usage of the property, capital investment, and maintenance expenses that the property owner has spent on the property for determining arm's length rental charges.

For adjusting prices of intangible property, tax authorities refer to the price that would normally be agreeable to an unrelated party, taking into consideration the development and investment, conditions of transfer, level of exclusivity, extent and duration of legal protection, expected benefit to the transferee, investment and cost of the transferee, and substitutability.

The tax authorities present their audit findings and discuss the proposed adjustments with the enterprise being audited. If there is any disagreement, the enterprise must provide further information within the time frame given by the tax authorities for their consideration. Upon receiving the additional information, the tax authorities will rule within 30 days and issue a "Notice of Adjustment of Transfer Pricing, Taxable Income and Tax Payable" to the enterprise. Taxpayers must settle the additional tax within the time frame given by the tax authorities. An extension of not more than three months may be obtained in case of special circumstances or

financial hardship. In addition, the Tax Collection Law (2001) empowers the tax authorities to impose a penalty up to five times the tax underpaid due to transfer pricing manipulation. In serious cases, criminal liability may also be pursued.

Taxpayers need to adjust their accounting books to reflect the full amount of taxable income being adjusted by the tax authorities. If they fail to adjust their books, the excessive amount received by the associate companies will be treated as a deemed dividend received. This deemed dividend will be subject to a withholding tax of 20 percent, and no exemption of withholding tax for foreign investors will be available in this case. If the excess income received by the foreign party is interest, royalty or other income which has already been subject to withholding tax, there will also be no recovery of such withholding tax paid.

#### *3.3.4.5 Appeal system*

Taxpayers must pay the tax according to the “Notice of Adjustment of Transfer Pricing, Taxable Income and Tax Payable” issued by tax authorities before they can appeal against the assessment. They must file an appeal with the tax authorities at the next higher level within 60 days. Upon receipt of the appeal, the next higher tax authorities make a decision within 60 days. However, in practice, since tax authorities frequently check with the next higher level tax authorities before making an additional tax assessment, there is no effective appeal of an assessment except to the People's Court (Wong and Chong 1999). Taxpayers need to initiate proceedings before the People's Court within 15 days if they are not satisfied with the decisions from the higher level tax authorities. However, as keeping a good relationship with local authorities is crucial for operating in China, it would be unwise for FIEs to sue the local tax authorities in court (CCH 2003).

#### *3.3.4.6 Advance pricing agreements*

The most important provision in Circular No. 59 (1998) is the introduction for the first time of advance pricing agreement (APA), an agreement between a taxpayer and tax authority on how a proposed transaction will be treated for tax purposes. According to the Circular, a company can submit an application for an APA by providing an application form together with relevant information. After review of the information and documents, the tax authorities may sign an APA with the enterprise and supervise its implementation. Theoretically, if the related-party transactions follow the APA, no transfer pricing adjustments would be made. However, the reference to APAs in Circular No. 59 (1998) is extremely brief. It does not include the application form nor set out the details of the application procedures and information required for the APA application.

#### **3.3.5 Tax Dispute Resolution Methods**

In China, tax disputes can be resolved by an institutionalized or a non-institutionalized method (Chan and Jiang 2002). An institutionalized method refers to a mechanism or procedure that has been expressly recognized and authorized by national legislation to handle disputes between taxpayers and tax officials. An administrative hearing, administrative reconsideration and administrative litigation are all institutionalized methods for handling tax disputes. If taxpayers have objections on decisions of Chinese tax authorities, they can apply for administrative hearings in writing within three days of the notification of the decisions. Administrative reconsideration enables taxpayers to appeal to a superior tax body against a decision made by lower level officials. Administrative reconsideration must be filed within 60 days of receiving the decision in question. Taxpayers can also bring court lawsuits against tax authorities by the administrative litigation within

15 days of receiving the administrative reconsideration decision. Taxpayers must file an administrative reconsideration before instituting an administrative litigation proceeding for cases involving a tax collection decision, decision of assessing tax liability or imposing interest on late payment. Non-institutionalized methods include negotiation with the tax authorities, an appeal to the tax official's superior, and exposure or complaints through the mass media.

**CHAPTER 4**  
**INTERNATIONAL TRANSFER PRICING IN CHINA - FROM THE**  
**PERSPECTIVE OF TAXPAYERS**

**CHAPTER SUMMARY**

This Chapter empirically examines the direct association between management's perception of the importance of environmental variables and management's choice of international transfer pricing methods. I collected the data from field interviews with the management of large foreign investment enterprises (FIEs) in China. These FIEs include mainly investors from the US, Japan and Europe. The empirical evidence indicates that the more important the management perceives the interest of local partners and the maintenance of a good relationship with the host government, the more likely that the FIE will use a market-based transfer pricing method. On the other hand, the more important the management perceives foreign exchange controls in transfer pricing decisions, the more likely the FIE will choose a cost-based method.

**CHAPTER 4**  
**INTERNATIONAL TRANSFER PRICING IN CHINA - FROM THE**  
**PERSPECTIVE OF TAXPAYERS<sup>1</sup>**

**4.1 INTRODUCTION**

As mentioned in Chapter 3, the business environment in China provides mixed inducements for MNCs' transfer pricing decisions. Strategically selected transfer prices can maximize global tax savings, minimize operating risks and circumvent restrictions imposed by host governments. Management needs to trade-off among this set of contradicting objectives through their choice of transfer pricing methods. While it is difficult to examine managers' decisions of these trade-offs directly, the trade-offs are reflected in perceptions of the relative importance of environmental variables in managers' choice of transfer pricing methods. This chapter empirically investigates how managers' perceptions of environmental variables influence their choice of international transfer pricing methods.

Seven environmental variables important to operating businesses in developing countries are examined in the context of the business environment in China. These variables are: (1) differences in income tax rates, (2) minimization of custom duties, (3) interests of local partners, (4) foreign exchange control and risks, (5) restrictions on profit repatriation, (6) risks of expropriation and nationalization, and (7) relationships with the host government. While the first two variables are generally relevant to all countries, the other five variables are of special relevance to developing countries.

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<sup>1</sup> Part of the materials of this chapter will be published in a forthcoming issue of The International Journal of Accounting.

Empirical studies reveal that MNCs rarely adopt transfer pricing methods. Based on economic models such as marginal cost and opportunity cost methods, because these models are not comprehensive enough to model the global environment of MNCs (Wu and Sharp 1979; Yunker 1983; Tang 1979, 1981, 1993). In practice, market-based methods and methods based on accounting costs are most commonly used. Market-based methods use comparable market prices or adjusted market prices which reflect the economy of internal transfers. Advocates of these methods argue that market prices are less manipulative, and disputes between managers of affiliates can be minimized (Granick 1975; Anthony and Dearden 1980; Cook 1995). They are also perceived to be relatively objective and fair, and are less likely to be challenged by tax authorities (Al-Eryani 1987). Cost-based methods include actual full cost, standard full cost, actual variable cost and standard variable cost. Mark-up may or may not be added to costs. If the company's policy is to tie the mark-up to prevailing market prices, the transfer pricing method will be classified as a market-based method. If the policy is to determine mark-up based on a desired rate of return on investment or capital, the transfer pricing method will be classified as a cost-based method. Cost-based methods are basically internally determined using available cost data. It is conceded in the literature that these methods are subject to inherent arbitrariness in cost allocation and difficulties in determining a fair profit to add to cost (Thomas 1971; Merville and Petty 1978; MaAulay and Tomkins 1992). Because of this arbitrariness, these methods provide more room for MNCs to pursue their corporate objectives in maximizing after-tax profits and minimizing operational risks. I will evaluate how management perceptions of the seven environmental variables affect their choice between the two transfer pricing methods in the following sections.

## **4.2 HYPOTHESES DEVELOPMENT**

### **4.2.1 Difference in Corporate Income Tax Rates**

It is commonly recognized that differences in income tax rates among jurisdictions provides MNCs with incentives to use transfer pricing strategy to minimize global tax payments (Chan and Chow 1997b). The greater the difference in income tax rates between two countries, the greater is the incentive for MNCs to use transfer pricing to shift income.

As elaborated in Chapter 3, the income tax rate applicable to FIEs operating in China is 30 percent. The government offers certain tax incentives for qualified foreign investors. A preferential income tax rate of 15 percent is granted to FIEs located in special economic zones and in economic and technological development zones. A preferential rate of 24 percent is offered to industrial FIEs located in open economic zones and cities. For FIEs of a production nature scheduled to operate for a period not less than ten years, an exemption from taxation for the first two profit-making years and a 50 percent tax reduction for the following three years are granted. However, currently, many FIEs are either beyond their tax holiday period or do not qualify for such holidays.

Although minimization of taxes is often cited as a transfer pricing objective, some argue that the significance of tax considerations should not be over-rated in developing countries because of the existence of nontax influences in these countries (Kim and Miller 1979; Plasschaert 1985). However, in general, tax minimization remains an important issue in transfer pricing decisions. The more important tax minimization is perceived to be, the greater the motivation for management to use transfer pricing strategy to reduce global tax payments, and the more likely management will adopt cost-based transfer pricing methods which facilitate the

pursuit of this corporate objective. The reasoning is reflected in the following hypothesis.

**Hypothesis 1:** The more important the difference in corporate income tax rates is perceived by management of FIEs, the more likely that a cost-based transfer pricing method will be adopted.

#### **4.2.2 Minimization of Custom Duties**

Minimization of import duties provides an incentive for MNCs to under-price goods transferred into a country. Under-pricing of imports can also circumvent restrictions such as a value quota on imports imposed by a host government. The Chinese government adopts a tariff escalation policy whereby nominal tariffs vary with the degree of domestic processing. Tariffs are lower for raw materials and semi-processed materials than for final goods. Like other developing countries, import duties in China are in general substantially higher than those in developed countries, although there is a downward trend since China has entered the World Trade Organization. There is a prima facie inference that the relatively high ad valorem tariffs in most developing countries are likely to tempt MNCs to use transfer pricing to minimize tariff payments (Plasschaert 1985). However, under-pricing of imports from related companies to minimize tariff payments will result in higher reported profits by FIEs, and this is not compatible with the considerations of restrictions on profit repatriation and foreign exchange control as discussed later. The impact of custom duties on FIEs' transfer pricing decisions thus depends on the relative importance of this variable as perceived by management. The more important the tariffs are perceived by management, the more likely that the management will adopt cost-based transfer pricing methods to

facilitate the minimization of tariff payments. This argument provides the basis for the second research hypothesis.

**Hypothesis 2:** The more important minimization of custom duties is perceived by FIEs' management, the more likely that a cost-based transfer pricing method will be used.

#### **4.2.3 The Interest of Local Partners**

Like many developing countries, the Chinese government prefers foreign investors to operate in China in the form of a joint venture with a local partner. The existence of a local partner in a joint venture reduces the share of reported profits attributable to foreign investors, and hence provides an inducement for the foreign investors to use transfer pricing to shift profits outwards (Emmanuel and Mehafdi 1994). As more profits are shifted away from China, the local partner's share of profit will be reduced. To safeguard their legitimate interest, the local partners may actively get involved in transfer pricing decisions. Thus, a local partner may play a monitoring role which restricts the latitude of transfer pricing strategies practiced by foreign investors (Lall 1973; Emmanuel and Mehafdi 1994).

In some joint ventures in China, the parties may enter into a management contract, whereby full management responsibility is delegated to the foreign partners who control the production and financial functions of business operations. In other cases, local partners participate actively in the business decisions. It is hypothesized that the impact of local partners on transfer pricing decisions depends on the management role of local partners and the importance of the interest of local partners as perceived by corporate management. The greater the importance of the interest of a local partner is perceived by corporate management, the more likely that management will attempt to minimize conflicts between partners over transfer

pricing by adopting a method that is relatively objective and fair to both parties and with less room for manipulation. This leads to a greater likelihood of adopting a market-based transfer pricing method, as stated below.

**Hypothesis 3:** The more important the interest of local partners is perceived by corporate management, the more likely that a market-based transfer pricing method will be adopted.

#### **4.2.4 Foreign Exchange Control and Risks**

Foreign exchange control imposed by developing countries is regarded as a strong inducement for MNCs to shift profits out of these countries. Fewer facilities are available in these countries to hedge against exchange losses. Transfer pricing can assist in managing foreign exchange risks by reducing liquid assets of subsidiaries in countries where foreign exchange control is imposed.

As elaborated in Chapter 3, until the early 1990s China adopted a centrally managed foreign exchange control system which provided limited access to foreign exchange. Foreign investment enterprises were allowed to retain foreign exchange earnings and made payments of foreign exchange therefrom. These enterprises were required to balance their foreign exchange revenues and expenditures, and were required to file with the government their annual budget of foreign exchange expenditures. Since 1994, the government has gradually relaxed its foreign exchange control policy. A system of limited convertibility of the local currency, the *Renminbi*, was introduced. In 1996, the *Renminbi* became freely convertible for current account items including payments for trading, transportation and tourism activities. However, capital account transactions including capital investment are still subject to foreign exchange control.

The limited-convertibility of the *Renminbi* and the restrictions on access to foreign exchange increase the financial risks for business operations in China. Shortage of foreign exchange has been cited as one of the most serious problems facing FIEs, especially those aiming at the domestic market or those relying heavily on imports of raw materials and machinery (Frisbie 1988; Davis and Yi 1992). The significance of the impact of foreign exchange control on an FIE depends on the nature of its business operations. It is hypothesized that the more important foreign exchange control is perceived by management, the greater the inducement for management to use transfer pricing to circumvent such a control and to reduce associated risks. This leads to the greater likelihood that management will adopt a cost-based transfer pricing method which provides management more flexibility in pursuing this objective.

**Hypothesis 4:** The more important foreign exchange control and risks is perceived by management, the more likely that a cost-based transfer pricing method will be adopted.

#### **4.2.5 Restrictions on Profit Repatriation**

Restrictions on profit remittances including dividends, royalties and management fees, or high withholding tax on such remittances imposed by host countries provide an inducement for MNCs to shift funds through transfer pricing. As these restrictions are more likely to be imposed by governments in developing countries relative to developed countries, this variable is considered important to transfer pricing decisions in developing countries (Kim and Miller 1979; Plasschaert 1985).

While the Chinese government does not ban foreign investors from repatriating their legitimate share of profits or royalties, these remittances are subject

to the availability of sufficient foreign exchange that an FIE has for this purpose. Withholding taxes on payments of interest, rental charges and royalties to affiliated companies are levied at a general rate of 20 percent, or at a preferential rate as specified in tax treaties. According to tax treaties entered into by the Chinese government with other countries, these taxes are allowed as credits against home countries' corporate income tax. However, Chinese tax law disallows the repatriation of management fees to parent companies, except for those incurred for specific and direct services provided by the parent companies such as training the local employees of the FIEs. The impact of these regulations on transfer pricing decisions depends upon managers' perception of their importance. The more important the restrictions on profit remittances are perceived by management, the greater the motivation to circumvent these restrictions, and the more likely that cost-based transfer pricing methods will be used as a mechanism to pursue this objective.

**Hypothesis 5:** The more important the management perceives the restrictions on profit repatriation, the more likely that a cost-based transfer pricing method will be used.

#### **4.2.6 Risks of Expropriation and Nationalization**

The perceived political risks relating to foreign operations including expropriation and nationalization has been a concern for MNCs operating in developing countries. A high perceived risk may motivate MNCs to seek an early return on investment through the transfer pricing mechanism. Political risk has been a major concern to foreign investors in socialist countries. To alleviate foreign investors' concerns, the Chinese government has enacted laws to protect their legal rights and interests. The government also signed bilateral investment treaties with more than forty countries, including the UK, Japan, Australia, Germany and France.

These guarantee either no expropriation or compensation in the event of expropriation. However, China has not been able to conclude an investment treaty with the US. While the possibility of expropriation of foreign-invested enterprises is small, the risk cannot be ruled out. For example, in order to construct the famous Oriental Plaza in Beijing, McDonald's was pushed off the site, although it had a 20-year lease there. The government retains the right to nationalize or expropriate enterprises under special circumstances. The more important management perceives this risk, the greater disposition management will have to use transfer pricing to minimize it by diverting liquid funds outwards, and the more likely that cost-based transfer pricing methods will be used.

**Hypothesis 6:** The more important the management perceives the risks of expropriation and nationalization, the more likely that a cost-based transfer pricing method will be used.

#### **4.2.7 Good Relationship with the Host Government**

Empirical studies reveal that MNCs give consideration to maintaining good relations with host governments when formulating their transfer pricing policies (Tang 1979, 1981; Yunker 1983). Al-Eryani (1987) find that this variable is more important for MNCs operating in developing countries than for their counterparts operating in developed countries. In China, a good relationship with government authorities is helpful in smoothing business operations and in negotiating bureaucratic hurdles. This is in part cultural and in part because the legal system in China is not as transparent as that in most developed countries (Chan and Jiang 2002). To maintain a good relationship with the government, FIEs try to avoid any disputes or conflicts with the tax authorities and the government departments. Thus, it is hypothesized that FIEs will more likely use market-based methods that are

perceived to be more objective than cost-based methods in formulating their transfer pricing policies to avoid such disputes and conflicts.

**Hypothesis 7:** The more important management perceives maintenance of a good relationship with the Chinese government, the more likely that an FIE will use market-based transfer pricing methods.

A summary of these hypotheses is shown in Table 4.1.

[Insert Table 4.1 here]

### **4.3 DATA COLLECTION**

I conducted a series of interviews with management of sample FIEs to collect the data for this study. The interview questionnaire consists of three sections. Section 1 is related to the transfer pricing policies adopted by the sample firms (FIEs). Interviewees were asked to elaborate on their dominant transfer pricing method (in terms of dollar value transferred) for trading with their overseas affiliates, and on the transfer pricing decision-making process. Section 2 contains demographic information about the FIEs, including source and percentage of foreign investment, size of the firm, volume of trade with overseas affiliated companies, and income tax rates applicable to the company. Section 3 consists of questions on the perceptions of management regarding the importance of the seven environmental variables when formulating transfer pricing policies. Interviewees were asked to assess the importance of these variables when formulating their transfer pricing policies. The importance of each variable was measured by using a five-point scale (1-Extremely important, 2-Very important, 3-Moderately important, 4-Not too important, and 5-Not important at all).

The interviews were conducted in the major cities of China, including Beijing, Shanghai, Guangzhou, Xiamen, Shenzhen and the open cities of Pearl River Delta. The sample FIEs for the interviews were selected from a directory of the top (largest 500) industrial FIEs in China as designated by the Chinese government in terms of annual sales. FIEs located in these cities and having trade of goods or materials with their overseas affiliated companies were contacted for interview. A total sample of sixty-four FIEs provides information for this study.

Interview is considered an appropriate methodology for a study of this nature which examines a sensitive and complex issue. Faculty members of local universities and partners of local CPA firms utilized their contacts in China to assist in arranging these interviews. They also attended the interviews. Because the interviewees know the local contacts, they have more confidence on the proper use of information. I assured the interviewees that the information will be kept confidential and used for academic research purposes only. Behavioral research confirms that an on-going personal relationship with the interviewees promotes truthful responses (Bazerman et al. 2002). When arranging the interviews, the local contacts informed the interviewees about the nature of the interviews and were assured of the interviewees' familiarity with the transfer pricing setting process in their firm before arranging the interviews. I chose to interview the financial controllers of these FIEs who actively participate in the transfer pricing decisions because of their expertise. With their first-hand knowledge of and experience in operating environments in China, they were particularly able to articulate the importance of the hypothesized environmental variables and their tradeoffs in achieving the transfer pricing objectives. In some cases, interviewees brought along their assistants to the interview to make sure that they could answer my questions comprehensively. All the interviewees were either expatriates sent from overseas

head offices who had extensive experience in China or local persons who received training from the head office. They were clearly familiar with the transfer pricing processes in their enterprises. At the beginning of the interviews, I explained the objective of the study and assured the confidentiality of the data they provided. I also explained the various transfer pricing methods in order to assure common understanding of the terms and proper codification of the methods adopted by these FIEs. When explaining the terms and asking the questions, I was careful not to give my own opinion which may influence the interviewees' responses. I also paid attention to the interviewees' response to see whether there were any inconsistent answers during the interview. After the interview, I searched the business directories to verify the demographic information provided by the interviewees. I also conducted interviews with four partners in two large CPA firms in Hong Kong and talked to several CPA firm partners in China to confirm the reasonableness and logic of the data collected. As the local contacts knew the interviewees, I was able to contact the interviewees after the interview when necessary for any follow-up clarification of my interview notes. These control measures taken together provide reasonable assurance that the data collected are valid and reliable.

## **4.4 ANALYSIS OF DATA**

### **4.4.1 Profile of the Sample Firms**

The 64 sample firms are engaged in the business of manufacturing different products, including chemicals, electronics, electrical appliances, pharmaceutical and medical equipment. The foreign investment of these FIEs are mainly sourced from the United States, Japan, Hong Kong, Taiwan, and European countries, including the UK, Germany, Belgium, Netherlands, Switzerland, Norway and France. About 30 percent of the sample firms are from the upper tier of the top 500 companies in terms

of sales. The annual sales range from US\$60 million to more than US\$3,000 million. Foreign investors in all sample firms hold at least 25 percent of equity shares, including eleven wholly foreign-owned enterprises. On average, foreign investors hold 63 percent of the equity shares of the FIE. Most of these FIEs have a great volume of transactions with their overseas affiliated companies. In 51 FIEs (80 percent of the sample firms), inter-affiliate trade accounts for more than 75 percent of their total trade.

#### **4.4.2 Transfer Pricing Policies**

Thirty-eight FIEs (59 percent of the sample) adopted market-based transfer pricing methods, and most of them used adjusted market prices. Adjusted market prices are the comparable market prices adjusted by an amount reflecting the economic difference between open market sales and internal transfers, for example, the marketing costs saved. Usually, the adjustment can be easily determined and documented. Of the 26 FIEs (41 percent of the sample) which adopted cost-based methods, more than half of them used standard full cost plus markups (Table 4.2A). Marginal cost, opportunity cost, mathematical programming, and profit-split methods were not used. A great majority of the sample firms (75 percent) have the autonomy to purchase raw materials and components from unrelated companies (Table 4.2B). FIEs with more autonomy will have greater power when setting transfer prices with their affiliates. In 41 FIEs (64 percent of the sample), parent companies of foreign partners were consulted in determining transfer pricing policies, and more than half of these were FIEs with the majority shareholdings by foreign investors (Table 4.2C). Fourteen FIEs (22 percent of the sample) determined their transfer pricing policies without direct influence from parent companies. Nine FIEs (14 percent of the sample), all being US MNCs, adopted their parent company's worldwide transfer

pricing policies. Only 16 percent of the sample firms have had disputes with affiliates over transfer prices during the past two years (Table 4.2D). Several approaches were adopted to resolve these disputes, including negotiation between FIEs and related companies, negotiation with interference from the parent companies, or negotiation with interference from the tax authorities.

[Insert Table 4.2 here]

#### **4.4.3 Importance of Environmental Variables as Perceived by Management**

Table 4.3 shows the mean scores of the importance of the seven hypothesized environmental variables as perceived by the management of the sample firms (range is from 1 to 5 with 1 being most important). For the overall sample, maintaining a good relationship with the Chinese government and differences in income tax rates are perceived as the two most important variables. Risk of expropriation and nationalization by host countries is perceived as least influential in the choice of transfer pricing methods. A comparison is made between US FIEs and non-US FIEs in my sample to see whether these firms take the same environmental factors into account when choosing their transfer pricing methods, as revealed by Arpan (1972). The Mann-Whitney tests do not reveal significant differences in the importance of these variables as perceived by US and by non-US FIEs. The Kendall-tau test of the rank-order of the importance of these variables (correlation coefficient = 0.586;  $p=0.068$ ) shows that there is moderate agreement between these two groups on the relative importance of the variables.

[Insert Table 4.3 here]

Finally, a check of the correlations among the environmental variables shows that only differences in income tax rates (Variable 1) and minimization of custom duties (Variable 2) have a moderate correlation of slightly larger than 0.50. As will be explained later, multi-collinearity and sensitivity tests show that this correlation has no impact on the analysis.

#### **4.4.4 Statistical Testing of Research Hypotheses**

Table 4.4 shows the mean scores of the importance of the seven hypothesized environmental variables as perceived by FIEs using market-based transfer pricing methods and those using cost-based transfer pricing methods. The statistical tests of these mean scores reveal significant differences in the perceived importance of three variables between FIEs using different transfer pricing methods. These three variables are the interest of local partners, foreign exchange control and risks (both significant at the 5 percent level), and good relationship with the Chinese government (significant at 10 percent level). FIEs using market-based transfer pricing methods perceived the interest of local partners and a good relationship with the Chinese government as more important, while FIEs using cost-based transfer pricing methods perceived the foreign exchange control as more important. Risk of expropriation and nationalization, which has been regarded in prior studies as important for business operations in developing socialist countries, is not perceived as important for FIEs using either the cost-based or market-based transfer pricing method. This suggests that with the endeavors to open up the economy and to attract foreign investment, the Chinese government has successfully eased foreign investors' concern of political risks associated with their business operations.

[Insert Table 4.4 here]

To further investigate the significance of management perceptions of the importance of these variables to the choice of transfer pricing method in a multivariate setting, a logistic regression analysis is performed (Simons 1987; Menon and Williams 1991; Norusis 1999; Balakrishnan and Soderstrom 2000). The logistic regression function is as follows:

$$TP = \alpha_0 + \sum_i \alpha_i \text{Var}_i, \quad (1)$$

where:

TP = binary variable assuming the value of 0 if cost-based methods are used, and 1 if market-based methods are used;

Var<sub>i</sub> = the importance of variable i, where i = 1,2,...,7, measured by a five-point scale with 1 being extremely important and 5 being not important at all.

These variables are:

Var<sub>1</sub>: Difference in income tax rates

Var<sub>2</sub>: Minimization of custom duties

Var<sub>3</sub>: Interest of local partners

Var<sub>4</sub>: Foreign exchange control and risks

Var<sub>5</sub>: Restrictions on profit repatriation

Var<sub>6</sub>: Risks of expropriation and nationalization

Var<sub>7</sub>: Good relationship with the Chinese government

$\alpha_i$  values are the regression coefficients.

As the dependent variable is dichotomous, a logistic regression analysis is appropriate to examine the significance of the hypothesized environmental variables in discriminating between FIE's choice of transfer pricing methods, i.e. market-based or cost-based methods (Norusis 1999). The analysis predicts the probability

that a particular transfer pricing method will be used when the importance of the environmental variables changes. The results show how the trade-off among the environmental variables affects the choice of transfer pricing methods. The results of the regression analysis are shown in Table 4.5. Variance inflation factors are all less than 2, indicating that multi-collinearity is unlikely to affect the inferences. White's heteroskedasticity test suggests that the homogeneous variance assumption was not rejected at the 0.05 level.

The analysis confirmed that Var 3 and Var 4, i.e. the interest of local partners and foreign exchange control and risks, are significant at 1 percent level and that Var 7, i.e. good relationship with the Chinese government, is significant at 5 percent level in discriminating FIEs' choice of transfer pricing methods. The model is significant at the 1 percent level. Indicating a good fit of the model, 87 percent of FIEs using market-based methods and 65 percent of FIEs using cost-based methods are correctly classified. The signs of the coefficients for these three variables are consistent with the hypotheses. FIEs which regard the interest of local partners and a good relationship with the Chinese government as being important are more likely to use market-based methods, and FIEs which perceive the foreign exchange control and risks as being important are more likely to use cost-based methods. These results are consistent with my univariate analysis. I do not find significant discriminating power in Var 1, Var 2, Var 5 and Var 6, i.e. difference in income tax rates, minimization of custom duties, restrictions on profit repatriation, and risks of expropriation and nationalization. In other words, FIEs using cost-based methods and FIEs using market-based methods perceive a similar degree of importance for each of these variables. The increasingly effective tax audits in China may reduce FIEs' incentive to use cost-based methods to manipulate these variables. However,

foreign exchange control remains the most important variable for FIEs using cost-based methods (Table 4.5).

[Insert Table 4.5 here]

#### **4.4.5 Sensitivity Tests**

I conducted additional tests to check the robustness of the regression results. First, I included a dummy variable signifying a majority and a minority foreign investor in my regression model. As shown in Table 4.6, the coefficient of this new variable is not significant at 0.05 level and the results of the original and the new model are basically the same.

[Insert Table 4.6 here]

Second, I tried two other logit models by adding a “percentage of foreign ownership” variable and a “consultation” variable (i.e. a variable signifying whether the FIEs set their transfer pricing policies with consultation of parent companies or not). The results are shown in Tables 4.7 and 4.8. Both the percentage of foreign ownership variable and the consultation variable are not significant at 0.05 level. However, Variable 3 (Interest of local partners) becomes insignificant when percentage of foreign ownership variable is added. This is due to the strong correlation between percentage of foreign ownership and Variable 3 ( $r = 0.719$ , significant at 0.01 level). As the percentage of foreign ownership increases, the interest of local partners becomes less important. As the main objective of my paper is to analyze the influence of management perceptions of environmental variables on the choice of transfer pricing methods, I chose to include the management perception variable (i.e. the perceived importance of the interest of local partners)

rather than the corporate attribute variable (i.e. percentage of foreign ownership) in my regression.

[Insert Table 4.7 and Table 4.8 here]

Third, I performed a sensitivity test by simultaneously adding the above two variables (percentage of foreign ownership and consultation) to the original regression model. The results are basically the same as above.

Fourth, I excluded the nine companies which adopted their parent's worldwide transfer pricing policies from my regression model. Var 3, Var 4 and Var 7 remain significant and all other variables remain insignificant. Therefore, the nine cases which adopted worldwide policies do not affect the significance of my results.

Fifth, I included a dummy variable representing US versus non-US foreign investors. Sixth, I included interaction terms of (i) US with income tax variable (Variable 1), (ii) US with foreign exchange control (Variable 4), and (iii) US with risks of expropriation (Variable 6) respectively. Seventh, I included a dummy variable representing Hong Kong or Taiwan sourced versus other sourced FIEs. Eighth, I included the size of the FIE (in terms of the logarithm of sales) in the model. Ninth, I added a variable representing the FIE's export as a percentage of total sales. Tenth, I included the FIE's proportion of inter-affiliate trade as a percentage of total trade in the model. The results of these sensitivity tests show that the interest of local partners (Variable 3), foreign exchange controls (Variable 4), and good relationship with Chinese government (Variable 7) which are significant in the original model remain significant at the 0.01 to 0.05 level. None of the newly added variables in the above tests is significant at the 0.05 level.

Finally, I deleted minimization of custom duties (Variable 2) from the model to assess the effect of its moderate correlation with the income tax variable (Variable 1). The results of the reduced model are the same as the original model.

#### **4.5 CONCLUSION**

Despite expressed concerns about the significance of transfer pricing to the economy of developing countries, there is limited empirical research addressing the influence of environmental characteristics in these countries on MNCs' choice of transfer pricing methods. MNCs' operations in developing countries are subject to more economic, political and social risks due to the unique business environment in these countries. These factors provide inducements for MNCs to use transfer pricing to maximize after-tax profits, to circumvent government restrictions, and to reduce financial risks.

My study provides empirical evidence on how environmental variables influence MNCs' transfer pricing decisions in the context of the business environment in China, a major developing economy. The analysis reveals that management perceptions of nontax factors, namely, interest of local partners, foreign exchange control and risks, and good relationships with local government are important in discriminating the choice of transfer pricing methods. The greater the importance of the interest of local partners as perceived by management, the more likely that market-based transfer pricing methods will be used. These market-based methods are considered more objective and fairer to both parties of joint ventures as compared with cost-based methods. This finding is generally consistent with previous studies that hold the view that a local partner in a joint venture plays a monitoring role which restricts the latitude of transfer pricing strategy practiced by foreign investors (Chan and Chow 1997b). My study also reveals that the greater

the importance of foreign exchange control and risks as perceived by management, the more likely that cost-based transfer pricing methods will be used, as cost-based methods allow more flexibility for dealing with restrictive laws or regulations. Also, the more important a good relationship with the local government as perceived by management, the more likely that market-based transfer pricing methods will be adopted to minimize disputes with government and tax authorities. Certain variables such as restrictions on profit repatriation and risks of expropriation and nationalization were not found to be important because it appears that these problems have, to a certain extent, been solved by the Chinese government's open door policy. Other variables such as income tax rates and customs duties which are of general relevance to all countries were not found to be significant in discriminating between the choice of transfer pricing methods in China.

The literature on international transfer pricing is largely consistent with the argument that MNCs exploit market imperfections in global markets emerging from international socio-economic factors. This multinational transfer-pricing decision-making environment makes an assessment of the effect of these factors difficult. By examining the environmental characteristics pertaining to China, this study sheds empirical light on how the management perception of these characteristics influences their choice of transfer pricing method. The findings of this study are of particular relevance to developing countries in enhancing their understanding of environmental influences on transfer pricing decisions, and thus contribute to the building of a more comprehensive theoretical framework of transfer pricing in developing economies. A limitation of this study is that the data are based on a convenient sample of FIEs rather than a random sample, as FIEs in China would not normally grant interviews on sensitive issues like transfer pricing without prior personal contacts.

**CHAPTER 5**  
**INTERNATIONAL TRANSFER PRICING IN CHINA - FROM THE**  
**PERSPECTIVE OF TAX AUTHORITIES**

**CHAPTER SUMMARY**

When deciding on transfer prices, firms need to consider both the tax and nontax costs involved. Given a particular set of environmental characteristics, management would set transfer prices to achieve various conflicting objectives. Based on an analysis of tax and nontax costs for firms with different characteristics, I hypothesize that wholly foreign-owned enterprises and cooperative joint ventures, export-oriented enterprises, and Hong Kong-Taiwan sourced foreign investment enterprises (FIEs) in China are more motivated to shift profits out from China through transfer pricing manipulation than equity joint ventures, domestic-market-oriented enterprises and FIEs from other countries, respectively. Furthermore, the audit costs for wholly foreign-owned enterprises, cooperative joint ventures, export-oriented firms and Hong Kong-Taiwan sourced FIEs are either smaller or similar to their counterparts. Thus, they are more likely to be selected for transfer pricing audits by Chinese tax authorities after controlling for the size of operations and the volume of inter-affiliate transfers. To test my hypotheses, I examine the likelihood of transfer pricing audits for 305 FIEs in China. Consistent with my prediction, I find that wholly foreign-owned enterprises, cooperative joint ventures and export-oriented FIEs are more likely to be selected for transfer pricing audits in China. However, I do not find that source of investment affects audit probability.

**CHAPTER 5**  
**INTERNATIONAL TRANSFER PRICING IN CHINA - FROM THE**  
**PERSPECTIVE OF TAX AUTHORITIES**

**5.1 INTRODUCTION**

Transfer pricing has long been a significant accounting, taxation and management issue around the world. International transfer pricing is regarded as an important mechanism for multinational corporations (MNCs) to maneuver funds internationally and to choose the countries in which profits will be reported. MNCs frequently use transfer pricing as a means of reducing global income tax payments. A survey conducted by Ernst & Young (2001) finds that transfer pricing is rated as the most important international tax issue by MNCs.

Empirical studies on transfer pricing mainly focus on the US, Japan and other developed countries. A few studies on developing countries provide empirical evidence on trading statistics to assess the extent of transfer pricing manipulation by MNCs (Natke 1985; Rahman and Scapens 1986; Chan and Chow 1997a). Kim and Miller (1979), Plasschaert (1985), and Chan and Chow (2001) focus on examining transfer pricing policies and the importance of environmental variables for companies operating in developing countries. They suggest that due to differences in the business environment, tax factors which are important in developed countries should not be over-rated in developing countries. Some nontax factors such as foreign exchange controls and restrictions on profit repatriation which may not be perceived as important in developed countries are considered as important in developing countries. Empirical studies examining the trade-off between tax and nontax factors for transfer pricing decisions in the business environment of developing countries can enhance the understanding of MNC behavior in developing economies.

From the perspective of tax compliance studies, empirical research is limited. Mills (1996, 1998) provides empirical evidence that proposed tax audit adjustments by tax authorities increase when the difference between book income and taxable income widens. Chan and Chow (1997b) provide the first empirical study on transfer pricing noncompliance by MNCs in China in the early 1990s. However, they do not provide any multivariate analysis, nor do they specifically analyze the tax and nontax cost trade-off for the MNCs. As explained later, they also do not study the effect of activity orientation, profitability and volume of transfer on transfer pricing noncompliance. Chan and Mo (2000) examine corporate noncompliance during tax holidays. Chan and Mo (2002) further decompose noncompliance into book-tax conforming and book-tax difference noncompliance, and examine the tax and nontax cost trade-off on these two types of noncompliance. However, they exclude transfer pricing noncompliance in their studies. Hence, this is the first tax compliance study based on tax audits on MNCs, examining empirically how the tax and nontax cost tradeoff affects international transfer pricing.

Specifically, this study investigates empirically via multivariate statistical analysis the relationship between firm characteristics and the probability of being selected for transfer pricing audits by the Chinese tax authorities. I use the tax and nontax cost trade-off theory to explain why certain types of firm are more likely to manipulate transfer prices and be selected for transfer pricing audits in China. Based on the findings of Chapter 4, the major nontax factors affecting transfer pricing decisions in China include relationships with the host government, interests of local partners, and foreign exchange control and risks. In this chapter, I analyze how these nontax factors are being considered against the tax factor and influence MNCs' decisions on profit shifting through transfer pricing manipulation.

The sample firms of my study are foreign investment enterprises (FIEs) which include Sino-foreign joint ventures and wholly foreign-owned enterprises in China. I hypothesize that equity joint ventures, as compared to wholly foreign-owned enterprises and cooperative joint ventures, have comparable tax cost but higher nontax costs for shifting profits out of China due to the necessity of keeping a good relationship with government and the monitoring effect of local partners. Export-oriented FIEs, as compared to domestic-market-oriented enterprises, have lower tariff costs and lower nontax costs for shifting profits out of China due to an exemption from import tariffs for export production and less reliance on local government and distributors. Export-oriented FIEs also have more opportunities for transfer pricing manipulation. Hong Kong and Taiwan sourced FIEs, as compared to FIEs from other sources, have both lower tax and nontax costs for shifting profits out of China due to lower home countries' tax rates and higher inside ownership concentration. Therefore, I expect that wholly foreign-owned enterprises, cooperative joint ventures, export-oriented FIEs, and Hong Kong-Taiwan sourced enterprises should have a greater incentive to evade tax through transfer pricing. As such, they would be more likely to be audited by Chinese tax authorities for transfer pricing transactions given that the audit cost is not significantly different for auditing different types of FIEs and after controlling for the size of operations and the possible tax amount that can be recovered. Based on a sample of 305 FIEs that engaged in significant related-party transactions with overseas affiliates, I find that wholly foreign-owned enterprises, cooperative joint ventures and export-oriented FIEs are more likely to be audited by Chinese tax authorities for transfer pricing manipulation. These findings are consistent with my hypotheses developed based on the tax and nontax cost trade-off theory.

My study should have significant implications for tax authorities as well as foreign investors operating in China and other developing economies. The results should assist tax authorities in tackling tax audit problems more effectively and in particular, setting tax audit guidelines on related-party transactions. For example, given the low nontax costs of shifting profits out of China by export-oriented FIEs, the tax authorities can set an audit priority for investigating this type of FIE which is considered to be more likely to engage in transfer pricing manipulation. My research results should also help foreign investors gain a better understanding of tax and nontax costs for transfer pricing manipulation in China. As this is the first empirical study of tax and nontax cost trade-offs in an international transfer pricing context, the results should also provide researchers with an interesting perspective in studying the effect of nontax costs on transfer pricing manipulation. Finally, although China is unique in terms of its size and history, it is in essence a developing economy according to IMF (2003). Thus, my research results of how tax and nontax costs affect transfer pricing decisions and compliance should provide a useful reference for other developing countries. For example, countries that have comparable forms of investment as China can make reference to this research on how different types of investment affect transfer pricing compliance.

The next section describes transfer pricing legislation and tax audit development in China. Section 5.3 discusses the tax and nontax cost trade-off theory. Section 5.4 formulates the research hypotheses. Section 5.5 explains the research design. Section 5.6 provides the empirical results, and Section 5.7 concludes the study.

## **5.2 INSTITUTIONAL BACKGROUND**

China has experienced rapid growth in GDP and foreign direct investment. The average GDP growth rate in China was 9.1 percent for 1993-2003 compared with 2.2 percent for the G-7 countries for the same period (IMF 2003). The foreign direct investment inflow in China reached US\$52.7 billion in 2002, a new record reinforcing its position as the largest recipient of FDI inflows in the developing world (UNCTC 2003). FIEs in China play an increasingly important role in China's foreign trade. In 2002, total imports and exports by FIEs accounted for, respectively, 54 percent and 52 percent of China's total imports and exports (MOC 2003). Among these imports and exports, a large volume of transactions represented related-party transactions where the FIEs in China traded with their overseas affiliated companies. Chan and Chow (1998) find that 88 percent of the export-oriented FIEs in China purchase and sell goods to their affiliated companies for 70 percent or more of their total imports and exports. Therefore, international transfer pricing is an important issue in China for both the Chinese government and the MNCs invested therein. As in other developing countries, tax evasion is also a serious problem in China (Mo 2003). The Chinese tax authorities estimate that over 80 percent of MNCs operating in China evade taxes. This caused at least US\$3.6 billion tax revenue losses in 2002 (PRN 2003). Transfer pricing manipulation is the most common method used by MNCs for tax evasions.

### **5.2.1 Transfer Pricing Legislation in China**

Transfer pricing provisions were first introduced as national legislation in China under Article 13 of the Income Tax Law of the People's Republic of China for Enterprises with Foreign Investment and Foreign Enterprises (Income Tax Law) in 1991 by the National People's Congress. Apart from the Income Tax Law, the

State Administration of Taxation (SAT) issued a number of rules and regulations to govern transfer pricing transactions in China including Guoshuifa (1992) No.237 and Guoshuifa (1998) No. 59. The principle of transfer pricing regulations in China is based on the recommendations of the Organisation for Economic Cooperation and Development (OECD 1979). The Income Tax Law stipulates that the payment or receipt of charges in business transactions between an FIE in China and its associated enterprises shall be made in the same manner as the payment or receipt of charges in business transactions between independent enterprises (i.e. the arm's length principle). Where the payment or receipt of charges is not made in the same manner as business transactions between independent enterprises and results in a reduction of taxable income, the tax authorities shall have the right to make reasonable adjustments. Currently, the adjusting methods include comparable uncontrolled price method, resale price method, cost-plus method, and other appropriate methods (SAT 1998). China's transfer pricing regulations in respect to the definition of an associated company and burden of proof are similar to those introduced by China's major trading partners including the United States.

### **5.2.2 Transfer Pricing Audits in China**

Since the early 1990s, transfer pricing audits have been considered one of the most important tasks of the Chinese tax authorities. They find that a large number of FIEs use related-party transactions to shift their profits out of China. According to their records, on average, more than 60 percent of FIEs in China reported losses during 1996 to 2002. Despite this, direct foreign investment continues to increase rapidly in China. The SAT believes that many of the loss reporting FIEs manipulate their transfer prices to reduce profits reported in China (Chinese Tax News 2002; PRN 2003). To protect government revenues, the SAT puts anti-tax avoidance work

as their top priority. Since China entered the World Trade Organisation in 2001, tariff rates have also been rapidly reduced. The average tariff rate was reduced from 36 percent in 1995 to 12 percent in 2002 and will be further reduced to 10 percent in 2005. As such, the government revenue from tariffs will be decreased. The SAT is required to increase its efforts on transfer pricing audits to collect more tax in order to partly compensate for the loss of revenue from tariff reduction.

In 2001, the Chinese tax authorities increased assessable profits of FIEs by US\$49 million after transfer pricing audits, which is more than half of the total amount adjusted for the previous five years (Chinese Tax News 2002). Regulations which govern information exchange with foreign tax authorities for tax audits were issued in 2001. Under these regulations, Chinese tax officials can exchange data and information with other overseas tax authorities where the FIE's associate companies are located. Such arrangement helps the tax authorities collect audit evidence and determine arm's length prices for transfer pricing audits. In recent years, computerized databases were also set up in different provinces of China to facilitate tax auditing.

How to select audit targets is one of the major concerns of tax authorities. Obviously, tax authorities want to collect more tax revenue by auditing the non-compliant companies. This study empirically examines how tax and nontax costs affect the motivation for transfer pricing manipulation and in turn the probability of being selected for transfer pricing audits, given that audit costs incurred by tax authorities for auditing different types of FIEs are similar.

### **5.3 TAX AND NONTAX COST TRADE-OFF THEORY**

A growing body of empirical tax research examines the coordination of tax and nontax factors in business decisions (Shackelford and Shevlin 2001). Cloyd (1995), Cloyd et al. (1996), and Mills (1998) investigate how expected tax costs of a firm are influenced by the probability of being audited by tax authorities and the probability of successfully defending tax positions. Mills and Newberry (2001) examine the effect of nontax financial-reporting costs on the book-tax-reporting choice. Chan and Mo (2002) examine the tax and nontax cost trade-off for exporters and high-tech companies on book-tax conforming and book-tax difference noncompliance. Hodder et al. (2003) examine how the tax and nontax cost trade-off influences commercial banks' conversion from C-corporation to S-corporation. However, these empirical studies do not deal with issue of transfer pricing. Smith (2002) provides an analytical study on transfer pricing dealing with the trade-off between tax minimization and managerial performance evaluation. He finds that such trade-off is necessary even if a firm adopts a dual pricing system or uses a non-profit based performance evaluation method. My study is different from the previous studies mentioned above because I empirically examine transfer pricing behavior based on actual tax audit cases and the "tax and nontax cost trade-off" theory.

#### **5.3.1 Tax Incentives for Transfer Pricing**

Minimizing global tax liabilities is one of the most important goals of transfer pricing. When there are large differentials in income tax rates among countries and a large volume of transfers, the incentive for MNCs to use transfer pricing to shift income will be significant (Jacob 1996). For example, Klassen et al. (1993) find evidence of income shifting by MNCs in response to tax rate changes in

Canada, Europe and the United States. They find that with increasing Canadian tax rates, MNCs shift income to the United States from Canada, whereas with decreasing rates in Europe, they shift income to Europe from the United States. Chan and Mo (2000) find that FIEs in a tax-exemption period are less likely to underreport taxable income than FIEs in post-holiday and tax-reduction periods, i.e. firms reduce their reported income when the tax rate increases. Although they do not specifically investigate transfer pricing issues, their findings generally support the income reporting/shifting behavior for tax rate differentials. In Chapter 4 of my thesis, I find that differences in income tax rates and minimization of custom duties are important factors affecting MNCs' transfer pricing decisions in China.

In China, the enterprise income tax rate is 30 percent with an additional 3 percent local tax. The Chinese government offers a basket of tax incentives and reductions to FIEs. For example, a preferential income tax rate of 15 percent is granted to FIEs located in special economic zones and in economic and technological development zones. For FIEs of a production nature scheduled to operate for a period of not less than ten years, an exemption from taxation for the first two profit-making years and a 50 percent tax reduction for the following three years are granted. With the above generous tax incentives, China's corporate income tax rates applicable to FIEs are lower than those imposed by most of its major trading and investing countries like the United States and Japan (Chan and Chow 1997b). Given the low tax rates in China as compared to their home countries, most FIEs can shift their profits to China through transfer pricing in order to save global tax payments and cash outflows. However, in practice, many FIEs shift their profits out of China due to nontax considerations.

### **5.3.2 Nontax Costs for Transfer Pricing**

Kim and Miller (1979) and Plasschaert (1985) argue that the tax variable should not be over-rated in transfer pricing policies in developing countries because of the existence of nontax influences in these countries. Given a particular set of environmental characteristics, management needs to achieve various objectives through transfer pricing, including maximizing corporate profits, minimizing financial risks and taking care of other behavioral and political aspirations. In Chapter 4 of my thesis, I find that important nontax factors affecting transfer pricing decisions of FIEs in China include interest of local partners, foreign exchange control and risk, and good relationship with host government. Whether an FIE would shift profits out of China depends on its trade-off between tax and nontax costs affected by transfer pricing. From the viewpoint of a developing country, the major concern is profits being illegally shifted out of the country. This is also a focus of my study.

### **5.3.3 Probability of Tax Audit**

Tax compliance is often modeled as a game between taxpayers and tax authorities. Tax authorities seek to maximize collections of tax revenue net of audit costs (Graetz et al. 1986; Reingaum and Wille 1986; Beck and Jung 1989; Sansing 1993; Rhoades 1999). Tax authorities first identify companies which are likely to evade tax and decide to audit those companies which can maximize the amount that can be recovered net of audit costs. Mills and Sansing (2000) find that tax authorities are more likely to audit firms that have a positive book-tax difference than firms that have no book-tax differences since a book-tax difference is a cue for tax evasion. Rhoades (1999) suggests that the tax authorities will base their audit decisions on the likelihood of misstatement of tax returns and the audit cost. Tax

authorities observe the taxpayer's reported income in the tax return, and based on the likelihood that this reported income misstates the true tax liabilities make a decision whether to audit the taxpayer's report. To summarize, the probability that a company will be selected for audit depends on the likelihood and the possible amount of tax evasion, as well as the audit costs.

## **5.4 HYPOTHESES DEVELOPMENT**

### **5.4.1 Forms of Investment**

Joint ventures are a common form of investment in developing countries because it is easier for foreign companies to enter into a new market with the help of a local partner, and many developing countries restrict the establishment of wholly foreign-owned enterprises, particularly in certain sensitive industries. There are two types of joint ventures in China: equity joint ventures and cooperative joint ventures. For equity joint ventures, foreign investors share profits and bear risks with local partners in proportion to their equity ownership. The establishment of a cooperative joint venture is based on a contract between the venture partners. Unlike equity joint ventures, Chinese and foreign investors are able to contractually specify their profit-sharing ratios, not necessarily according to their proportion of capital contributions. Apart from joint ventures, another common form of business for FIEs in China is wholly foreign-owned enterprises.

Under the Income Tax Law, all FIEs in China are subject to the same tax rate. Thus, other things being equal, the tax cost for shifting profits out of China through transfer pricing is similar for different forms of investment. Whether a particular form of business in China is more likely to shift profits out would thus depend on the nontax cost consideration of transfer pricing manipulation.

Relationships with local partners is important for foreign investors of equity joint ventures. Local partners can act as a bridge between the foreign investors and local government, and can help to establish effective contacts with the local distributors, suppliers, customers, and workers (Ambler and Witzel 2000). Chinese partners are equipped with local market information and have a good relationship with the local government. Up-to-date local market information can help the ventures penetrate into the local Chinese market. Good relationships with the local government is helpful to smooth business operations and to negotiate bureaucratic hurdles. This is in part cultural and in part because the legal system in China is not as transparent as that in most developed countries (Chan and Jiang 2002). Chapter 4 of my thesis finds that relationships with local partners is rated as one of the most important variables by management of FIEs for choosing transfer pricing methods. Chan and Chow (2001) suggest that transfer pricing manipulation increases the conflict between local and foreign partners. They find that in order to minimize conflicts with local partners over transfer pricing, FIEs having a local partner in management are more likely to use market-based transfer pricing methods and are less likely to undertake transfer pricing manipulation.

On the other hand, some studies (Plasschaert 1985; Emmanuel and Mehafdi 1994) suggest that the existence of a local partner in a joint venture provides an inducement for the foreign investors to use transfer pricing to shift profits out. By shifting profits to parent companies, profits reported in China and in turn, the amount shared by the local partners of equity joint ventures, is reduced. However, equity joint ventures incur a high political cost for shifting profits out of China because most of the local partners of the joint ventures are directly or indirectly linked to the central or local governments or their agencies (Chan and Chow 1997b). Therefore, manipulation of transfer prices by the foreign partners not only causes a

loss of tax revenue for the Chinese government, but also a loss of the government's investment in the ventures. The Chinese government thus monitors the operations of the ventures closely and puts serious effort into protecting their tax revenue and investment. Executives of the local partners are also compensated and evaluated based on performance of the joint ventures. Local executives thus tend to be actively involved in transfer pricing decisions to ensure the reasonableness of transfer prices such that more objectively determined profits are reported by the ventures. Accordingly, equity joint ventures are less likely to manipulate their transfer prices and shift profits out from China due to the high political cost and performance evaluation incentives.

For cooperative joint ventures, many of the local partners may enter into a management contract with foreign investors, whereby full management responsibility is delegated to the foreign partners who control the production and financial functions of business operations. The local partners provide land and labor for the ventures and in turn receive a fixed amount of fees. Thus, the monitoring costs and conflicts with local partners are minimal for cooperative joint ventures as long as the foreign partners pay the agreed fees according to the contract. Some of the agreements of cooperative joint ventures also require the foreign partners to transfer all their ownership of fixed assets to the Chinese partners at the end of the agreement. Such arrangements create a great inducement for transfer pricing manipulation by foreign investors for a quick recovery of their investment (Chan and Chow 1997b). Due to lower monitoring costs and greater inducement for manipulating transfer prices, cooperative joint ventures are more likely to manipulate their transfer prices and shift their profits out from China than equity joint ventures. Similarly, management of wholly foreign-owned enterprises has absolute control of the FIEs. Compared with equity joint ventures, wholly foreign-

owned enterprises are not monitored by the local partners. Therefore, wholly foreign-owned enterprises have a higher degree of freedom to manipulate their transfer prices and shift their profits out of China to achieve their corporate strategic objectives (Emmanuel and Mehafdi 1994).

In conclusion, equity joint ventures, compared with wholly foreign-owned enterprises and cooperative joint ventures, have comparable tax costs but higher nontax costs for shifting profits out of China through transfer pricing manipulation due to the need for maintaining a good relationship with local partners and government, and the monitoring effect of local partners. Therefore, it is expected that wholly foreign-owned enterprises and cooperative joint ventures are more likely to shift profits out of China through transfer pricing manipulation.

For reasons explained above and since local partners of equity joint ventures may have good relationships with local governments, tax authorities foresee a comparatively lower incentive and necessity to audit them. Furthermore, the costs for auditing equity joint ventures may be higher because the local partners may have some political influence on the tax officials which will affect their audit work (Chan and Chow 1997b). On the other hand, some may argue that due to good relationships, the local partners would be more willing to provide information to the tax authorities for audits which would in turn reduce the audit costs of the tax authorities. However, in normal circumstances, whistle-blowing is unlikely as this will be against the economic interests of the local partners. I believe that on the whole, the form of investment does not significantly affect the audit costs of investigating transfer pricing. Therefore, wholly foreign-owned enterprises and cooperative joint ventures are more likely to be selected for transfer pricing audits by the Chinese tax authorities than equity joint ventures because of the higher

probability of transfer pricing manipulation. Accordingly, the following hypothesis is formulated.

**Hypothesis 1:** Ceteris paribus, wholly foreign-owned enterprises and cooperative joint ventures are more likely to be selected for transfer pricing audits by the Chinese tax authorities than equity joint ventures.

#### **5.4.2 Activity Orientation**

Foreign investors that establish business operations in China have two typical marketing objectives. One is to take advantage of cost savings in China and export goods at more competitive prices to other countries. The other is to capitalize on savings of transportation costs and tariffs for local production in order to penetrate the domestic market (Chan and Mo 2002). Maintaining a favorable balance of payments is one of the most important economic objectives for most developing countries due to their need for foreign exchange. In China, the government encourages export activities by FIEs and therefore provides numerous supports for export-oriented companies including reduced tax rates, tax refunds, simplified customs procedures, reduced land use fees, and other convenient services (China Daily 2002). Raw materials, knock-down components, parts, accessories and packaging materials imported for producing exports are exempt from import tariffs in China. In other words, export-oriented FIEs are exempted from import duties for materials or parts imported for producing exports. Therefore, export-oriented FIEs can overprice imports to shift profits out from China without the trade-off of paying more import tariffs in China. However, for domestic-market-oriented FIEs, if they overprice import materials or parts for production of domestic sales, they need to pay a higher amount of tariffs. As such, the tariff costs of transfer pricing

manipulation by domestic-market-oriented FIEs are higher than export-oriented FIEs.

In order to encourage exports, the Chinese government also provides tax incentives for export-oriented FIEs. For FIEs which export more than 70 percent of their total sales, they can enjoy a 50 percent tax reduction in the year they qualify, with a minimum tax rate of 10 percent. However, export-oriented FIEs still have to pay the standard tax rate at the time of filing their tax return and receive tax refunds only after verification of their total sales and export-sales documents by the Bureau of Economic Development. Chan and Mo (2000, 2002) suggest that the outcome of tax refunds is uncertain since many refund requests were rejected because of inadequate documentation and sales manipulation. Therefore, FIEs do not know whether they can get the tax refund when they decide the transfer prices during the year. Thus, corporate tax rate differences between export-oriented FIEs and domestic-market-oriented FIEs should not significantly affect transfer pricing decisions and profit shifting activities.

On the other hand, export-oriented FIEs face higher foreign exchange risks for keeping profits in China. FIEs in China that undertake foreign trade are required to open a foreign exchange settlement account with a designated bank. For foreign exchange received under the current account, FIEs may retain a certain amount of it within the limit prescribed by State Administration of Exchange Control (SAFE). Any excess portion must be sold to the designated banks. When the FIEs need to make foreign currency payments, they can draw the required amount from the foreign exchange settlement account. For export-oriented FIEs, as most of their products are sold overseas, they are more likely to have a positive balance in the foreign exchange settlement account and thus the amount exceeding the limit prescribed by the SAFE must be sold to designated banks. This would then increase

the foreign exchange risks of the FIEs. Therefore, export-oriented FIEs have a greater incentive to shift profits out of China by over-pricing imports or under-pricing exports in order to reduce the balance of the foreign exchange settlement account and in turn, reduce the foreign exchange risks.

Export-oriented FIEs have priority in obtaining loans from the Bank of China and other state-owned commercial banks in China (Barale 1988; USDOC 1999). Chan and Mo (2002) found that the role of financial statements in obtaining financing is reduced for export-oriented FIEs, and thus their nontax cost of underreporting book income and shifting profits out of China is lower.

Compared with domestic-market-oriented FIEs, export-oriented FIEs have a more significant volume of inter-affiliate trade (Jacob 1996; Chan and Chow 1998), and thus export-oriented FIEs have greater opportunity to manipulate their transfer prices. For domestic-market-oriented FIEs, they need to sell their products in China. Thus, they have a particularly important need to maintain good relationships with local government and distributors because they rely heavily on the local distribution network and local contacts to market their products. To avoid conflict with local government and distributors in transfer pricing issues, domestic-market-oriented FIEs are more likely to use market-based transfer pricing methods (Chan and Chow 2001). Therefore, domestic-market-oriented FIEs have less room for manipulating their transfer prices.

In conclusion, export-oriented FIEs have a greater incentive to transfer profits out of China to reduce foreign exchange risks. They also have lower tariff costs and nontax costs for reporting lower income in China than domestic-market-oriented FIEs. Thus, they are more motivated to evade tax through transfer pricing. In addition, export-oriented FIEs are required to submit sales documents to the Bureau of Economic Development to substantiate their export sales and total sales

(i.e. the 70 percent requirement) in order to claim the tax refund. Since those documents have already been verified by the Bureau of Economic Development, this reduces the audit costs for tax authorities. Therefore, the audit cost for auditing export-oriented FIEs should be lower than auditing domestic-market-oriented FIEs. Hence, I anticipate that export-oriented FIEs have a higher probability of being selected for audit by tax authorities. This expectation is reflected in the following hypothesis:

**Hypothesis 2:** *Ceteris paribus*, export-oriented FIEs are more likely to be selected for transfer pricing audits by the Chinese tax authorities than domestic-market-oriented FIEs.

### **5.4.3 Sources of Investment**

The extent of global tax saving that can be obtained by MNCs through transfer pricing manipulation depends on the tax rate differentials between the host and the home countries. The major sources of foreign direct investment (FDI) in China are Hong Kong, Taiwan, Japan and the United States, totaling 60 percent of FDI in China in 2002 (SSB 2003). The corporate tax rates of Hong Kong and Taiwan are respectively 17.5 percent and 25 percent, which are relatively lower than other countries like the United States and Japan (with marginal tax rates of 40 percent and 42 percent respectively). Therefore, Hong Kong and Taiwan FIEs would incur significantly lower tax costs for shifting profits out of China than other countries. Some may argue that for companies that are subject to global tax with full tax credit available, they cannot reduce their global tax liability by shifting profits to home countries through transfer pricing. However, the tax on foreign-source income typically can be deferred until the income is repatriated to the home countries. Therefore, in practice, the effective tax rate computed in a present value

sense for income first taxed in China is typically lower than if the income were first taxed in the home countries with higher income tax rates (Klassen et al. 1993). As such, the tax cost for shifting profits out of Mainland China to Hong Kong and Taiwan are lower compared with shifting profits to Japan and United States.

Performance evaluation is also an important consideration for setting transfer prices. Management is less likely to manipulate transfer prices that would adversely affect their compensation and performance evaluation even if such decisions are beneficial to the companies. Hong Kong and Taiwan FIEs are often closely held, owner-managed family businesses (Liu 1999). Klassen (1997) finds that high inside ownership concentration reduces the need for accurate financial reporting. Therefore, Hong Kong and Taiwan FIEs have lower financial reporting costs for underreporting profits since they have higher inside ownership structure and can efficiently inform shareholders of the companies' value through channels other than financial statements. In addition, since Hong Kong and Taiwan FIEs are often owner-managed or managed by relatives of the owners, the agency problems between owners and management are minimal. Companies' information including the setting of transfer prices and their effect on FIEs' profits can be efficiently communicated from the management to owners, with few information asymmetry problems. Thus, performance evaluation problems and management compensation problems which would be caused by transfer pricing manipulation are reduced for Hong Kong and Taiwan FIEs. Given the lower nontax costs, I expect that Hong Kong and Taiwan FIEs are more likely to shift profits out of China through transfer pricing manipulation.

In conclusion, Hong Kong and Taiwan sourced FIEs have both lower tax and nontax costs for shifting profits out of China through transfer pricing. In addition, auditing Hong Kong and Taiwan sourced FIEs may be easier than auditing other

sourced FIEs because of similar items in culture and language. Audit costs including translation costs for auditing Hong Kong and Taiwan sourced FIEs would thus be lower. Networking in Chinese communities should also facilitate information exchange. Therefore, I expect that Hong Kong and Taiwan FIEs are more likely to be selected for transfer pricing audits by the Chinese tax authorities than other FIEs. The following hypothesis is formulated:

**Hypothesis 3:** *Ceteris paribus*, Hong Kong and Taiwan sourced FIEs are more likely to be selected for transfer pricing audits than other FIEs.

The comparative tax and nontax costs for shifting profit out of China by different types of FIEs are summarized in Table 5.1.

[Insert Table 5.1 here]

## **5.5 RESEARCH METHOD**

### **5.5.1 Data Collection**

I collected the data from tax authorities in coastal China cities where FIEs are concentrated. First, I requested the tax authorities to randomly select FIEs which were audited for transfer pricing manipulation. In total, 111 cases were provided by the tax authorities. All of the firms are in a post-holiday period or do not qualify for tax holidays. Information such as the basis for tax adjustments, form of investment, activity orientation, nationality of investors, amount of capital, sales and industry were provided by the tax authorities.

Second, I requested the same tax authorities to randomly select FIEs that have been established for more than five years, and have significant related-party transactions (i.e. more than 50 percent of their total sales or purchases are sold to or purchased from related companies), but which have not been selected for transfer

pricing audits. By selecting FIEs that have been established for more than five years, I exclude any FIEs that are newly established in my sample. Tax authorities may have difficulties in targeting newly established FIEs for transfer pricing audits as they do not have a history of the FIEs' profits and losses for analysis. In total, I collected 194 non-audited FIEs that meet the selection requirements. Similar to the audited sample, all of the firms are either in a post-holiday period or do not qualify for tax holidays. Tax authorities provided information on the FIEs' characteristics including form of investment, activity orientation, nationality of investors, amount of capital, sales, and industry.

### 5.5.2 Statistical Model

For testing my hypotheses, I used a logistic regression model as follows:

$$\text{AUDIT} = \beta_0 + \beta_1 \text{FORM} + \beta_2 \text{ACTIVITY} + \beta_3 \text{SOURCE} + \beta_4 \text{INDUSTRY} \\ + \beta_5 \text{SIZE} + \beta_6 \text{ROC} + \beta_7 \text{RPT} + \epsilon$$

where:

Dependent Variables:

Audit = 1, if an FIE was selected for transfer pricing audit by Chinese tax authority, 0 otherwise;

Policy Variables:

Form = 1, if an FIE is an equity joint venture, 0 otherwise;

Activity = 1, if an FIE is an export-oriented enterprise, 0 otherwise;

SOURCE = 1, if an FIE is sourced from Hong Kong or Taiwan, 0 otherwise.

Control Variables:

INDUSTRY = 1, if an FIE is in an industry that has a higher risk of transfer pricing manipulation, 0 otherwise;

SIZE = natural logarithm of FIE's sales

ROC = return on capital (i.e. profit before tax over total capital of the FIEs)  
RPT = volume of related-party transactions over sales

The dependent variable of the regression is a dichotomous variable to identify the FIEs which were selected for transfer pricing audit by the Chinese tax authorities

### **5.5.3 Control Variables**

Prior studies on international transfer pricing in China have found that certain specific industrial sectors are more likely to undertake transfer pricing manipulation. Chan and Chow (1997a) reveal that Chinese FIEs in industries of audio and video equipment, garment and textile, plastic products and chemicals tend to over-price their imports and under-price their exports and thus generally report lower profit. I interviewed six partners or senior managers of the Big Four CPA firms who specialized in China tax and transfer pricing. They also suggested that business engaged in certain types of industry like garments and textiles are more likely to be selected by the Chinese tax authorities for tax audits. To control for the potential effect of industries on the selection of transfer pricing audits, I introduced “INDUSTRY” as a control variable for the regression. The dummy variable equals 1 if the FIEs are in the industries identified as having a high opportunity of transfer pricing manipulation, and 0 for other industries.

Large firms usually have more complicated organizational structures than small firms, and thus their inter-affiliate transactions are more complicated. Chan and Chow (1997b) suggest that an audit of large MNCs is very costly and requires a sophisticated audit unit. Therefore, audit costs for auditing large firms should be significantly higher than for auditing small firms. I include “SIZE” by taking the

natural logarithm of an FIE's sales as a control variable to control for the potential effect of size of business on audit costs and the selection of transfer pricing audits by the Chinese tax authorities.

I also include a control variable "ROC" to control for the effect of profitability of FIEs on the probability of being audited, as FIEs with persistent losses or low profitability are more likely to be selected for audit. I use a variable "RPT", which is the ratio of the volume of related-party transactions to sales to control for its effect on the probability of being audited. Tax incentive for profit-shifting depends on the volume of related-party transactions (Jacob 1996). The higher the volume of related-party transactions, the higher the tax incentive and the higher the possible amount of tax evasion. Although the audit costs for auditing firms with high proportion of inter-affiliate trades may be higher, I expect that FIEs with high proportion of related-party transactions are more likely to be audited. This is because the amount can be recovered net of audit costs for FIEs with higher proportion of related-party transactions would be larger than those with low proportion of related-party transactions.

## **5.6 EMPIRICAL RESULTS**

### **5.6.1 Descriptive Statistics**

Table 5.2 provides descriptive statistics for the firm attributes of the 111 FIEs which were selected for in-depth transfer pricing audits and 194 FIEs which were not selected for transfer pricing audits. The table shows that 86.5 percent of the FIEs in the audited sample are wholly foreign-owned enterprises and cooperative joint ventures, 91.0 percent are export-oriented enterprises, and 82.9 percent are sourced from Hong Kong or Taiwan. Table 5.2 also provides the results of univariate tests for the comparison of distributions and means between the audited

sample and non-audited sample. I find that wholly foreign-owned enterprises, cooperative joint ventures, export-oriented FIEs and Hong Kong and Taiwan sourced FIEs are more likely to be selected for transfer pricing audits. The results are consistent with my hypotheses and are similar to Chan and Chow (1997b)'s findings which report that wholly foreign-owned enterprises, cooperative joint ventures and Hong Kong sourced FIEs are more likely to be audited, but they do not study activity orientation. For the control variables, I find that FIEs in identified higher risk industries, firms with larger volume of sales, and firms have a higher proportion of related-party transactions to sales are more likely to be selected for transfer pricing audits. As related-party transactions include inter-affiliate purchases, sales, loans and management fees, the mean "RPT" for the audited sample is 1.34 which is higher than sales.

[Insert Table 5.2 here]

### **5.6.2 Logistic Regression**

Table 5.3 reports logistic regression results for the likelihood that an FIE with different firm characteristics will be selected for transfer pricing audits by the Chinese tax authorities. Overall, the model correctly predicts 87.2 percent of the selection for transfer pricing audits. The results of logistic regression confirm that form of investment and activity orientation are significant corporate attributes affecting the probability of being selected for transfer pricing audits in China. The signs of the coefficients are consistent with my hypotheses. Specifically, cooperative joint ventures, wholly foreign owned FIEs, and export-oriented FIEs have lower nontax costs for shifting profits out of China and this contributes to a higher probability of being selected for transfer pricing audits by the Chinese tax authorities. Smaller firms and firms with a larger proportion of related-party

transactions are also more likely to be selected for transfer pricing audits because of lower audit costs for auditing smaller firms, and greater incentives or more opportunities for transfer pricing manipulation for firms that have a higher proportion of related-party transactions. However, my multivariate analysis did not find that the source of investment significantly affects the probability of being selected for transfer pricing audits. Variance inflation factors are all less than 2, meaning that multi-collinearity is unlikely to affect my inferences.

[Insert Table 5.3 here]

I conducted additional tests to check the robustness of the regression results. First, I changed the variable “SOURCE” from signifying “Hong Kong and Taiwan source FIEs” to “Hong Kong FIEs” to see whether a different tax system would affect my results since Hong Kong charges corporate taxes only on local sourced income. Second, I replaced the variable “ROC” by a variable “PROFIT” which is defined as net profit before tax over sales. Third, I replaced the “ROC” variable by a dummy variable representing whether the FIEs report losses or profits in their accounts, and fourth, by a dummy variable representing whether the FIEs have consistent losses or low profitability. Fifth, I replaced sales volume by registered capital for controlling the firm size. Sixth, I changed the definition of “RPT” to the natural logarithm of the volume of related-party transactions. Seventh, I included a dummy variable of the choice of transfer pricing method in the model. Eighth, I included an interaction term of “EXPORT” and “RPT” in the model. Ninth, I excluded six audited cases which involved in transfer of intangible in the regression. The results of the above sensitivity tests are similar to the results of the original model, except in (i) the second and fourth tests where the significant level of the variable “FORM” changes from 5 percent to 10 percent, (ii) in the fifth test, where

the control variable “RPT” becomes insignificant and “ROC” becomes significant at the 5 percent level, and (iii) in the eighth test, the significant level of the variable “EXPORT” changes from 5 percent to 10 percent.

## **5.7 CONCLUSION**

This study investigates empirically the relationship between firm characteristics of FIEs in China and the probability of being selected for transfer pricing audits based on a modified tax and nontax cost trade-off theory. I found that equity joint ventures and domestic-market-oriented FIEs have higher nontax cost than their counterparts for shifting profits out of China through manipulating transfer prices mainly because of the need to keep a good relationship with local partners and government. Export-oriented FIEs also have higher tax benefits for shifting profits out of China than domestic-market-oriented FIEs because of exemption of import tariffs for export goods. Thus, wholly foreign-owned enterprises, cooperative joint ventures and export-oriented FIEs are more likely to manipulate their transfer prices and shift their profits out of China to achieve their strategic objectives. My empirical results are consistent with the theoretical predictions.

My study is useful for tax authorities in developing economies as it provides evidence on how firm characteristics affect tax and nontax costs of shifting profits out of a developing economy. These findings should be useful for the tax authorities in these economies in designing tailor-made tax audit guidelines and in the selection of transfer pricing audit targets. A study of tax and nontax costs involved in international transfer pricing manipulation allows us to understand more about the incentives and disincentives for MNCs to comply with transfer pricing regulations. Public policy makers should then design legislation to increase incentives for

compliance or reduce disincentives. For example, policy makers should set policies which would reduce the foreign exchange risks and thus the incentive to shift profits out of China by export-oriented FIEs. Management of MNCs can also gain a better understanding of how firm characteristics affect their transfer pricing decisions in China.

Finally, for academic research, this study provides new insight on how the tax and nontax cost trade-off theory can explain the way management balances the often conflicting transfer pricing objectives and the probability of MNCs being audited on transfer pricing. It helps researchers in assessing the suitability and robustness of the tax and nontax cost theory in explaining tax audits on international transfer pricing.

## **CHAPTER 6**

### **CONCLUSIONS**

#### **CHAPTER SUMMARY**

This thesis provides comprehensive analysis of international transfer pricing in China. It extends prior studies by examining how management's perception of the relative importance of environmental variables affects their choice of transfer pricing methods within a developing economy framework. This thesis also provides the first tax compliance study based on tax audits on MNCs, examining empirically how the tax and nontax cost tradeoff affects international transfer pricing decisions.

The results reveal that management perception of nontax factors, namely, interests of local partners, foreign exchange control and risks, and good relationships with local government, are important in discriminating between choices of transfer pricing methods. I also find that wholly foreign-owned enterprises, cooperative joint ventures and export-oriented FIEs are more likely to manipulate their transfer prices and shift their profits out from China to achieve their strategic objectives. The empirical results are consistent with the theoretical predictions. Future research can investigate the related-party transactions entered between the management and the companies themselves, which are very common in developed countries. Studies on the transfer pricing issues between Chinese state-owned enterprises and their listed companies should also be contributory.

## **CHAPTER 6**

### **CONCLUSIONS**

#### **6.1 SUMMARY OF THE RESULTS**

Prior studies examined the transfer pricing methods commonly used by MNCs in developed countries and the role of certain important environmental variables in their transfer pricing considerations. The perceived importance of environmental variables reflects management's trade-off on a number of conflicting objectives of transfer pricing, and thus influences their decisions on choosing among transfer pricing methods. My thesis extends prior studies by examining how management's perception of the relative importance of various environmental variables affects their choice of transfer pricing methods in China under a developing economy framework. The analysis of my data reveals that management's perception of three environmental variables, namely, the interests of local partners, foreign exchange control, and the maintenance of a good relationship with the host government are significant to discriminate FIEs' choice of transfer pricing methods. The more important the management perceives the interest of local partners and the maintenance of a good relationship with the host government, the more likely that an FIE will use a market-based transfer pricing method. The more important the management perceives foreign exchange controls, the more likely a cost-based transfer pricing method will be used. Overall, there is a moderate agreement between US and non-US FIEs on the relative importance of the environmental variables studied.

In addition, my thesis provides the first tax compliance study based on tax audits of MNCs, examining empirically how the tax and nontax cost trade-off affects international transfer pricing. The analysis of my data reveals that wholly foreign-owned enterprises, cooperative joint ventures and export-oriented FIEs are

more likely to manipulate their transfer prices and shift their profits out of China to achieve respective strategic objectives. Equity joint ventures and domestic-market-oriented FIEs have higher nontax costs than their counterparts for shifting profits out of China through manipulating transfer prices mainly because of the need to keep a good relationship with local partners and government. Export-oriented FIEs also have higher tax benefits for shifting profits out of China than domestic-market-oriented FIEs mainly because of the exemption of import tariffs for export goods.

## **6.2 IMPLICATIONS**

The findings of this thesis are of particular relevance to developing countries in enhancing our understanding of environmental influences on transfer pricing decisions, and thus contribute to the building of a more comprehensive theoretical framework of transfer pricing in developing economies. Results of this study should also have significant implications for tax authorities as well as foreign investors operating in China and other developing economies. The results should help tax authorities to tackle the tax audit problems more effectively and in setting auditing guidelines on related-party transactions. For example, given the low nontax costs of shifting profits out of China by export-oriented FIEs, tax authorities can set audit priority for investigating this type of FIEs. In addition, my research results should help foreign investors to have a better understanding of the tax and nontax factors for transfer pricing decisions in China. For example, management can consider the relative importance of these factors in setting or revising their transfer pricing policies. This research should be of interest to academic researchers interested in international accounting as it contributes to building a more comprehensive theory of environmental influences on international transfer pricing. This research is also

the first study to provide an empirical assessment based on tax audits of the tax and nontax cost trade-off theory as it applies to international transfer pricing.

### **6.3 LIMITATIONS**

A limitation of this study is that the data as summarized in Chapter 4 was collected based on a convenience sample of FIEs rather than a random sample, as FIEs in China would not normally grant interviews on sensitive issues like transfer pricing without prior personal contacts. In addition, as China is unique due to its rapid economic growth rate and large population, the findings of this research should not be generalized to other developing countries without considering the business environment of each country. Having said that, China is essentially a developing country and is classified as such by the IMF (2003). Therefore, the findings of this research should be considered as a useful reference tool for other developing economies in enhancing their understanding of MNC's transfer pricing behaviors. For example, countries that have similar forms of investment as China can make a reference on how different types of investment affect transfer pricing compliance.

### **6.4 FUTURE EXTENSIONS OF THIS RESEARCH**

My study mainly focuses on international transfer pricing for inter-company transactions (i.e. the transactions between parent companies and subsidiaries, and transactions among the subsidiaries). Future research can investigate related-party transactions between companies and their management. This type of related-party transaction is very common in developed countries. For example, Apple Computer Inc. paid its chief executive Steven Jobs nearly US\$1.2 million to reimburse him for costs he incurred using his personal jet on company business in 2001 and 2002.

Actually, many US companies have side deals involving private planes of their executives. Ford Motor Co. paid two of its directors hundreds of thousands of dollars in consulting fees (Emshwiller 2003). These are just a few examples of this type of related-party transaction. Such transactions introduce conflicts of interest since management is acting on behalf of the shareholders, but at the same time, they are also involved in business transactions with the companies. Management of the holding companies often have business deals with the company's subsidiaries in other jurisdictions. In many cases, these transactions cross national boundaries. Future research can analyze the extent of this type of related-party transaction in China and Hong Kong, how agency theory can be applied to explain this type of transaction, and how these transactions affect stock returns.

Future research can also investigate transfer pricing issues in Chinese state-owned enterprises (SOEs). China implemented the SOE reforms in the 1990s. Many SOEs organized their operations into profit centers and introduced performance-based reward systems. There are numerous transactions between these profit centers. The centers that performed well were allowed to raise capital in the security markets. Thus, policies of intra-firm transfers become a significant issue for China. Future research can study how the management of SOEs decides on their transfer pricing methods, and analyze the factors which have a potential influence on their transfer pricing decisions. Strictly speaking, this type of transaction mainly involves domestic transfer pricing. However, SOEs often have overseas subsidiaries including those in Hong Kong and some are listed companies in China, Hong Kong and overseas. Therefore, international transfer pricing can be an important variable in affecting capital market behaviors for Chinese listed companies.

**Table 1.1**  
**Average Annual Percentage Growth of Real GDP**

<b>Countries/ Region</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003 Projection</b>	<b>Average 1993-2002</b>
<b>World</b>	2.2	3.7	3.7	4.1	4.3	2.8	3.6	4.7	2.3	3.0	3.2	3.4
<b>G-7 countries</b>	1.3	3.1	2.4	2.0	2.7	2.5	2.7	3.5	1.2	1.4	1.5	2.3
<b>US</b>	2.7	4.0	2.7	3.6	4.4	4.3	4.1	3.8	0.3	2.4	2.2	3.2
<b>Germany</b>	-1.1	2.3	1.7	0.8	1.4	2.0	2.0	2.9	0.6	0.2	0.5	1.3
<b>Japan</b>	0.5	1.0	1.8	3.5	1.9	-1.1	0.2	2.8	0.4	0.3	0.8	1.1
<b>China</b>	13.5	12.6	10.5	9.6	8.8	7.8	7.1	8.0	7.3	8.0	7.5	9.3

Source: IMF (International Monetary Fund). 2001, 2003. *World Economic Outlook*. Washington D.C.: IMF.

**Table 1.2**  
**Value and Annual Growth of China's Foreign Trade**

	Total Trade			Export		Import	
	Value (US\$bn)	Growth (%)	Ranking in the world	Value (US\$bn)	Growth (%)	Value (US\$bn)	Growth (%)
<b>1993</b>	195.70	18.2	11	91.74	8.0	103.96	29.0
<b>1994</b>	236.62	20.9	11	121.01	31.9	115.61	11.2
<b>1995</b>	280.85	18.7	11	148.77	22.9	132.08	14.2
<b>1996</b>	289.90	3.2	11	151.07	1.5	138.83	5.1
<b>1997</b>	325.16	12.2	11	182.79	21.0	142.37	2.5
<b>1998</b>	324.05	-0.3	11	183.81	0.6	140.24	-1.5
<b>1999</b>	360.63	11.3	9	194.93	6.0	165.70	18.2
<b>2000</b>	474.29	31.5	7	249.20	27.8	225.09	35.8
<b>2001</b>	509.76	7.5	6	266.15	6.8	243.61	8.2
<b>2002</b>	620.77	21.8	4	325.60	22.3	295.17	21.2
<b>2003</b>	851.21	37.1	5	438.37	34.6	412.84	39.9

Source: SSB (State Statistical Bureau). 2003. *China Statistical Yearbook 2003*. Beijing: China Statistical Publishing House.

United nations. 2000, 2003. *Monthly Bulletin of Statistics* (Nov 2000, Oct 2003). New York: United Nations.

2003 data from [www.mofcom.gov.cn](http://www.mofcom.gov.cn)

**Table 1.3**  
**The Top Ten Largest Recipients of Direct Foreign Investment in the World**

Ranking	1997		1998		1999		2000		2001		2002	
	Countries	US\$M	Countries	US\$M								
<b>1</b>	US	103 398	US	174 434	US	283 376	US	300 912	US	124 435	Luxembourg*	125,660
<b>2</b>	<b>China</b>	44 237	UK	74 324	Belgium and Luxembourg	133 059	Belgium and Luxembourg	245 561	UK	53 799	<b>China</b>	52,700
<b>3</b>	UK	33 229	<b>China</b>	43 751	UK	87 973	Germany	195 122	France	52 623	France	51,505
<b>4</b>	France	23 174	Netherlands	36 964	Sweden	60 850	UK	116 552	Belgium and Luxembourg	50 996	Germany	38,033
<b>5</b>	Brazil	18 993	France	30 984	Germany	54 754	Canada	66 617	Netherlands	50 471	US	30,030
<b>6</b>	Mexico	14 044	Brazil	28 856	France	47 070	Hong Kong	61 938	<b>China</b>	46 846	Netherlands	29,182
<b>7</b>	Germany	12 244	Germany	24 593	Netherlands	47 289	Netherlands	52 453	Germany	31 833	UK	24,945
<b>8</b>	Belgium and Luxembourg	11 998	Canada	22 809	<b>China</b>	40 319	<b>China</b>	40 772	Mexico	24 731	Spain	21,193
<b>9</b>	Canada	11 527	Belgium and Luxembourg	22 691	Brazil	28 578	Spain	37 523	Hong Kong	22 834	Canada	20,595
<b>10</b>	Hong Kong	11 368	Sweden	19 564	Canada	24 435	Brazil	32 779	Brazil	22 457	Ireland	19,033

Source: UNCTC (United Nations Centre on Transnational Corporation). 2002, 2003. *World Investment Report*. New York: United Nations

Note: It is estimated that about 80% of the FDI inflow in Luxembourg in 2003 is transshipped investment which have little economic impact in the country.

**Table 1.4**  
**Import and Export by Foreign Investment Enterprises in China**

	<b>Total Trade</b>		<b>Export</b>			<b>Import</b>		
	<b>Value (US\$bn)</b>	<b>Growth (%)</b>	<b>Value (US\$bn)</b>	<b>% of China's total export</b>	<b>Growth (%)</b>	<b>Value (US\$bn)</b>	<b>% of China's total import</b>	<b>Growth (%)</b>
<b>1993</b>	67.07	53.4	25.24	27.5	45.4	41.83	40.2	58.6
<b>1994</b>	87.64	30.7	34.71	28.7	37.5	52.93	45.8	26.5
<b>1995</b>	109.82	25.3	46.88	31.5	35.1	62.94	47.7	18.9
<b>1996</b>	137.11	24.8	61.51	40.7	31.2	75.6	54.5	20.1
<b>1997</b>	152.62	11.3	74.90	41.0	21.8	77.72	54.6	2.8
<b>1998</b>	157.68	3.3	80.96	44.0	8.1	76.72	54.7	-1.3
<b>1999</b>	174.51	10.7	88.63	45.5	9.5	85.88	51.8	11.9
<b>2000</b>	236.71	35.6	119.44	47.9	34.8	117.27	52.1	36.6
<b>2001</b>	259.10	9.5	133.24	50.1	11.6	125.86	51.7	7.3
<b>2002</b>	330.23	27.5	169.99	52.2	27.6	160.25	54.3	27.3
<b>2003</b>	472.25	43.0	240.34	54.8	41.4	231.91	56.2	44.7

Source: SSB (State Statistical Bureau). 1997, 2000, 2003. *China Statistical Yearbook*. Beijing: China Statistical Publishing House.

2003 data from [www.mofcom.gov.cn](http://www.mofcom.gov.cn)

**Table 2.1**  
**Prior Empirical Research on International Transfer Pricing in Developed Economies**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>
Tang and Chan (1979)	Questionnaire survey	76 US companies in the Fortune 500 and Fortune Second 500; and 50 Japanese companies in the President Directory	Rate the importance of different environmental variables on transfer pricing decisions.	Five environmental variables rated as most important by US firms are overall profit to the company, restrictions on repatriation of profits, competitive position of foreign subsidiaries, differentials in income tax rates and income tax legislation among countries, and performance evaluation of foreign subsidiaries. Five environmental variables rated as most important by Japanese firms are overall profit to the company, competitive position of foreign subsidiaries, devaluation and revaluation in countries where the company has operations, restrictions on repatriation of profits imposed by foreign countries, and performance evaluation of foreign subsidiaries. Variables most able to discriminate between US and Japan are interest of local partners, devaluation and revaluation of foreign currencies, antidumping legislation, import restrictions imposed by foreign countries, and differentials in income tax rates and income tax legislation among countries.
Burns (1980)	Questionnaire survey	62 US-based MNCs in Fortune 500	Examine the importance of various environmental variables on transfer pricing by asking the financial executives to rate the variables.	Market conditions in foreign countries, competition in foreign countries, reasonable profit for foreign affiliates, US federal income taxes, and economic conditions in foreign countries are rated as most important environmental variables among the others.

**Table 2.1 (cont.)**

**Prior Empirical Research on International Transfer Pricing in Developed Economies**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>
Tang (1981)	Questionnaire survey and interviews	145 US MNCs, 102 Japanese MNCs, 192 Canadian MNCs, and 80 UK MNCs	Rate the importance of different environmental variables and test whether there is significant difference on the importance of these variables for different nations.	Overall profits to the company and the competitive position of subsidiaries in foreign countries are considered the most important variables by all four national groups. The interests of local partners in foreign subsidiaries is ranked substantially higher by UK and Japanese firms than by Canadian and US companies. Compared with the other national groups, Japanese companies place significantly greater importance on the devaluation and revaluation of foreign currencies.
Mostafa et al. (1984)	Questionnaire survey	46 UK companies	Examine whether there is significant difference in the importance of environmental variables for the firms using different transfer pricing methods.	The perceived importance of the 20 environmental variables selected including overall profit of the company, divisional autonomy, and compliance with foreign tax and tariff regulations are significantly relates to the international transfer pricing methods used.
Borkowski (1992)	Questionnaire survey	247 US MNCs in the Fortune 500 or the Business Week 1000	Examine whether organizational characteristics and environmental factors affect the choice of transfer pricing methods.	The choice of a transfer pricing method is affected by specific organizational and environmental characteristics, but not upon the nature of the transfer. Stability and favorableness of the parent company's economic circumstances are significant environmental factors which would affect transfer pricing decisions.

**Table 2.1 (cont.)**

**Prior Empirical Research on International Transfer Pricing in Developed Economies**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>
Klassen et al (1993)	Financial statement data from annual reports	191 US MNCs	Evaluate changes in the reporting of taxable income by US MNCs in response to the changes in income tax rates.	With increasing Canadian tax rates, MNCs shift income to the United States from Canada, whereas with decreasing rates in Europe, they shift income to Europe from the United States.
Tang (1993)	Questionnaire survey	78 US companies in Fortune 500	Rate the importance of different environmental variables on transfer pricing decisions.	Overall profit to the company is the most important environmental variables for US MNCs' transfer pricing decisions. Compared with Tang (1979), management ranked differentials in income tax rates and income tax legislation among countries, maintaining good relationship with host governments, the need of subsidiaries in foreign countries to seek local funds, and antitrust legislation of foreign countries as more important on transfer pricing decisions.
Cravens and Shearon (1996)	Questionnaire survey	82 US MNCs	Examine how transfer pricing policies affect financial results.	Number of countries of operations and the dollar value of transfers are significant factors to explain the total tax burden of MNCs. Value of transfers and the foreign sales percentage have an effect on the financial outcomes of the firm as measured by return of assets.
Jacob (1996)	Financial statement data from annual reports	260 US firms for the period of 1982-1984 and 289 US firms for the period of 1988-1990	Investigate the relationships between the volume of intrafirm sales, differential of tax rates and tax payments.	Firms with substantial intrafirm transfers paid lower global taxes, lower US taxes in the period of 1982-1984 (i.e. when foreign tax rates were lower than US tax rates) and higher US taxes in the period of 1988-1990 (i.e. when US tax rates were lower than foreign tax rates).

**Table 2.1 (cont.)**

**Prior Empirical Research on International Transfer Pricing in Developed Economies**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>
Borkowski (1997a)	Questionnaire survey	39 Japanese MNCs and 28 US MNCs	Examine whether organization factors, environmental factors and financial factors would affect the choice of transfer pricing methods.	The choice of transfer pricing methods is affected by differences in environmental and financial factors, but not by organization factors. Environmental variables including the risk of audits by tax authorities and the market conditions in subsidiary countries have significant impact on the choice of transfer pricing methods.
Borkowski (1997b)	Questionnaire survey	28 Canadian MNCs with US subsidiaries and 62 US MNCs with Canadian subsidiaries	Examine the importance of different environmental variables on transfer pricing decisions.	Canadian and US MNCs have similar views on the importance of different environmental variables on transfer pricing decisions. Economic conditions of Canadian and risk of audits by US tax authorities are significant factors affecting the choice of transfer pricing methods.
Oyelere and Emmanuel (1998)	Financial statement data from annual reports	36 foreign-controlled enterprises operating in the UK and 36 UK-controlled enterprises	Examine the possible use of international transfer pricing as an income shifting mechanism by foreign-controlled enterprises operating in the UK.	Foreign-controlled enterprises have lower profitability and higher dividend distribution than UK-controlled enterprises. This provides evidence that foreign-controlled enterprises in UK shift income through international transfer pricing.

**Table 2.1 (cont.)**

**Prior Empirical Research on International Transfer Pricing in Developed Economies**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>
Conover and Nichols (2000)	Financial statement data from annual reports	490 US firms for the period of 1982- 1984 and 657 US firms for the period of 1988- 1990	Evaluate the effect of firm size on income shifting between tax jurisdictions through the use of transfer prices both before and after the passage of the US Tax Reform Act of 1986.	Smaller and financially distressed firms are less likely to shift income through transfer pricing than larger firms.
Kachelmeier and Towry (2002)	Experimental study	48 MBA students	Examine whether the expectations of fairness-based price concessions extend to the actual prices that result from real-cash negotiation by using an experimental study.	Expectations of fairness-based price concessions do not survive actual negotiations when participants negotiate over a computer network with no communication other than bids, asks, and acceptances. Conversely, both expectations and actual negotiated outcomes reflect fairness-based price concessions when participants negotiate in a face-to-face setting with unrestricted communication.
Tang (2002)	Questionnaire survey	95 US MNCs in Fortune 1000	Rate the importance of different environmental variables on transfer pricing decisions.	Transfer pricing regulations and other tax rules in the United States is the most important variable for ranking transfer pricing decisions, followed by overall profit to the company.

**Table 2.2**  
**Prior International Transfer Pricing Research in Developing Economies**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>
Lall (1973)	Empirical study	Import data of 14 foreign firms in Colombia	Provide evidence on the use of transfer pricing in Colombia.	MNCs in Colombia over-priced their imports by 33 percent to 300 percent in the pharmaceutical sector, and by 24 percent to 81 percent in the rubber and electrical industries.
Kim and Miller (1979)	Empirical study	Questionnaire survey of 30 US parent firms with at least one subsidiary in two of the eight specified countries (i.e. Korea, Malaysia, Philippines, Taiwan, Brazil, Colombia, Mexico and Peru)	Investigate the effect of environmental variables on transfer pricing decisions of MNCs in developing countries.	Profit repatriation restrictions and exchange control within the foreign subsidiary country are most important for transfer pricing decisions in these developing countries. The tax variables, that is, income tax liability within the host country and within the US only rank the fifth and the sixth.
Natke (1985)	Empirical study	Import data of 141 manufacturing firms operating in Brazil	Investigate whether MNCs pay higher import prices than Brazillian firms due to transfer pricing manipulation.	MNCs pay higher prices on imports than local firms and the prices of MNCs' imports also exhibit greater variability.

**Table 2.2 (cont.)**  
**Prior International Transfer Pricing Research in Developing Economies**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>
Plasschaert (1985)	Analytical study	N/A	Explore whether policies and regulations in less developed countries are such that the temptations for the MNCs to practice transfer pricing manipulation are stronger than is the case in more developed countries.	Less developed countries typically impose more restrictions on the MNCs than is the case in more developed countries. Import duties and exchange controls are also important environmental variables to induce transfer pricing manipulation in less developed countries. Moreover, less developed countries generally have fewer measures to uncover and to redress transfer pricing manipulation since they are less well equipped for the task. Therefore, inducements for MNCs to resort to transfer pricing manipulation in developing countries are stronger than in developed countries.
Rahman and Scapens (1986)	Empirical study	Import data of 20 MNCs in Bangladesh	Determine whether MNCs in Bangladesh price imports from related sources at higher prices.	MNCs over-priced imports from affiliates by between 78 percent and 600 percent.
Chan and Chow (1997a)	Empirical study	238 imported commodities and 1,062 exported commodities	Provide evidence that foreign investors shift profits out of China by the transfer pricing mechanism.	MNCs in China over-priced imports and under-priced exports in the audit/video equipment, garment, plastic and chemicals industries.

**Table 2.3**  
**Prior Research on Tax Compliance**

Article	Methodology	Sample	Objective of Study	Major Results	Rationale for the results	Significance and Implication
Mills (1998)	Empirical study	1500 manufacturing firms in Coordinated Examination Program of US IRS	Examine whether firms can manage tax and financial accounting income separately (i.e. no trade-off between tax and financial reporting).	IRS proposed audit adjustments increase as the excess of book income over taxable income increases.	GAAP tend to be conservative. But the primary role of tax legislation is revenue-raising. Certain provisions of the tax law are designed to increase revenues and decrease deductions. Thus, the more book income exceeds taxable income, the stronger the evidence the IRS may have that the firm has been aggressive in its tax reporting.	Firms cannot manage tax and financial accounting income separately and cannot have unlimited level of book-tax differences.
Chan and Chow (1997b)	Empirical study	81 FIEs being audited by Chinese tax authorities on related-party transactions in early 1990s	Examine whether certain FIEs are more likely to be selected for transfer pricing audits by tax authorities using univariate analysis	Higher proportion of wholly foreign-owned enterprises, cooperative joint ventures and Hong Kong sourced FIEs are selected for transfer pricing audits.	Wholly foreign-owned enterprises and cooperative joint ventures have more freedom on transfer pricing decisions due to the lack of local partners in the management.	Firm characteristics affect the probability of being selected for transfer pricing audits.
Chan and Mo (2000)	Empirical study	585 FIEs being audited by Chinese tax authorities, but excludes transfer pricing audits	Examine how the tax-holiday position affects noncompliance in China.	Companies are least compliant before entering a tax holiday, and most compliant while in tax-exemption period	FIEs have incentives to exaggerate losses during the pre-holiday period to delay the start of tax holiday and thus they are least compliant. FIEs are most compliant while in tax-exemption period because FIEs do not have an incentive to evade tax since they are exempted from tax.	Tax rates and tax incentives affect firms' tax noncompliance behavior.

**Table 2.3 (cont.)**  
**Prior Research on Tax Compliance**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>	<b>Rationale for the results</b>	<b>Significance and Implication</b>
Chan and Mo (2002)	Empirical study	256 tax audits in China, excluding transfer pricing audits	Examine the tax and nontax cost trade-off for exporters and high-tech companies when they under-report both book and taxable incomes.	Export-oriented and high-tech firms have larger book-tax-conforming tax audit adjustments than domestic-market-oriented and non-high-tech firms. Domestic-market-oriented and non-high-tech firms have larger book-tax difference adjustments.	Export-oriented FIEs have special tax incentives and priority in obtaining loans. Thus, they have greater tax benefits and lower nontax costs of underreporting book and tax incomes. High-tech FIEs have less reliance on reported profits for performance evaluation and obtaining loans. Thus, they have lower nontax costs of underreporting book and tax incomes.	Firm characteristics affect firms' tax noncompliance behavior.

**Table 2.4**  
**Prior Research on Tax and Nontax Cost Trade-off Theory**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>	<b>Rationale for the results</b>	<b>Significance and Implication</b>
Cloyd (1995)	Experimental study	72 experienced tax professionals in US	Examine the effects of tax and financial accounting conformity on the tax preparers' recommendations of tax treatment.	Book-tax conformity increases tax preparers' subjective probabilities of successfully defending aggressive tax positions and thus more of them would recommend aggressive tax treatment.	Taxpayers need to disclose inconsistencies between financial and tax accounting treatments. IRS audit guidelines instruct examiners to reconcile taxable income from book income. Thus, preparers may believe that large book-tax difference will alert the IRS. Besides, financial accounting choice should reflect the facts and circumstances. Therefore, it is more difficult to defend for book-tax different treatments.	Book-tax conformity reduces tax audit costs predicted by tax preparers.
Cloyd et al. (1996)	Empirical study	Questionnaire survey from 600 financial executives of public and private firms in US	Examine whether management is more likely to choose conformity when expected tax savings increase and less likely to choose conformity for public firms.	Conformity is more likely if the probabilities of successfully defending the aggressive tax position can be increased. Public-firm managers are less likely to choose book-tax conformity than private-firm managers.	Conformity increases expected tax saving by increasing the probabilities of successfully defending tax positions. However, conformity results in lower reported profits and this would increase nontax costs (eg. debt covenant violations, reduced compensation, perceived negative capital market consequences). The expected tax savings must be balanced against the nontax costs. Public firms face higher levels of nontax costs and thus they are less likely to choose conformity.	Book-tax conformity reduces tax audit costs because it decreases the risk of being audited and the difficulty of defending tax positions, but conformity increases costs for financial reporting purposes because decrease tax income would also decrease financial reported income.

**Table 2.4 (cont.)**

**Prior Research on Tax and Nontax Cost Trade-off Theory**

<b>Article</b>	<b>Methodology</b>	<b>Sample</b>	<b>Objective of Study</b>	<b>Major Results</b>	<b>Rationale for the results</b>	<b>Significance and Implication</b>
Guenther et al. (1997)	Empirical study	66 listed firms in US plus 66 control firms	Examine the impact of book-tax conformity on firm's financial reporting and tax planning strategies	Required use of accrual method for tax purposes causes firms to defer income for financial statement purposes.	Firms can maximize book earnings without increasing tax payments if they use cash method for tax reporting. Due to the change of using accrual method for tax purposes, firms have less incentive to accelerate revenue and defer expenses in the post change periods than in the pre-change periods because this would accelerate tax payments.	Increasing book-tax conformity causes firms to defer income to deferring tax payment even if this would result in lower income for financial reporting purpose.
Klassen (1997)	Empirical study	327 divestitures from 285 firms listed in US	Examine the influences of inside ownership concentration on the trade-off between financial reporting and tax reporting incentives.	Firms with lower levels of inside ownership concentration realize larger financial reporting gains or smaller financial reporting losses than firms with higher levels of concentration.	Lower inside ownership concentration will lead to increased emphasis on financial reporting, and thus result in larger realized gains or smaller realized losses.	Lower inside ownership increases the capital market pressure and thus increases the financial reporting costs which in turn reduces the incentives for underreporting income for tax saving.

**Table 2.4 (cont.)**  
**Prior Research on Tax and Nontax Cost Trade-off Theory**

Article	Methodology	Sample	Objective of Study	Major Results	Rationale for the results	Significance and Implication
Mills (1998)	Please refer to Table 2.3.					
Mills and Newberry (2001)	Empirical study	5,776 firm-year observations for private and public firms in US	Examine whether financial-reporting costs influence book-tax conformity.	Public firms and firms with higher debt levels are less likely to have book-tax conformity due to the higher costs for reporting low income.	Public firms have higher nontax financial-reporting costs than private firms because the diffuse ownership results in greater reliance on compensation plans that use reported book income. Public firm managers are more likely to believe that reported income determines the market values of their firms. Besides, accounting theory posits that firms subject to greater monitoring by lenders are more likely to use income-increasing accounting procedures.	Managers would choose book-tax conforming or book-tax different reporting based on the level of nontax costs incurred for underreporting profits.
Chan and Mo (2002)	Please refer to Table 2.3.					

**Table 2.4 (cont.)**  
**Prior Research on Tax and Nontax Cost Trade-off Theory**

Article	Methodology	Sample	Objective of Study	Major Results	Rationale for the results	Significance and Implication
Smith (2002)	Analytical study	N/A	Analyze the trade-off between tax minimization and managerial performance evaluation.	The trade-off between tax and performance evaluation still exists for making transfer pricing decisions by multinational firms even if the firms can (i) set separate transfer prices for tax and performance evaluation or (ii) use a performance measure other than profit because of the audit risks.	Possibility of discovery of a second price by tax authorities may lead to penalties and additional tax audits which would thus limit the value of using separate prices for transfer pricing. Besides, sophisticated regulators could correctly infer that income shifting motivates a firm's choice of an idiosyncratic, non-profit-based compensation scheme and thus decide to audit the firm more closely.	Using separate transfer prices for tax and performance evaluation, or using a performance measure other than profit cannot eliminate the tax-incentive trade-off because this would increase the risks of being audited by IRS and thus increase the expected tax costs.
Hodder et al. (2003)	Empirical study	6,622 private commercial banks in US	Examine tax and nontax factors that influence commercial banks' decision on conversion from C-corporations to S-corporations.	Banks are more likely to convert to S-corporations when conversion saves dividend taxes, avoids alternative minimum taxes, and minimizes state income taxes. Banks are less likely to convert when conversion costs increase (i.e. when banks have high demand of capital but conversion causes restricted access to equity capital).	Given the tax benefits of being an S-corporation (i.e. no corporate tax), one might expect that many banks would convert from C-corporation to S-corporation. However, there are other tax costs (e.g. no losses carryforwards, penalty taxes) and nontax costs (e.g. limitation on raising capital) which may also affect the decisions.	Tax benefits, tax costs, and nontax costs are associated with banks' choice of organizational form.

**Table 3.1**  
**Sources of Foreign Direct Investment in China**

Country	1979-1999		2000		2001		2002		1979 - 2002	
	Value (US\$bn)	% of China's total FDI	Value (US\$bn)	% of China's total FDI	Value (US\$bn)	% of China's total FDI	Value (US\$bn)	% of China's total FDI	Value (US\$bn)	% of China's total FDI
<b>Hong Kong</b>	154.8	50.3	15.5	38.1	16.71	35.6	17.86	33.9	204.88	45.7
<b>US</b>	25.65	8.3	4.38	10.8	4.43	9.5	5.42	10.3	39.89	8.9
<b>Japan</b>	24.89	8.1	2.92	7.2	4.35	9.3	4.19	7.9	36.34	8.1
<b>Taiwan</b>	23.86	7.8	2.30	5.6	2.98	6.4	3.97	7.5	33.11	7.4
<b>Virgin Inlands</b>	9.40	3.1	3.83	9.4	5.04	10.8	6.12	11.6	24.39	5.4
<b>Singapore</b>	14.82	4.8	2.17	5.3	2.14	4.6	2.34	4.4	21.47	4.8
<b>Korea</b>	8.84	2.9	1.49	3.7	2.15	4.6	2.72	5.2	15.20	3.4
<b>UK</b>	7.58	2.5	1.16	2.8	1.05	2.2	0.90	1.7	10.70	2.4

Source: SSB (State Statistical Bureau). 2002, 2003. *China Statistical Yearbook*. Beijing: China Statistical Publishing House.

**Table 3.2**  
**Distribution of Forms of Foreign Investment in China**

	1979-1999		2000		2001		2002		1979 - 2002	
	% of China's total FDI		% of China's total FDI		% of China's total FDI		% of China's total FDI		% of China's total FDI	
	By value	By number of firms								
<b>Wholly-foreign owned FIEs</b>	29.53	27.87	47.31	54.58	62.14	59.84	60.15	64.89	36.97	34.22
<b>Equity Joint Ventures</b>	47.33	58.03	35.23	37.49	25.34	34.02	28.42	30.38	42.91	53.25
<b>Cooperative Joint Venture</b>	21.12	14.06	16.20	7.86	12.00	6.08	9.59	4.67	18.48	12.49
<b>Others</b>	2.02	0.05	1.26	0.07	0.52	0.06	1.84	0.07	1.64	0.04

Source: SSB (State Statistical Bureau). 2002, 2003. *China Statistical Yearbook*. Beijing: China Statistical Publishing House.

**Table 3.3**  
**Annual Average of Renminbi Exchange Rates (US dollar to Renminbi)**

<b>Year</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
<b>Spot Exchange Rates</b>	8.6187	8.3510	8.3142	8.2898	8.2791	8.2783	8.2784	8.2770	8.2770	8.2809

Source: SSB (State Statistical Bureau), 2003. *China Statistical Yearbook*. Beijing: China Statistical Publishing House.

**Table 4.1**  
**Summary of Hypotheses**

<b>Hypothesis</b>	<b>Environmental Variables</b>	<b>Choice of Transfer Pricing Method</b>
1	Difference in income tax rates	The more important this variable is perceived by management, the more likely a cost-based method will be used
2	Minimization of custom duties	The more important this variable is perceived by management, the more likely a cost-based method will be used
3	Interest of local partners	The more important this variable is perceived by management, the more likely a market-based method will be used
4	Foreign exchange control and risks	The more important this variable is perceived by management, the more likely a cost-based method will be used
5	Restrictions on profit repatriation	The more important this variable is perceived by management, the more likely a cost-based method will be used
6	Risks of expropriation and nationalization	The more important this variable is perceived by management, the more likely a cost-based method will be used
7	Good relationship with the Chinese government	The more important this variable is perceived by management, the more likely a market-based method will be used

**Table 4.2**  
**Transfer Pricing Policies**

**Panel A: Transfer pricing methods**

	Market-based methods		Cost-based methods		
	Market prices	Adjusted market prices	Actual full cost plus	Standard full cost plus	Standard variable cost plus
No. of FIEs	10	28	9	16	1
% of total FIEs	16%	44%	14%	25%	1%

**Panel B: Autonomy in external sourcing of materials or components**

	Having autonomy	Not having autonomy
No. of FIE	48	16
% of total FIEs	75%	25%

**Panel C: Transfer pricing decisions and foreign equity share**

Foreign equity share	Over 50%	Not exceeding 50%	Total
	<b>Transfer pricing decisions</b>		
Decided by FIEs with consultation of foreign partner's parent company	26	15	41 (64%)
Decided by FIEs without direct influence from foreign partner's parent company	8	6	14 (22%)
Adopted the worldwide policies of the foreign partner's parent company	9	0	9 (14%)
	43	21	64 (100%)

**Panel D: Disputes over transfer prices**

	Having disputes	Not having disputes
No. of FIEs	10	54
% of total FIEs	16%	84%

**Table 4.3**  
**The Importance of Environmental Variables Affecting International Transfer Pricing**

	<i>Variables</i>	All Sample FIEs		US FIEs in Sample		Non-US FIEs in Sample	
		Mean	Ranking	Mean	Ranking	Mean	Ranking
1	Difference in income tax rates	2.70	2	2.91	3	2.59	1
2	Minimization of custom duties	3.03	5	3.09	4/5	3.00	4
3	Interest of local partners	2.98	3	3.09	4/5	2.93	3
4	Foreign exchange control and risks	3.02	4	2.68	2	3.19	5
5	Restrictions on profit repatriation	3.75	6	3.55	6	3.86	6
6	Risks of expropriation and nationalization	4.31	7	4.32	7	4.30	7
7	Good relationship with the Chinese government	2.64	1	2.59	1	2.67	2

Note: The importance of variables is measured by a five-point scale as follows: 1 - extremely important; 2 - very important; 3 - moderately important; 4 - not so important; 5 - not important at all.

**Table 4.4**  
**The Importance of Environmental Variables Perceived by Sample Firms Using**  
**Different Transfer Pricing Methods**

Environmental variables	FIEs Using Market-based Methods	FIEs Using Cost-based Methods	Test of Significance of Difference in Mean Scores
	Mean score	Mean score	Mann - Whitney U (Z value)
Var 1 Difference in income tax rates	2.66	2.77	0.11
Var 2 Minimization of custom duties	2.89	3.23	0.98
Var 3 Interest of local partners	2.45	3.77	3.34**
Var 4 Foreign exchange control and risks	3.39	2.46	2.53**
Var 5 Restrictions on profit repatriation	3.71	3.80	0.55
Var 6 Risks of expropriation and nationalization	4.39	4.19	0.43
Var 7 Good relationship with the Chinese government	2.39	3.00	1.68*

\*\* Significant at 5% level; \* Significant at 10% level.

Note: The importance of variables is measured by a five-point scale as follows: 1 - extremely important; 2 - very important; 3 - moderately important; 4 - not so important; 5 - not important at all.

**Table 4.5**  
**Multivariate Analysis of Significance of Management Perception of the Importance of Environmental Variables to the Choice of Transfer Pricing Methods**

Independent Variables in logistic regression function	Predicted Sign	Logistic regression analysis		
		Coefficient	Chi-square	p-value
Model			28.063	0.001***
Var 1 Difference in income tax rates	+	0.276	0.816	0.366
Var 2 Minimization of custom duties	+	-0.175	0.268	0.605
Var 3 Interest of local partners	-	-0.860	7.102	0.008***
Var 4 Foreign exchange control and risks	+	0.871	7.915	0.005***
Var 5 Restrictions on profit repatriation	+	0.024	0.007	0.935
Var 6 Risks of expropriation and nationalization	+	-0.044	0.018	0.892
Var 7 Good relationship with the Chinese government	-	-0.675	4.216	0.040**

\*\*\*Significant at 1% level; \*\*Significant at 5% level

Note 1: The logit function is as follows:

$$Z = b_0 + \sum_i b_i Var_i$$

where: Z is the model score of logistic distribution (0 = cost-based, 1 = market-based),  
 $b_i$  is the model coefficient for the independent variables ( i.e. the seven environmental variables).

Note 2: Based on the logit function, 65.38% of FIEs using cost-based methods and 86.84% of FIEs using market-based methods are correctly classified.

**Table 4.6**  
**Sensitivity Test 1 – By Adding a Dummy Variable Signifying a Majority or Minority Foreign Shareholding**

	Original model		New model	
	Regression Coefficient	p-value	Regression Coefficient	p-value
Var 1. Difference in income tax rates	0.276	0.366	0.290	0.347
Var 2. Minimization of custom duties	-0.175	0.605	-0.179	0.596
Var 3. Interest of local partners	-0.860	0.008*	-0.909	0.008*
Var 4. Foreign exchange control and risks	0.871	0.005*	0.872	0.005*
Var 5. Restrictions on profit repatriation	0.024	0.935	0.041	0.892
Var 6. Risks of expropriation and nationalization	-0.044	0.892	-0.010	0.975
Var 7. Good relationship with the Chinese government	-0.675	0.040*	-0.698	0.038*
<b>Newly added variable:</b>				
Majority or minority foreign shareholding			0.370	0.647

\* Significant at the 5% level

**Table 4.7**  
**Sensitivity Test 2 – By Adding Percentage of Foreign Ownership as Variable**

	Original model		New model	
	Regression Coefficient	p-value	Regression Coefficient	p-value
Var 1. Difference in income tax rates	0.276	0.366	0.115	0.721
Var 2. Minimization of custom duties	-0.175	0.605	-0.230	0.519
Var 3. Interest of local partners	-0.860	0.008*	-0.332	0.430
Var 4. Foreign exchange control and risks	0.871	0.005*	1.050	0.004*
Var 5. Restrictions on profit repatriation	0.024	0.935	0.038	0.903
Var 6. Risks of expropriation and nationalization	-0.044	0.892	-0.205	0.556
Var 7. Good relationship with the Chinese government	-0.675	0.040*	-0.871	0.021*
<b>Newly added variable:</b>				
Percentage of foreign ownership			-5.340	0.067

\* Significant at the 5% level

**Table 4.8**  
**Sensitivity Test 3 - By Adding a Variable Signifying Whether the FIEs Set Their**  
**Transfer Pricing Policies with Consultation of Parent Companies**

	Original model		New model	
	Regression Coefficient	p-value	Regression Coefficient	p-value
Var 1. Difference in income tax rates	0.276	0.366	0.265	0.387
Var 2. Minimization of custom duties	-0.175	0.605	-0.199	0.562
Var 3. Interest of local partners	-0.860	0.008*	-0.879	0.007*
Var 4. Foreign exchange control and risks	0.871	0.005*	0.872	0.005*
Var 5. Restrictions on profit repatriation	0.024	0.935	0.039	0.896
Var 6. Risks of expropriation and nationalization	-0.044	0.892	-0.008	0.980
Var 7. Good relationship with the Chinese government	-0.675	0.040*	-0.691	0.037*
<b>Newly added variable:</b>				
Consultation			0.487	0.572

\* Significant at the 5% level

**Table 5.1**  
**Comparative Tax and Nontax Costs of Shifting Profits out of China through International Transfer Pricing**

	Tax Cost	Nontax Costs	Incentive to Evade	Audit Costs	Probability of Being Audited
<b>Form of Investment</b>					
Wholly foreign-owned FIEs and cooperative joint ventures (compared with equity joint ventures)	Similar	Lower	More motivated to evade	Similar	Higher
<b>Activity Orientation</b>					
Export-oriented FIEs (compared with domestic-market-oriented enterprise)	Lower	Lower	More motivated to evade	Lower/ Similar	Higher
<b>Nationality</b>					
Hong Kong or Taiwan sourced FIEs (compared with other-sourced FIEs)	Lower	Lower	More motivated to evade	Lower/ Similar	Higher

**Table 5.2**  
**Descriptive Statistics and Univariate Tests for Sample FIEs**

Variables	Category	Audited Sample (n = 111)		Non-audited Sample (n = 194)		Univariate Tests	
		No. of Firms	Percentage of the Sample	No. of Firms	Percentage of the Sample	Chi-square test	t-test
<b>Policy variables:</b>							
<b>FORM</b>	Wholly foreign-owned enterprise and cooperative joint venture	96	86.5%	117	60.3%	22.967 ***	
	Equity joint venture	15	13.5%	77	39.7%		
<b>ACTIVITY</b>	Export-oriented enterprise	101	91.0%	67	34.5%	90.949 ***	
	Domestic-market-oriented enterprise	10	9.0%	127	65.5%		
<b>SOURCE</b>	Hong Kong or Taiwan sourced FIEs	92	82.9%	124	63.9%	12.289 ***	
	Others	19	17.1%	70	36.1%		
<b>Control variables:</b>							
<b>INDUSTRY</b>	Identified industries	38	34.2%	35	18.0%	10.169 ***	
	Others	73	65.8%	159	82.0%		
<b>SIZE</b>	Sales in US\$million	111	<u>Mean</u> 25.4	194	<u>Mean</u> 50.4		7.659 ***
<b>ROC</b>	Return on capital (i.e. net profit before tax over capital)	111	11.2%	194	22.9%		1.367
<b>RPT</b>	Volume of related-party transaction over sales	111	1.34	194	0.91		-4.569 ***

Chi-square test and t-test compare the sample distribution and means between audited sample and non-audited sample.

\*\*\* indicates significance at the 1 percent level.

**Table 5.3**  
**Regression Results on the Impact of Firm Characteristics on Transfer Pricing Compliance**

Regression equation:

$$\text{AUDIT} = \beta_0 + \beta_1 \text{FORM} + \beta_2 \text{ACTIVITY} + \beta_3 \text{SOURCE} + \beta_4 \text{INDUSTRY} + \beta_5 \text{SIZE} + \beta_6 \text{ROC} + \beta_7 \text{RPT}$$

Variable	Predicted Sign	Regression Coefficient	Wald $\chi^2$	Significance (p-value)
Intercept		7.015		
FORM	-	-0.856	3.267	0.036 **
ACTIVITY	+	2.607	30.990	0.000 ***
SOURCE	+	-0.353	0.664	0.208
INDUSTRY	+	0.082	0.039	0.422
SIZE	-	-1.066	41.892	0.000 ***
ROC	-	0.211	0.901	0.172
RPT	+	1.103	8.878	0.002 ***
Chi-square for Model		200.795***		
Percentage Correctly Classified		87.2		

\*\*\*, \*\* indicate significance at the 1 percent, 5 percent levels, respectively.

Definitions of variables:

- AUDIT = 1, if an FIE was audited by the Chinese tax authorities due to transfer pricing manipulation, 0 otherwise;
- FORM = 1, if an FIE is a equity joint venture, 0 otherwise;
- ACTIVITY = 1, if an FIE is an export-oriented enterprise, 0 otherwise;
- SOURCE = 1, if an FIE is sourced from Hong Kong or Taiwan, 0 otherwise.
- INDUSTRY = 1, if an FIE is in identified higher risk industries, 0 otherwise;
- SIZE = natural logarithm of sales
- ROC = return on capital of FIE (i.e. profit before tax over capital)
- RPT = volume of related-party transactions over sales

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