Eden - Taxing Mult Nationals 1998

1

Taxing Multinationals: An Introduction to the Issues

Introduction

Governments use taxes to finance public spending. Given that the ultimate purpose of taxes is to raise sufficient revenues to finance expenditures, how should these revenues be raised?

Most economists would answer this question by arguing that governments should set up their domestic tax systems with two underlying principles of public finance in mind: equity and neutrality. A good tax system should be *equitable* – that is, two taxpayers in similar economic circumstances should pay the same tax (horizontal equity) and taxpayers in different circumstances should pay appropriately different taxes (vertical equity). The system should also be *neutral* – that is, it should not affect the taxpayer's choice of corporate form, location of the tax base, choice of pricing policy, and so on. This is the so-called 'normative theory of public finance,' which has a long tradition in economic theory.[1]

Setting up a tax system based on these principles involves choices about the appropriate blend of what Carl Shoup (1991) has called tax architecture, engineering, and administration. *Tax architecture* (choosing which taxes to include in the tax system), *tax engineering* (deciding the substantive issues concerning each tax, such as its rate and base), and *tax administration* (how to implement tax law in practice) all need to be considered simultaneously when setting up or reforming a tax system.

This book is about the architecture, engineering, and administration of taxing multinational enterprises. Its specific focus is *tax transfer pricing*, that is, how governments treat the pricing policies multinational enterprises (MNEs) adopt for intrafirm transfers among their affiliated companies. *Multinational enterprises* are private organizations that engage in foreign direct investment (FDI) in the form of owning and/or controlling value-adding activities in more than

one country. The parent firm and its domestic and foreign affiliates engage in international production, producing and selling products around the world. MNEs can be either horizontally integrated (different affiliates produce, the same product in different markets) or vertically integrated (upstream affiliates produce intermediate products that are further processed by downstream affiliates prior to final sale) or both.

Because the MNE is an integrated enterprise, its affiliates engage in substantial amounts of intrafirm transactions. The price of any non–arm's length transaction involving transfers of goods, intangibles, or services between wholly or partly owned affiliates (parent, branch, subsidiary) of a multinational enterprise is called a *transfer price*.

Governments are concerned that multinationals can and do manipulate transfer prices (that is, over- or under-invoice their intrafirm transactions) so as to avoid paying corporate income taxes. Tax authorities, in response, have developed a complex set of rules and procedures at the national and international levels designed to regulate MNE transfer pricing policies. These regulations are the subject of this book.

How Should National Governments Tax Multinationals?

In making their tax architecture, engineering, and administrative choices, the fiscal authorities generally act as if their power to tax were unbounded, and, under national law, the federal power to tax residents of a country is basically unbounded. However, even if a government's power to tax is legally unbounded, in practice there are limits because jurisdictional reach is restricted by the mobility of individuals and businesses and by the reach of other tax authorities. As Brian Arnold, a well-known Canadian tax law expert, notes:

> [The] government's power to tax is limited effectively only by the countervailing interests of other governments and the practical difficulties of enforcement and collection. There are no limitations under international law on a nation's power to tax; and in most countries, there are no constitutional limitations. (Arnold 1986, 1)

If there are limits in terms of taxing domestic labour and capital owners, these limitations are even more pronounced in terms of taxing multinational enterprises (MNEs). As the activities of these large, integrated businesses grow and spread out across the globe, so do the interlinkages between national economies. Governments are faced with regulating firms within their borders at the same time as these borders are becoming more permeable. Given the mobility of multinational enterprises and of capital flows in general, countries have to accommodate their domestic tax policy choices to the realities of the global economy or see capital flight erode their tax base.

The Globalization of the Multinational Enterprise

Recent data on multinationals show how the globalization of (what was once) domestic activity is spreading through the activities of large enterprises. Inward and outward investment and crossborder flows of technology, goods, services, and businesspeople have all increased exponentially since 1950, particularly in the Triad economies of the United States, the European Community (now called the European Union), and Japan.

For example, the *1993 World Investment Report* (UNCTAD 1993, 13) estimates that at least 35,000 parent firms control 170,000 foreign affiliates worldwide. These include both majority-owned foreign affiliates or MOFAs (i.e., the parent firms holds more than 50 per cent equity ownership in the affiliate) and minority-owned foreign affiliates (i.e., the parent holds between 10 and 50 per cent equity ownership). The report estimates that Canada has roughly 1,300 parent firms with over 10,000 affiliates; the corresponding numbers for the United States are at least 3,000 parents with in excess of 15,000 affiliates (UNCTAD 1993, 20).[2]

The top 100 multinationals, ranked by the size of their foreign assets, in 1990 owned 3.2 trillion dollars in assets, of which approximately 1.2 trillion dollars were held outside the parent firm's home country. These 100 firms account for one-third of the worldwide stock of foreign direct investment (FDI). Five major home countries (United States, United Kingdom, France, Germany, and Japan) are the headquarters for 75 per cent of the top 100 MNEs. The United States is home to 27 firms on this list and accounts for one-third of the top 100 MNEs' foreign assets. Of the top ten MNEs, five are American: Ford, General Motors, Exxon, IBM, and Mobil. Canada is home to three (Thomson, Alcan Aluminium, and Seagram).[3] In terms of industries, the petroleum, automotive, chemical, and pharmaceutical industries represent over half the foreign assets of the largest 100 firms (UNCTAD 1993, 22). Thus the largest of the multinationals are concentrated both in terms of geography and industry distribution.

Worldwide, the assets of all MNEs have been estimated to total more than nine to ten trillion U.S. dollars; more than $3 trillion are held by foreign affiliates. MNEs worldwide employ more than 55 million workers; foreign affiliates have a labour force in the range of 15 million. Worldwide sales by MNEs total in excess of $13.5 trillion, with $4–4.5 trillion sales made by foreign affiliates. The worldwide sales of the largest firms exceed the gross domestic products of many small countries (Dunning 1993, 16).

As these statistics show, large multinational enterprises are the major non-state actors in the global economy. As economies become more open and more integrated due to the globalizing effects of MNEs, national taxation of multinationals become more problematic. We look below at some of the problems MNEs create for national tax authorities.

The Problems Multinationals Create for National Taxation

Globalization of MNE activities raises the national salience of the *problematique* of international taxation: How should national governments tax multinationals in a global economy? Lawrence Summers phrases the issue as follows:

> Until recently, international taxation has been an arcane subspecies among American tax lawyers, and international considerations have rarely influenced the thrust of tax reform ... Such a provincial approach to tax policy may have been appropriate in an earlier era, but the increasing economic integration of the world requires a more global approach to policy. (Summers 1988, 64)

Multinational enterprises create particular problems for tax authorities that do not occur in taxing domestic firms. The key reason is that the MNE is an *integrated or unitary business*. The accepted definition of an MNE is two or more firms, located in different countries, but under *common control*, with a *common pool of resources* and *common goals*.

The multinational enterprise should be visualized as an interlocking network of activities, working more or less in tandem depending on the control exercised by the parent firm. The enterprise's goals are to survive, make profits, increase its market share, and grow. Its rivals are other large multinationals and its actions are developed as strategic responses to those rivals in an environment characterized by market imperfections, oligopolistic behaviour, and substantial risk and uncertainty.

Since, by definition, its activities cross national borders, the MNE has certain characteristics which pose problems for tax authorities:

- *A multinational has affiliates located in several countries.* Thus the MNE has a global reach, whereas governments are limited by their geographic boundaries to a national reach. This creates jurisdictional problems for domestic tax authorities and limits the effectiveness of governments in taxing MNEs.
- *All components of a multinational are under the common control of the parent firm.* This means the MNE decisions on investment, production, sales, trade, and pricing may be made outside the country.

- *All members of the MNE family have common goals such as the maximization of global after-tax profits.* This brings the affiliates of the enterprise into conflict with the governments where they are located since each government has its own national goals which most likely will differ from the MNE's goals.
- *A multinational has common overheads and resources.* This causes problems for tax authorities in deciding where the tax base is located and how to allocate the income from, and expenses of, MNE activities among jurisdictions. The resources allow the MNE to escape the jurisdiction of national governments (for example, controls over borrowing can be avoided if affiliates can access their parent's funds).

Conflicts are inevitable when national governments tax multinationals because domestic tax systems set up for domestic purposes, by definition, are poorly designed to handle the international activities of multinational enterprises. Thus tax authorities and MNEs are likely to disagree about the appropriate tax the enterprise should pay at the national level. Conflicts can also occur between the tax authorities of the countries where the units of the MNE are located as these governments compete for their 'fair' share of an increasingly mobile tax base. Double taxation and/or undertaxation of MNE profits, relative to the taxes that would be paid by a purely domestic firm engaged in comparable activities in comparable circumstances, is highly probable.

National Responses to the Problem of Taxing Multinationals

Governments have responded in two very different ways to the problems MNEs create for domestic tax systems. The first approach is to use lower taxes to attract MNEs. One method is to set low tax rates at home to attract MNEs to locate inside the country. For example, many governments in developing countries have set themselves up as tax havens (e.g., Bermuda, Bahamas, the Seychelles), trying to attract more inward investment activity through lower tax rates. In addition, many countries offer tax rebates, tax holidays, and other financial incentives for certain locations in their countries; e.g. export processing zones (South Korea, Taiwan, Ireland, Mexico), duty-free zones (the United States) and international banking and financial centres (Canada). A second method is not to tax the income domestic MNEs earn on their foreign activities. For example, some governments tax foreign source income such as dividends only when remitted by a foreign affiliate to its parent firm (the United States). Other tax authorities do not tax repatriated income if the foreign source income is defined as active business income[4] (Canada). A third group does not tax foreign source income at all (France).

The second approach to the problems created by MNEs is the reverse of the first: that is, tighten up tax regulations, eliminate loopholes, broaden the tax base, and/or raise tax rates. This approach is designed to make sure firms that are located within a country pay their 'fair share' of taxes to the domestic government.

The United States is the best example of this approach. While all OECD governments have passed tax legislation insisting that multinationals follow the *arm's length standard* – that is, intrafirm transactions should be priced the same as the prices chosen by unrelated parties engaged in similar transactions under similar circumstances – the U.S. government has developed incredibly complex regulations outlining how this standard is to be followed in practice.[5]

In addition, the Internal Revenue Service has narrowed the credits given to U.S. MNEs for foreign taxes paid on their foreign source income. The U.S. tax rules require U.S. parent firms to charge their affiliates higher royalty rates and more for headquarters expenses, shifting taxable income to the parents. Penalties for income tax violations have risen, along with the amount of documentation that MNEs are required to file with tax authorities. The amounts spent by the IRS on auditing and enforcement of MNEs, and the numbers of tax auditors allocated to transfer pricing, have also risen dramatically over the past 15 years. Lastly, at the subfederal level, some of the state governments (California) have broadened their tax reach by attempting to tax MNE worldwide income through the unitary tax method.

In this second approach, we should also distinguish between those governments that have moved or are moving to a tighter fiscal regulatory system for all firms and governments that have focused mostly on lessening abuses – i.e., on the small percentage of firms that are tax evaders. Of course, while arguing that the purpose of the regulation is to catch abusers, tax authorities may in practice be adopting a confiscatory tax regime that applies to everyone. The distinction is important, as a system designed to penalize abusers should be different from one designed to provide uniform treatment across taxpayers.

In the U.S. case, it is clear that the Internal Revenue Service has moved to a tighter regulatory system for all firms, both U.S. multinationals and foreign MNEs located in the United States. At the same time, the U.S. Congress has shown open concern with potential tax abuse in particular sectors (pharmaceuticals), by firms of particular nationalities (Japanese transplants), and in particular categories of transactions (transfer pricing).

Problems at the International Level

Clearly, these two very different ways of dealing with the global reach of multinationals – we can call them the 'low-tax' versus the 'high-tax' approach – can and do create international interjurisdictional conflicts among the countries themselves. Disagreements between MNEs and governments, and between governments, over the appropriate 'tax bite' taken by the tax authorities are likely to arise. For example, an enterprise with affiliates in two different tax jurisdictions may find its income double taxed if the definitions and/or methods of taxation are not harmonized between countries. This can happen if one government reassesses the MNE's income and levies a higher tax bill, and the second government is unwilling to provide an offsetting tax adjustment.

Differences in tax systems also allow the possibility of tax arbitrage – that is, the shifting of real and/or financial activities from the high taxed to the low taxed location. For example, where one state is a low-tax jurisdiction and another neighbouring state is a high-tax jurisdiction, capital may be attracted into the lower-tax location. Firms may shift revenues to the low-taxed, and deductible expenses to the high-taxed, location. This puts pressure on high-tax states to reduce their taxes and/or to tighten their monitoring and enforcement mechanisms in order to avoid losing mobile firms and employment opportunities. If capital exits, taxes on less mobile actors (e.g., labour) must rise in order to provide the same level of public services. Thus tax differentials can have inequitable and non-neutral effects on multinationals.

As a result, the principles of public finance – equity and neutrality – which should underpin a good tax system are unlikely to be satisfied at the international level so that either under- or overtaxation of multinationals is probable. The amount of income to be taxed, and the division of the tax revenues among the countries where the MNE conducts its activities, are unlikely to be seen as fair, either by the MNE or by the revenue authorities; tax neutrality is also problematic. Domestic taxation of MNEs, without harmonization or coordination of national tax systems, in sum, is a recipe for conflict.

The international problems caused by multinationals raised above, and the various government responses, fall into two general categories. The first is the general question of *tax jurisdiction.* Which government has the right to tax what tax base? While we pay some attention to this question (primarily in the next chapter), the focus of this book is on the second question: the issue of *income and expense allocation.*

The Purpose and Organization of This Book

Our main interest in this book is the appropriate valuation for tax purposes to attach to intrafirm transactions among various affiliates of the multinational

enterprise, particularly with respect to multinationals in North America. That is, the purpose of this book is to address two sets of questions.

The first set of questions deals with taxing multinationals in general at the national and international levels in terms of the allocation of MNE income and expenses and transfer pricing issues. Here we address questions such as the following:

- How do multinationals set their transfer pricing policies in theory? In practice?
- How can MNEs manipulate transfer prices in order to avoid paying corporate income taxes? What are the theoretical benefits and costs of transfer price manipulation?
- Do multinationals engage in such manipulation of transfer prices? What evidence do we have that MNEs do manipulate transfer prices so as to avoid paying taxes?
- How should governments regulate MNE transfer pricing policies at the national level so as to ensure that the principles of international equity and neutrality are achieved in terms of taxing the income from multinationals?
- What are the recommendations of international organizations such as the Organization for Economic Cooperation and Development (OECD) and the United Nations with respect to taxing intrafirm transactions? What principles and norms underlie these recommendations? What transfer pricing methods are recommended, and why? How could these be improved?
- Is there a regime in place at the international level through which national governments can cooperate to reduce the interjurisdictional problems of taxing multinationals at the national level, a regime specifically focused on the issue of taxing intrafirm transactions, that is, tax transfer pricing?

The second set of questions deals specifically with transfer pricing regulations and practice in Canada and the United States. We address these questions:

- How important are MNEs in the North American economy? How large is intrafirm trade?
- Is transfer price manipulation a problem in North America? What evidence do we have that MNEs have manipulated transfer prices so as to avoid paying taxes to the U.S. and Canadian governments?
- How do the U.S. and Canadian governments tax multinationals, and, in particular, what regulations do they have with respect to transfer pricing? Do these regulations satisfy international norms and principles with respect to taxing multinationals? How could these regulations be improved?

- What transfer pricing policies should multinationals in North America adopt in response to these regulations?

Taxing Multinationals examines the current tax transfer pricing regime, focusing in particular on the U.S. and Canadian approaches to transfer price regulation under the corporate income tax (CIT). The book deals with the regime in terms of its tax architecture, engineering, and administration at the domestic and international levels.

At the national level, we examine how the Canadian and U.S. tax officials have attempted to regulate transfer pricing through the corporate income tax, evaluate the various methods that have been employed in the past, and make proposals for improvements. Policy recommendations are made to improve the overall effectiveness of the U.S. and Canadian approaches to taxing intrafirm trade.

At the international level, we look at the role of the OECD as the organization at the heart of the tax transfer pricing regime. We evaluate the current regime in terms of its principles, rules, and procedures, focusing in particular detail on an assessment of the various transfer pricing methods for valuing tangibles, services, and intangibles. We argue that new solutions are necessary, solutions worked out at the multilateral level and not unilaterally imposed by the largest and most powerful governments. We make suggestions for such improvements, and strongly urge policy reform be developed in multilateral forums like the OECD's Committee on Fiscal Affairs.

Taxing Multinationals is organized in five parts. Part I, 'The Rules of the Game,' is divided into two chapters: Chapter 1 introduces the book, while Chapter 2 develops the book's framework, the international tax transfer pricing regime.

Part II, 'Multinationals and Intrafirm Trade,' consists of chapters 3 and 4, which focus on the multinational enterprise as an integrated business. Chapter 3 develops a theory of the MNE as an integrated business that includes the possible impacts of regional integration schemes (such as the North American Free Trade Agreement) and technological change on intrafirm trade patterns. Chapter 4 provides statistical data on the extent and involvement of multinationals in the North American economy.

Part III, 'Transfer Pricing and Taxation,' contains chapters 5, 6, and 7, which deal with taxing multinationals in theory and practice. Chapter 5 develops several theoretical models that explain how MNEs choose transfer prices for goods, services, and intangibles in the absence of external motivations for transfer pricing such as taxes and tariffs. In each case, the theoretical results are compared with the OECD's transfer pricing guidelines. Chapter 6 extends these

models to cases in which the MNE faces various types of taxes and government regulations. In Chapter 7 the empirical literature on transfer price manipulation is reviewed, along with an analysis of the recent U.S. and Canadian debates over the tax payments of multinationals. New evidence on taxes paid by multinationals, both domestic and foreign owned, in North America is presented.

Part IV, 'The Rules of the Game in North America,' consists of four chapters that examine Canadian and U.S. transfer pricing regulations. Chapter 8 provides a detailed history of U.S. transfer pricing rules, while Chapter 9 focuses specifically on U.S. tax procedures. The Canadian rules and procedures are reviewed in Chapter 10. Chapter 11 looks at one court case in detail, *Indalex versus the Queen*, the best known of the Canadian tax court cases in the transfer pricing area.

Part V, 'Reforming the Rules of the Game,' contains three chapters that assess the international tax transfer pricing regime, examine possible alternatives and reforms, and make policy recommendations. Chapter 12 evaluates the international tax transfer pricing regime in terms of its principles and norms, with a large section devoted to evaluating the main alternative to the arm's length standard: unitary taxation. Chapter 13 evaluates the regime in terms of its rules and procedures. The last chapter of the book concludes with policy recommendations for Canadian and U.S. taxing authorities.

The purpose of this book is to address these questions. We explore the answers to some of the questions very briefly below, and devote the rest of this book to an in-depth study of these topics.

Multinationals and Transfer Pricing

In this section we look at transfer pricing through the eyes of the multinational enterprise. What is a transfer price, and why do MNEs use transfer prices? What pricing methods do large firms use for their intrafirm transactions? Is one method more commonly used than other methods? What incentives are there to manipulate these prices?

What Is a Transfer Price?

MNEs supply their affiliates with a package of capital and technology inputs and managerial skills, for which the parent firm receives a stream of dividend and interest payments, royalties, and licence fees. Intrafirm transfers of technology, management services, and financial loans move around within the MNE family. Intermediate goods (parts, components, subassemblies) flow downstream for further processing before final sale to end consumers. Some affiliates provide business services (e.g., legal, accounting, advertising) on behalf of the group.

The examples listed in the previous paragraph are all examples of *intrafirm trade* – that is, trade in goods, services, and intangibles conducted at non–arm's length within the affiliates of the MNE family. The price of any non–arm's length transaction involving goods, technology, or services between wholly or partly owned affiliates (parent, branch, subsidiary) of the MNE is called a *transfer price*. The multinational may record some intrafirm flows on its books as transactions and formally put a price on these activities. Other flows may not be treated as separate transactions, nor priced internally.

Most intrafirm flows of tangibles (raw and semi-finished products, finished goods), are valued by the MNE in one of two ways: on a *cost plus* basis, that includes direct costs plus some allocation for overhead expenses of the producer, or on a *market price* basis, where prices charged to nonrelated firms are used to determine transfer prices on related party sales. Within these two general categories lies a wide range for determining the actual transfer price. Which transfer pricing method is chosen will depend on the relative strengths of the various motivations the MNE has for using transfer pricing.

The Multinational's Motivations for Transfer Pricing

There are both internal and external motivations for transfer pricing. In terms of internal motivations, where different affiliates within the MNE family are treated as stand-alone units called *profit centres*, transfer prices are needed internally by the MNE to determine profitability of the individual divisions. Transfer prices can also be used for internal measures of performance by individual affiliates and to motivate corporate managers.[6]

Other units within the MNE, particularly units which provide group services to the MNE family, are likely to be run as *cost centres*. In such cases, downstream affiliates are generally charged a share of the costs of providing the group service function so that the service provider, in total, covers its costs plus a small mark-up. For example, the price for windshield wiper blades made by a Mexican maquiladora subsidiary of Ford, the North American advertising expenses incurred by the U.S. head office of Toyota, and the tooling charges paid by Ford Canada to its U.S. parent are all examples of transfer prices the MNE is likely to record on its books for internal reasons.

On the other hand, affiliates often share in the ongoing goodwill intangibles of the parent, exchange information among themselves, and offer short-

term assistance when problems arise. These events generally occur without the need for the MNE to price the intrafirm activity. Thus there are likely to be intrafirm transfers where the enterprise has no internal motivation for setting a price.

Several external motivations can affect the MNE's choice of transfer prices. Because multinationals operate in two or more jurisdictions, transfer prices must be assigned for intrafirm trade that crosses national borders. Border taxes, such as tariffs and export taxes, are often levied on crossborder trade. Where the tax is levied on an *ad valorem* (per cent of the value) basis, the higher the transfer price, the larger the tax paid per unit. On the other hand, where border taxes are levied on a per-unit basis (i.e., specific taxes), the transfer price is irrelevant for tax purposes.

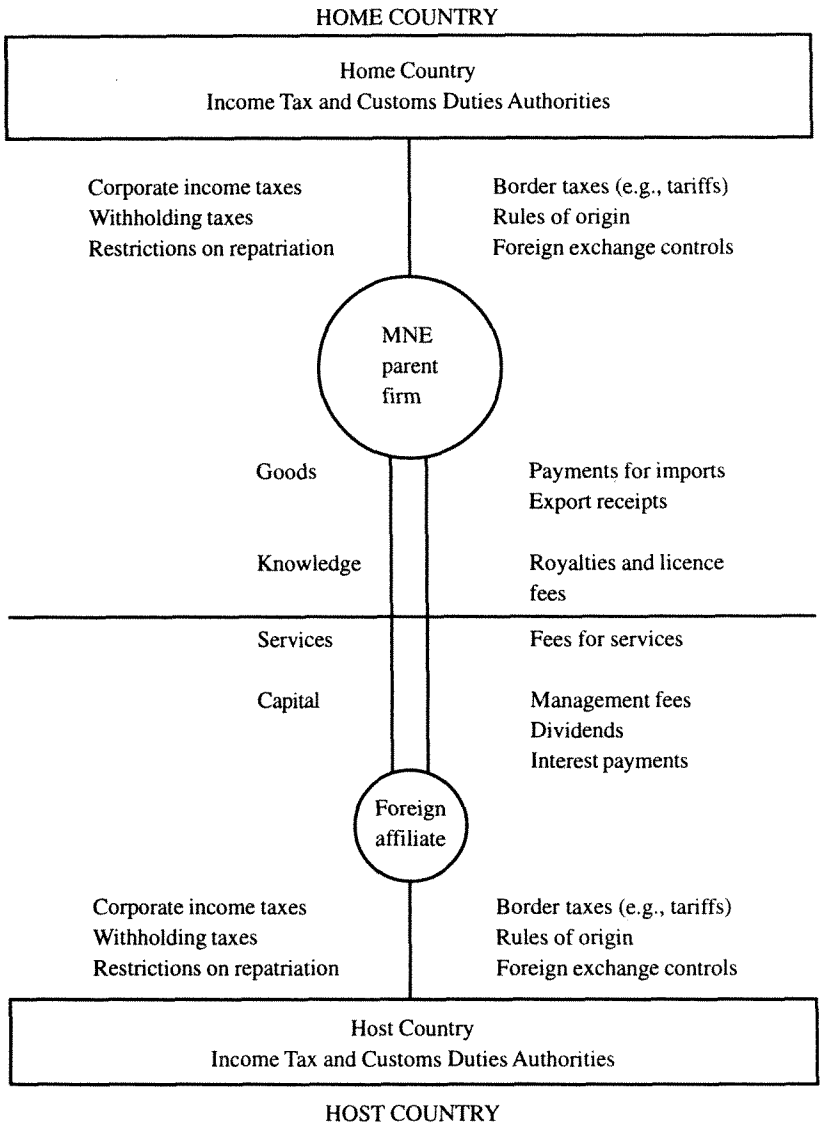
Another external factor that can affect a multinational's transfer pricing choices is the need to meet the rules of origin that apply to crossborder flows within a free trade area. Since border taxes are eliminated within the area, rules of origin must be used to determine eligibility for duty-free status. Over- or underinvoicing inputs is one way to avoid customs duties levied on products that do not meet the rule-of-origin test.

In addition, MNEs must declare profits and pay taxes in the various jurisdictions where they do business. Most governments tax residents on their worldwide income while taxing nonresidents on their domestic source income. The need to declare taxable income means that the enterprise must allocate its expenditures and revenues among its various affiliates, set prices for all intrafirm crossborder transactions, and, at the same time, follow the different (and possibly conflicting) corporate tax rules set down by the various taxing authorities. Thus, the MNE may have to determine and record transfer prices for activities even if there is no internal reason to determine a price.

Figure 1.1 shows the various transfer prices that could be involved in crossborder intrafirm transactions between an MNE parent and its foreign affiliate. These include the valuation of goods (where both tariff and tax authorities are involved), services, and intangibles (where tax officials are involved). Where rules of origin must be satisfied in a free trade area, valuation of intrafirm trade (exports and imports) in goods, services, and intangibles is required. All of the transactions identified in Figure 1.1 are examples of intrafirm trade in the sense that they take place between related parties that are not at arm's length with each other.

How important are internal and external factors in affecting the actual transfer pricing policies of MNEs? To answer this question, we look at some recent empirical studies on how firms set their transfer prices.

FIGURE 1.1
External Motivations for Setting Transfer Prices



Transfer Pricing in Practice

In practice, the typical MNE values its intrafirm trade flows within the firm, either by having the prices set by headquarters or through bargaining among divisions. The more centralized the MNE, the more likely the transfer price is to be set by headquarters. If an outside market price exists, some reference is often made to that price; however, not all MNEs allow their divisions to buy or sell on the outside market.

Several studies have been done, mostly through questionnaires, to find out how MNEs actually set transfer prices for tangibles. We report on four of the most recent studies.

The Benvignati (1985) Study

Benvignati (1985) analysed data from the U.S. Federal Trade Commission on intracorporate transfers made by U.S. manufacturing MNEs to their foreign and domestic affiliates in 1975. She found that nonmarket pricing was used more frequently (76 per cent of the cases) in transfers to foreign affiliates than to domestic affiliates (49 per cent of cases). (See Table 1.1 below.) The most important nonmarket pricing method was cost plus, used in 57 per cent of all foreign transfers and 29 per cent of domestic transfers. She concluded that foreign transfers were potentially more problematic for tax authorities because such transfers typically were not based on market prices.

Benvignati then used regression analysis to explain the greater use of nonmarket prices in foreign transfers. The dependent variable, the percentage of foreign affiliate transfers priced at market prices, was regressed against a large number of industry- and firm-related variables. The significant variables were the firm's advertising intensity (negative sign), the dollar value of total MNE transfers to foreign affiliates (negative), foreign branch activity (positive), domestic company size (positive), and number of foreign affiliates (positive). On the basis of these regressions, she reached several conclusions. First, most of the variation in pricing behaviour came from firm-to-firm differences and not from industry variations. Second, U.S. MNEs were more likely to use nonmarket prices if products were heterogeneous, total transfers were large, and the MNE was small and did not have branches or many affiliates. Third, the U.S. tax treatment of branches on an accrual basis made it less profitable to engage in transfer price manipulation. And, fourth, large-size MNEs with many subsidiaries were also more likely to use market-based pricing perhaps because of a higher likelihood of tax audits, higher propensity for conflicts with management objectives, or greater administrative costs associated with keeping 'two sets of books' (Benvignati 1985, 209).[7]

TABLE 1.1
The Benvignati (1985) Survey of Transfer Pricing Methods

	Domestic transfers	Foreign transfers
Per cent of transfers that used a market-based pricing method	49.44	24.04
Per cent of transfers that used nonmarket-based pricing methods:		
Cost plus method	29.27	57.24
Other cost-based methods	18.83	14.48
Other methods	2.46	4.25
Total per cent using nonmarket-based pricing methods	50.56	75.96

SOURCE: Benvignati (1985, 197)

The Al-Eryani, Alam, and Akhter (1990) Study

Al-Eryani, Alam, and Akhter (1990) surveyed 164 U.S. multinationals in 1987 concerning their transfer pricing policies. Large MNEs were selected and then broken into two groups depending on whether the majority of their foreign affiliate activity occurred in developed or developing countries. Their results are summarized in Table 1.2.

The authors found that 50 per cent of the sample MNEs with affiliates primarily in developed countries used cost-based transfer pricing methods; another 34 per cent used methods based on market prices. For MNEs mainly in developing countries the percentages were 41 and 38 respectively. Overall, 47 per cent of the sample MNEs used cost-based pricing while 35 per cent used market-based pricing. Two-thirds of the 'actual cost' cases included a fixed markup on top of actual full cost per unit of output; one-third had no markup. A markup also characterized most of the 'standard cost' cases. Marginal or opportunity cost was rarely adopted. Therefore about two-thirds of the cost-based cases used a cost plus transfer pricing methodology. The second most frequent transfer pricing policy was market price with the cases evenly split between the prevailing price and an adjusted market price.

What Table 1.2 does not say is *who* sets the transfer price – head office, a centralized purchasing division, or the firms themselves. The only case that suggests complete autonomy of the divisions is the negotiated price approach. Approximately 15 per cent of respondents negotiated prices – i.e., the related firms would set the transfer price through bargaining between themselves.

The IBFD (1991) Study

A third survey was conducted by the International Bureau of Fiscal Documentation (IBFD) in 1991 (see Hamaekers 1992, 605). This voluntary survey,

TABLE 1.2
The Al-Eryani et al. (1990) Survey of Transfer Pricing Methods

Transfer pricing method	U.S. MNEs with affiliates primarily in developed countries		U.S. MNEs with affiliates primarily in developed countries		U.S. MNEs with affiliates in all host countries	
	Number	Per cent of total	Number	Per cent of total	Number	Per cent of total
Actual cost	19	19	15	20	34	20
Standard cost	29	29	16	21	45	26
Marginal cost or opportunity cost	2	2	0	0	2	1
Total cost-based methods	50	50	31	41	81	47
Negotiated price	13	13	12	16	25	15
Other	2	2	4	5	6	3
Total nonmarket (cost + other) methods	100	66	47	62	112	65
Market price	17	18	12	16	29	17
Adjusted market price	15	16	16	22	31	18
Total market price–based methods	32	34	28	38	60	35
Total number of responses	97	100	75	100	172	100

SOURCE: Al-Eryani et al. (1990, 420)

answered by 67 MNEs, 50 in manufacturing and trade and 17 in services, from 13 countries, inquired about their use of the CUP, RP, C+, and other methods. Over three-quarters of the firms used one pricing method, but another 7 per cent used two methods, and 16 per cent used three methods in combination. The most used method was cost plus – 42 per cent of the respondents used it as the only method, while as many as 65 per cent used it in conjunction with the resale price and CUP methods. None of the MNEs that responded to the questionnaire used profit comparisons to establish their transfer pricing policies, but six firms used profit splits. The results of this survey are summarized in Table 1.3.

TABLE 1.3
The IBFD (1991) Survey of Transfer Pricing Methods

Transfer pricing method or combination of methods	Percentage of respondents using method
Comparable uncontrolled price (CUP)	20
Resale price (RP)	8
Cost plus (C+)	42
Resale price and cost plus	7
CUP, resale price, and cost plus	16
Other methods	7
Total	100

SOURCE: Hamaekers (1992, 605)

The Tang (1993) Study

Roger Tang (1993, 271) performed a similar analysis of transfer pricing policies for domestic and international transfers, using a sample of 143 firms from the Fortune 500. His results are summarized in Table 1.4. In evaluating the methods used by respondents (noting that many of these firms use more than one domestic or international transfer price), Tang found that, for domestic transfers, 46.1 per cent used cost-based methods, 36.7 per cent used market-based methods, and 17 per cent utilized other methods. By contrast, for international transfers, 41.4 per cent used cost-based methods for pricing, 45.9 per cent used market-based methods, and 12.7 per cent made use of other methods. Note that Tang also found that 13–17 per cent used a negotiated-price approach where the affiliates bargained to set the transfer price, a percentage similar to that of the previous study.

From these four surveys, it is clear that MNEs use a variety of transfer pricing methods, based primarily on cost plus or market price with cost plus dominating as the preferred method. In about 15 per cent of the remaining cases, the two affiliates negotiated the transfer price. Since methods based on cost plus and/or market price appear to make economic sense, why the considerable attention paid by national tax authorities to transfer pricing?

The Problem of Transfer Price Manipulation (TPM)

Governments have developed sophisticated, complicated rules for valuing intrafirm transactions for tax purposes. The reason for these rules is not transfer pricing per se, but the fear of transfer price manipulation.

TABLE 1.4
The Tang (1993) Survey of Transfer Pricing Methods

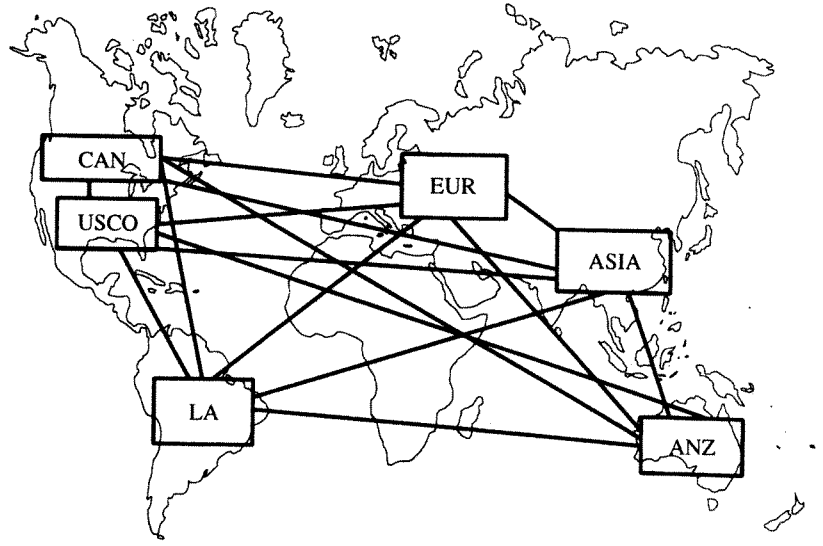
Pricing methods	For domestic transfers: Number of firms	For domestic transfers: Per cent of total	For international transfers: Number of firms	For international transfers: Per cent of total
		Methods based on cost		
Variable cost	8	3.6	2	1.2
Full cost	54	24.2	17	10.8
Variable cost plus lump sum subsidy	2	0.9	2	1.3
Full cost plus markup	37	16.6	42	26.8
Other	2	0.9	2	1.3
Subtotal	103	46.2	65	41.4
% of total	46.1		41.4	
		Methods based on market price		
Market price	56	25.1	41	26.1
Other	26	11.6	31	19.8
Subtotal	82	36.7	72	45.9
% of total	36.7		45.9	
		Other methods		
Negotiated price	37	16.6	20	12.7
Other methods	1	0.5	0	0
% of total	17.0		12.7	
Total all methods	223*	100.0	157*	100.0

*Many firms use more than one domestic or international transfer price.
SOURCE: Tang (1993, 71)

It is important to distinguish between the terms 'transfer price' and 'transfer price manipulation.' Transfer pricing is a normal, legitimate, and, in fact, *required* activity. Firms set prices on intrafirm transactions for a variety of perfectly legal and rational internal reasons, and, even where pricing is not required for internal reasons, governments require it in order to determine how much tax revenues and customs duties are owed by the MNE.

The image of giant MNEs manipulating millions of dollars of crossborder flows in order to evade or avoid payment of taxes and tariffs, on the other hand, is an image of *transfer price manipulation.* Transfer price manipulation is the deliberate setting of the price paid by one company to a corporate affiliate located in another taxing jurisdiction for the purpose of reducing the aggregate 'tax' burden of the company and its affiliates, where 'tax' is broadly defined as

FIGURE 1.2
Intrafirm Transactions within the Multinational Enterprise



any external constraints on the MNE – e.g., taxes, tariffs, compulsory minority shareholders, quota regulations, and so on.

Figure 1.2 illustrates some complexities that multinationals create for national tax authorities in terms of transfer pricing. For example, even a small MNE (call it USCO) with five foreign affiliates (e.g., in Canada, Latin America, Europe, Asia, Australia) has the possibility of 30 (six times five) different international, one-way channels through which intermediate and final products of the MNE can pass. If we classify products as goods, services, or intangibles, that brings the total number of channels by broad category up to 90 (30 times three). Most firms have dozens of product lines and each product requires hundreds or perhaps thousands of parts. We could similarly divide service and intangible flows into dozens of categories. International transactions can also occur with frequencies as low as once a year (e.g., dividend payments) to as high as several times an hour (e.g., foreign exchange transactions).

Therefore the number of individual transactions within one MNE group can number in the millions per year. Regulating these transactions in any meaningful way at the national level is impossible because each government sees, and has control over, only part of the whole integrated business. No government has

BOX 1.1
External Motivations for Transfer Price Manipulation

Intrafirm trade	Type of transfer price manipulation
Motivation: The corporate income tax rate on affiliate A's income is higher than the tax on other MNE affiliates.	
A's imports and exports of goods	Overinvoice A's imports and underinvoice A's exports to shift profits to other MNE affiliates where tax rates are lower.
Repatriated dividends from affiliates to firm	If A is parent firm and A's government taxes only upon repatriation, delay dividend parent payments to A to avoid additional tax. If A is affiliate, deferring dividends can avoid the dividend-withholding tax.
Head office services to affiliates	If A is parent, undercharge for head office to services. If A is affiliate, overcharge for services as long as head office fees are deductible against host country's income tax.
Technology transfers to affiliates	If A is parent, undercharge for transfers and defer royalty payments to parent. If A is subsidiary, overcharge and speed up royalties paid to parent as long as royalties are deductible against host income tax.
Motivation: A's government levies a tariff on imports.	
Imports	If ad valorem tariff, underinvoice imports.
Motivation: A's government subsidizes (taxes) exports.	
Exports	Over-invoice (underinvoice) exports if subsidy (tax) is ad valorem.
Motivation: Transactions in volatile currencies are subject to exchange rate risks.	
Payments for intrafirm transactions	Overprice and lead payments to shift profits into a strong currency; underinvoice and lag payments to shift out of a weak currency.
Motivation: The government forces the MNE to take on minority shareholders in A.	
All transactions	Minority shareholding acts as an effective tax on MNE profits earned in the affiliate because each dollar of profits must be shared. Use TPM to reduce the profits declared in A (see above methods for CIT).

the funds to oversee all these transactions, nor would a benefit/cost analysis justify such a close examination.

Many exogenous factors might cause the MNE to adjust its transfer prices. Some external reasons why MNEs might be motivated to engage in transfer price manipulation are outlined in Box 1.1, along with the type of manipulation (under- or overinvoicing, leading or lagging payments) that we might expect these firms to use. The external motivations include customs duties, export taxes/subsidies, differences in corporate income tax rates, and foreign exchange restrictions. Most of the strategies identified in Box 1.1 are methods to (1) shift taxable income into low-tax jurisdictions, and (2) shift tax-deductible costs into high-tax jurisdictions.

Both income tax and customs duty officials need to be concerned about potential transfer price manipulation (see Figure 1.1). Customs officials worry that MNEs underinvoice inbound transfers so as to minimize the duties they pay on imported parts and finished goods. Tax authorities worry that MNEs overinvoice tax-deductible items (e.g., cost of inputs, service charges) and underinvoice income receipts (e.g., from sales of goods, service fees, royalties, and dividend income) so as to avoid paying corporate income taxes.

Governments worry about transfer price manipulation because they are concerned with the loss of revenues through tax avoidance and/or evasion, and they dislike the loss of control this implies. Overall MNE profits after taxes may be raised by either under- or overinvoicing the transfer price; such manipulation for tax purposes, however, comes at the expense of distorting other goals of the firm, in particular, evaluating management performance. Thus taxes and tariffs are only some of the variables that influence the transfer pricing policies of MNEs; the MNE must also pay attention to its internal constraints.

An example of how MNEs can use transfer price manipulation to reduce corporate income tax payments is provided in Box 1.2 and illustrated in Figure 1.3.

Assume USCO, a U.S. multinational, makes 100 widgets at a per-unit cost of $2.00. The manufacturer charges cost plus 65 per cent, or $3.30 per unit, as the transfer price on intrafirm sales to its affiliate MEXCO. MEXCO markets and distributes the widgets in the Mexican domestic market, incurring costs of $1.00 per widget. Total manufacturing and distribution costs per widget are $4.30. (We ignore customs, insurance, and freight costs for simplicity.) MEXCO sells the widgets to consumers for $5.00 each. USCO makes a pre-tax profit of $130; MEXCO of $70. Assuming the effective tax rate on USCO's profits is 50 per cent, and on MEXCO's profits is 30 per cent, we calculate the total tax paid as $65 by USCO and $21 by MEXCO, for total MNE taxes of $86. USCO is left with $65 in after-tax profits, MEXCO with $49, for total after-tax MNE profits of $114.

BOX 1.2
Transfer Price Manipulation Reduces Overall Taxes

The initial situation
Assume USCO manufactures widgets and charges standard cost plus a 65 per cent markup on its sales of widgets to its affiliate MEXCO. MEXCO markets and distributes the widgets for final sale at a price of $5.00 per unit. USCO's profits are taxed at 50 per cent; MEXCO's profits at 30 per cent. (We ignore tariffs and transport costs.)

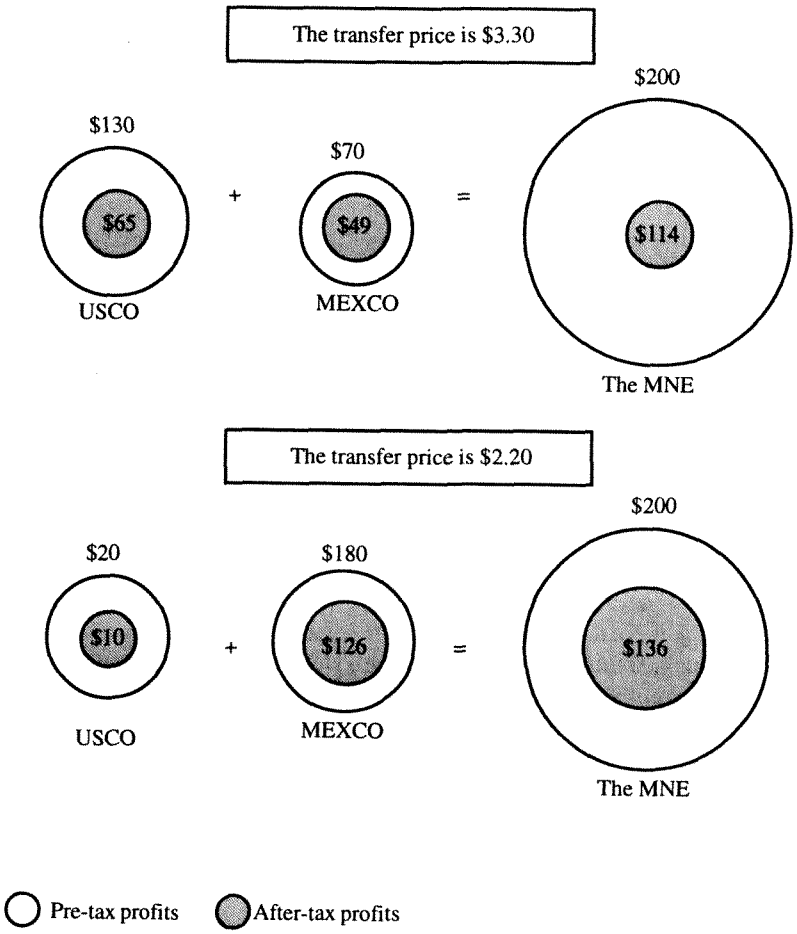
	USCO	MEXCO	The MNE
Output	100	100	100
Per-unit cost	2.00	1.00	3.00
Unit cost of imports		3.30	
Total cost	200.00	430.00	300.00
Price	3.30	5.00	5.00
Total sales	330.00	500.00	500.00
Profit before tax	130.00	70.00	200.00
Tax paid	65.00	21.00	86.00
Profit after tax	65.00	49.00	114.00

The MNE reduces the transfer price
Assume the price is $2.20 (i.e., a 10 per cent markup). All other conditions are unchanged.

	USCO	MEXCO	THE MNE
Output	100	100	100
Per unit cost	2.00	1.00	3.00
Unit cost of imports		2.20	
Total cost	200.00	320.00	300.00
Price	2.20	5.00	5.00
Total sales	220.00	500.00	500.00
Profit before tax	20.00	180.00	200.00
Tax paid	10.00	54.00	64.00
Profit after tax	10.00	126.00	136.00

Conclusion: Underinvoicing raises MNE after-tax profits
Where the tax rate on USCO is higher than on MEXCO, the MNE receives larger global profits, net of tax, by underinvoicing USCO's exports to MEXCO. Shifting profits to the lower-taxed firm causes a drop in profits for exporter, but the MNE as a whole is better off.

FIGURE 1.3
Transfer Price Manipulation Raises After-Tax Profits for the Multinational



Now assume the multinational can underinvoice the product USCO sells to MEXCO, setting a mark-up of 10 per cent, making the new price $2.20 instead of $3.30. Working through the example again, we find that pre-tax profits of the manufacturer fall (to $20 from $130) while those of the distributor rise (to $180 from $70). USCO pays less tax ($10 versus $65) while MEXCO's tax payments

rise (to $54 from $21). On the other hand, for the multinational as a whole, pre-tax profits are unchanged (at $200);[8] tax payments are lower ($64 versus $86) and after-tax total MNE profits are higher ($136 instead of $114).

The pre-tax and post-tax profits of the two firms and the MNE as a whole are illustrated in Figure 1.3. Note that the difference between the two circles represents taxes paid. By understating profits in the high-tax country and overstating them in the low-tax country, the MNE realizes greater overall after-tax profits.

Thus transfer price manipulation can be an effective way to avoid paying taxes where tax differentials exist between jurisdictions. Clearly, the USCO–MEXCO case outlined above is a very simple example. In practice, large MNEs engage in thousands of transactions in goods, services, and intangibles with affiliates in dozens of countries each year. The potential avenues for tax avoidance are therefore myriad.

In order to reduce the likelihood of transfer price manipulation, governments have responded to this possible source of revenue drain through ever-increasing regulations. These regulations have centred on a concept known as 'the arm's length standard.' In the next section, we turn from transfer pricing as seen by the multinational, to transfer pricing as regulated by the tax authorities.

National Regulation of Transfer Pricing

In this section, we look at government attempts to regulate MNE transfer prices and to resolve transfer pricing disputes at the national and international levels. Underpinning these tax regulations is the concept of the arm's length standard, so we first explain this standard. We then provide short outlines of transfer pricing regulation in the United States and in Canada. The U.S. regulations on tax transfer pricing are the oldest and most detailed regulations in the world. They are also the most complicated. The Canadian rules are based on the U.S. ones but are shorter and simpler. We provide a brief summary of the historical development of these rules below.

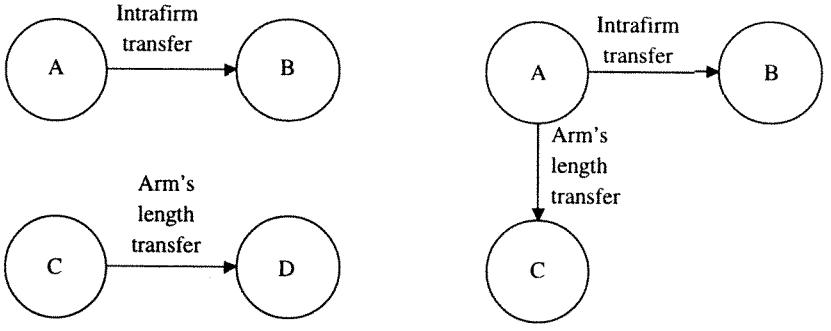
The Arm's Length Standard

The most common solution that tax authorities have adopted to reduce the probability of the transfer price manipulation is to develop particular transfer pricing regulations as part of the corporate income tax code.[9] These regulations (e.g., U.S. Internal Revenue Code section 482, the Canadian Income Tax Code section 69, the OECD transfer pricing reports) are generally based on the concept of the *arm's length standard*, which says that all MNE intracorporate activities should be priced as if they took place between unrelated parties acting at arm's

FIGURE 1.4
The Arm's Length Standard

METHOD # 1	METHOD # 2
Use the price negotiated between two unrelated parties C and D to proxy for the transfer price beteen A and B.	Use the price at which A sells to unrelated party C to proxy for the transfer price between A and B.

Both methods require either (1) the same product be transferred under the same circumstances or (2) adjustments to be made to quantify these differences.



length in competitive markets. The *arm's length price* is the price two unrelated parties would reach through bargaining in a competitive market. The 1979 OECD Report defines the arm's length standard (ALS) as

> prices which would have been agreed upon between unrelated parties engaged in the same or similar transactions under the same or similar conditions in the open market. (OECD 1979, 7)

The arm's length standard asks the following question: What would the parties have done had they been unrelated? What price would they have negotiated? Since the firms *are* related in the transaction under scrutiny by the tax authorities, any answer to this question must be hypothetical. The best answer is a proxy, done in one of two ways (see Figure 1.4).

In the first method, the price negotiated by two other unrelated parties which were engaged in a comparable transaction under comparable circumstances is a

proxy for the arm's length price in the transaction in question. In this case, the regulator looks for two other firms, unrelated and engaged in similar activities as the related parties in question, and then uses the price negotiated by the unrelated firms, adjusted if necessary for differences in product and functional characteristics, as the arm's length price. As Figure 1.4 shows, the arm's length price negotiated between firms C and D is used to proxy for the transfer price between the related firms A and B.

In the second method, the price set by one of the related parties in a comparable transaction under comparable circumstances with an unrelated party could be used as an estimate. Where the MNE either buys outside or sells outside, in comparable circumstances (e.g., product characteristics, functional level, time horizon, risks taken), the price negotiated with unrelated parties can be used as the arm's length price. That is, in Figure 1.4, the arm's length price that A charges unrelated firm C is used to proxy for the transfer price that A charges related firm B.

In practice, the method used will depend on the available data. Are there unrelated parties engaged in the same, or nearly the same, transactions under the same, or nearly the same, circumstances? Does one of the related parties also engage in the same, or nearly the same, transactions with an unrelated party under the same, or nearly the same, circumstances? Where there are differences, are they quantifiable? Do the results seem reasonable in the circumstances? If the answers to these questions is yes, then the arm's length standard will yield a reasonable result. If the answer is no, then alternative methods must be used. We provide an illustration of the arm's length standard as it was used in an actual court case: *J. Hofert vs. the Minister of National Revenue* (DTC 1962) in Appendix 1.1 at the end of this chapter.

The concept of the arm's length standard was first developed in, and then refined by, the U.S. Treasury. The Canadian government also follows this standard in its transfer pricing rules. In the two sections below, we briefly look at how these two governments have adopted and used the ALS in pricing MNE transactions for purposes of determining corporate income taxes.

The U.S. Approach to Transfer Pricing Regulation

As the principal source of outward-bound foreign direct investment (FDI), and also, since the early 1980s, the key destination for inward foreign direct investment, the United States has well-developed policies for taxing multinationals. The biggest of the national tax authorities is, of course, the U.S. Internal Revenue Service (IRS). The IRS has the world's largest staff of specially trained international examiners and economists located in an International Enforcement

Division for the auditing of MNEs. This staff is equipped with a range of policies designed to reduce and penalize MNE that engage in transfer pricing manipulation.

In the United States, transfer pricing law is developed in the U.S. Treasury, passed by the U.S. Congress, interpreted and applied by the Internal Revenue Service (IRS, or the Service), and interpreted by the U.S. tax courts. The keystone of the U.S. approach to tax transfer pricing is *section 482* of the U.S. Internal Revenue Code (IRC), first passed in 1917 and broadened in 1928, which applies to all intracorporate transfers, both tangible and intangible. In the legislation, the IRS Commissioner has the right to reallocate income and deductions between related parties in order to prevent tax avoidance and to determine the true taxable income of each party. Section 482 is responsible for ensuring that the income earned on transactions between related parties is determined on an arm's length standard.

In 1968, the U.S. Treasury developed its first set of regulations on section 482. IRS auditors were to evaluate intrafirm transactions using these regulations, and multinationals were encouraged to follow them in pricing their own transactions. The regulations specify various types of transactions: loans, rentals or sales of tangible property (i.e., goods); transfer or use of intangible property (e.g., patents, copyrights); and performance of services (e.g., managerial, technical). Sales of tangible property are tested against an arm's length standard based on one of four methods (in order of priority): *comparable uncontrolled price (CUP)*, *resale price (RP)*, *cost plus (C+)*, and so-called *fourth* or *other*, methods.

The CUP, RP, and C+ methods are transactions-based methods that look for comparable transactions between unrelated parties in order to proxy for the related party transaction. The most serious problem associated with section 482 has been the lack of comparables, making the CUP, RP, and C+ methods difficult to use in practice, and necessitating the use of fourth methods. This problem was accentuated when non-U.S. MNEs were involved since information was often less readily available than for U.S. multinationals.

In addition, U.S. law historically encouraged the offshore, below-cost transfer of intangibles by U.S. parents to their foreign affiliates, even though such underinvoicing was directly in conflict with the spirit of section 482. As a result, since the early 1960s, transfer pricing regulation has been an acrimonious area of U.S. tax law with dozens of tax court cases, many dragging on for up to a decade and more through the court process.

In order to address these problems, starting in the early 1980s, the U.S. Treasury has engaged in major, and frequent, revisions to its transfer pricing regulations. In 1986, the U.S. Congress passed a law requiring that transfers of

intangibles be priced *commensurate with the income (CWI)* from the intangibles. Since then, the U.S. Treasury has worked on integrating the CWI standard into the 482 regulations. Over the 1992–4 period three versions of new transfer pricing regulations were introduced; the final ones were approved in June 1994. In the final 482 regulations, the number of specified methods have increased by two – the *comparable profits method (CPM)* and the *profit split (PS) method*; the hierarchy of methods has been eliminated, and instead taxpayers are supposed to select the best method in terms of the facts and circumstances of the case; and *periodic adjustments* (i.e. re-evaluations) of intangible prices will be made, with certain exceptions, to ensure that the CWI standard is satisfied. Taxpayers are expected to use *functional analysis* (an economic evaluation of the activities, responsibilities, resources, and risks of each of the related parties) to explain their transfer pricing policy.

The procedures used by the IRS to handle transfer pricing disputes are also changing. A new *Advance Pricing Agreement* procedure was introduced in 1991 whereby a taxpayer and the IRS negotiate an agreed transfer pricing methodology that is binding on both parties for a specified time period, generally three years. In 1994, the Service and Apple Computer first used *binding arbitration* to settle their transfer pricing dispute rather than going to the tax courts. Both parties were happy with the outcome and the method is likely to be used by other MNEs. In addition, new *penalty regulations* for misvaluations (section 6662) were added to the Internal Revenue Code in order to ensure MNE compliance with the new section 482 rules. The traditional bilateral approach has been through *competent authority* provisions of bilateral tax treaties that bring the two tax authorities together to settle transfer pricing disputes.

Thus, over the past ten years (1986–96), the United States has been engaged in reforming its tax transfer pricing regulations. The new rules are finally in place and the U.S. Treasury is unlikely to engage in such major reform again for quite some time. Therefore it is a good time to stand back and look at these changes and assess the new regime in place in the United States. We provide a critical, historical review of the U.S. approach to tax transfer pricing in Chapter 8 (the U.S. rules), Chapter 9 (the U.S. procedures), a more general assessment in chapters 12 and 13 (reforming the tax transfer pricing regime), and some specific suggestions for reform in Chapter 14 (conclusions and policy recommendations).

The Canadian Approach to Transfer Price Regulation

In Canada, tax transfer pricing law is written by the Department of Finance, passed by Parliament, interpreted and implemented by Revenue Canada, and interpreted by the Canadian tax courts. The Canadian transfer pricing legislation, *section 69* of the Income Tax Act, was first passed in 1972. The section is in three parts.

Section 69(1) applies a fair market value criterion to the arm's length criterion for intrafirm domestic transactions. This section is designed to prevent related firms within Canada from artificially shifting income and/or deductions among their divisions. Sections 69(2) and 69(3) apply to intrafirm international transactions and use the 'reasonable under the circumstances' approach as the criterion for ensuring arm's length transactions. Section 69(2) insists that intracorporate crossborder payments not exceed a reasonable amount, whereas section 69(3) insists that such receipts be not less than a reasonable amount.

In 1987, Revenue Canada adopted Information Circular 87–2 designed to clarify the Canadian approach to tax transfer pricing. The Canadian regulations also apply the same four methods as the pre-1994 U.S. regulations: CUP, resale price, cost plus, and fourth methods, with CUP having priority. Rules are developed for transfers of tangibles, business services, and intangibles that roughly follow the U.S. approach. The key test in the Canadian rules is whether the MNE's transfer price for a particular transaction was *reasonable given all the facts and circumstances*. Unlike the United States, very few court cases in Canada have focused specifically on transfer pricing issues; most cases have involved tax havens and pricing of tangibles where the paperwork was shunted through a tax haven so as to move the profits offshore to a low-tax jurisdiction. We examine some of these court cases in Chapter 11.

While the U.S. Treasury engaged in the overhaul of its transfer pricing regulations between 1986 and 1994, Revenue Canada and the Department of Finance have watched the U.S. upheaval and done little to modify Canadian rules. The only significant pronouncement has been a January 1994 news release, clarifying for Canadian taxpayers that they should follow Canadian tax law and use the competent-authority process under the Canada–U.S. bilateral tax treaty in which differences in Canadian and U.S. law lead to double taxation. In addition, Canada has developed its own Advance Pricing Agreement procedure, the final version should be available in early 1997. Now that the United States has completed the overhaul of rules and procedures, it is perhaps a good time to evaluate the Canadian approach to tax transfer pricing and to suggest where the rules might need changing. Chapter 10 reviews the history of transfer price regulation in Canada, while Chapter 14 offers some proposals for change.

We turn now to international attempts to develop a common regulatory framework for taxing multinationals.

The International Tax Transfer Pricing Regime

In this section we provide a brief history of government efforts at the international level to develop a set of rules and procedures to guide tax authorities and MNEs. We argue that an international regime has developed whereby tax authorities have attempted to establish certain principles and norms centred around the arm's length standard in order to reduce international taxation disputes. We outline the structure of this regime, and compare it briefly with an alternative approach: unitary taxation.

Multilateral Solutions: A Brief History

Historically, the most common international solution has been the *bilateral tax treaty*. In a tax treaty, two governments spell out which one has jurisdiction over what tax base and how the tax base is to be measured and allocated. By signing tax treaties with close trading and investment partners, two countries could better regulate their crossborder transactions and provide a more secure legal environment for crossborder investments.

Beginning in the 1920s, tax authorities started to develop a set of international principles for tax treaties which were designed to reduce the probability of interjurisdictional conflict. The key idea behind the principles was the need to prevent both undertaxation and double taxation of MNE income. First through the League of Nations and then through the United Nations and the OECD, groups of tax experts have developed a set of principles in the form of model tax conventions to guide national taxation of multinationals and the bilateral tax treaty process.

Three principles underpin these conventions: *inter-nation equity* (tax revenues should be allocated fairly between jurisdictions), *international neutrality* (taxes should not interfere with private decisions), and *international taxpayer equity* (taxpayers in the same jurisdiction should be treated equally regardless of the source of their income). In the transfer pricing area, these principles are embodied in the international norm, the arm's length standard. Thus the ALS, first developed in the United States, has become the benchmark for pricing intrafirm transactions.

The first model tax conventions incorporating these principles and norms appeared in the late 1940s. Since the late 1960s, when the United States first set out its regulations on applying IRC section 482, the international tax community – tax authorities, lawyers, and public finance economists – has been involved in developing a set of rules and procedures designed to specify how different international intrafirm transactions should be priced so as to satisfy the arm's length standard. These guidelines have given us the comparable uncontrolled price (CUP), cost plus, and resale price methods. Guidelines have appeared in the form of OECD and UN model tax conventions, general guidelines on MNE–state relations, and transfer pricing guidelines, all centred on the principles of international equity and neutrality and on the norm of the arm's length standard.

We argue in this book that the national approach to tax transfer pricing has expanded into an international regulatory network. Led by the OECD, this regulatory network has become much more sophisticated in its approach to taxing multinationals, and can now be described as an international regime, the *international tax regime*. Nested within this regime is another: the *international tax transfer pricing regime* – the true subject of our book.

What Are International Regimes?

Problems of interdependence at the international level can perhaps best be handled through *international regimes*, a form of international governance structure (Krasner 1983; Preston and Windsor 1992). International regimes are institutions, sets of functional and behavioural relationships among national governments. These relationships embody the principles underlying the regime, the expected behaviour patterns of regime members, and the formal arrangements that implement the international agreements and understandings that form the regime.

Regimes are useful as a way to reduce international transactions costs in an interdependent world. When a clear legal framework establishing property rights and liability is missing, markets for information are imperfect, and/or incentives exist for actors to behave opportunistically, regimes can improve the functioning of international markets. International regimes can increase the predictability of behaviour, provide generalized sets of rules, and improve the information available to participants. Thus regimes are ways to manage interdependencies among nations.

The Current Tax Transfer Pricing Regime

The problems created for governments by the global reach of MNEs make it impossible to regulate these large firms effectively at the domestic level. Either MNE income goes untaxed or double taxation occurs. Both events cause conflict: conflict between MNEs and nation-states over who pays what tax to whom and how much, or conflict between tax authorities in different states over their fair share of MNE income. Therefore making regulations on transfer pricing at the national level to meet national goals is an unsatisfactory approach to

an international problem, and the need for multilateral approach to taxing multinationals is clear. The domestic reach of national jurisdictions is ill-suited to regulate the global reach of the multinational enterprise, and the number of interjurisdictional tax conflicts is growing along with the increase in MNE crossborder activity.

We contend that there is an international tax regime with principles, norms, rules, and procedures designed to facilitate cooperation between national tax authorities in order to better regulate crossborder taxable activities of multinationals. The goals of the regime are the avoidance of double taxation of income and the prevention of tax avoidance and evasion. These goals are to be achieved through coordination and harmonization of national tax systems. Examples of government cooperation in the tax area that form components of the tax regime include a variety of national tax policies, bilateral tax treaties (BTTs), and model treaties and guidelines developed by institutions such as the OECD and United Nations. The international tax regime deals with both jurisdictional issues (who has the right to tax what) and allocational issues (how should costs and revenues be allocated and priced).

Within the international tax regime is nested another regime dealing with the taxation of intrafirm trade. The international tax transfer pricing (TTP) regime focuses on the international allocation of MNE income and expenses, specifically on the pricing of intrafirm trade flows within the various affiliates of the multinational enterprise.

Government cooperation in the transfer pricing area is based on a variety of national tax policies, BTTs, and model treaties and guidelines developed by institutions such as the OECD and the United Nations. International bodies of experts such as the OECD's Committee on Fiscal Affairs and the International Fiscal Association (IFA) have played important roles in developing international policies and norms. We argue that the combination of these behaviours and functional relations can be seen as constituting an international tax transfer pricing regime.

At the core of the regime is the OECD's Committee on Fiscal Affairs and the OECD Model Tax Treaty. The treaty incorporates an arm's length standard for allocating income between firms and their subsidiaries, parents, or sister enterprises. Each unit of the MNE is expected to declare, for tax purposes, the profits which it would have made had it been a distinct and separate enterprise operating at arm's length from its parent and sister affiliates.[10]

We view U.S. tax law and the OECD Model Tax Treaty rules with respect to transfer pricing as central components of the TTP regime. Most members of the OECD adhere to the arm's length standard and have developed regulations loosely based on either the U.S. regulations or the OECD Model Tax Treaty

sections. We argue that this regime has its own norm (the arm's length standard), principles (international equity and neutrality), rules (various methods for valuing intrafirm trade), and procedures (e.g., competent authority rules, advance pricing arrangements, appeals, and arbitration).

In Chapter 2 we develop the concept of the tax transfer pricing regime and document the ways in which the OECD, United Nations, and the U.S. Treasury have influenced the development of the regime. We focus in particular on the model tax treaty and 1979 and 1984 transfer pricing reports, as developed by the OECD's Committee on Fiscal Affairs. The appendix to Chapter 2 summarizes the various international publications on tax transfer pricing.

In 1992, the OECD released a new model tax treaty. In addition, the Committee on Fiscal Affairs has engaged in a major overhaul of the OECD's earlier transfer pricing reports (OECD 1994b, 1995a,b, 1996). In chapters 5 and 13 we examine these revisions and make suggestions for improving their effectiveness as part of the international tax transfer pricing regime.

An Alternative Approach: Unitary Taxation

As part of our analysis of the tax transfer pricing regime it is important to look at alternatives to the arm's length standard that underpins the regime. In particular, there is one major alternative that has been proposed: to replace the arm's length standard with a formulary apportionment approach commonly referred to as 'unitary taxation.'

The arm's length standard is based on the *separate accounting* or *separate entity approach*. The borders of a firm are defined according to national boundaries; this is known as the 'water's edge.' Domestic affiliates and foreign branches are consolidated with the parent firm for tax purposes, but foreign subsidiaries and other affiliates of the MNE are treated as separate firms. Income of the multinational is measured using separate accounting for the domestic and international units of the MNE. Since the parent's tax return is consolidated with its domestic affiliates and foreign branches, transfer prices for intrafirm transactions among these affiliated parts of the MNE are not required for tax purposes. However, intrafirm transactions between the parent and its foreign affiliates must be measured and accounted for. These transfer prices must be valued as if they occurred at arm's length – i.e., using the arm's length standard. Transfer price rules (CUP, C+, RP) are used to ensure that such transactions approximate the prices unrelated firms would choose in comparable circumstances. This is the standard that lies at the heart of the international tax transfer pricing regime, a standard endorsed by the OECD and followed by the Canadian and U.S. tax authorities.

A quite different approach is that of unitary taxation. *Unitary taxation* is taxation of the worldwide income of a unitary business – that is, the tax authority measures the income of all the related affiliates of a multinational enterprise that do business within the taxing jurisdiction, and then assesses tax according to the share of the worldwide business of the MNE that occurs within that particular jurisdiction. Unitary taxation is normally based on a *formula apportionment method* whereby a firm's share of certain factors (e.g., sales, labour costs, and capital costs), as a percentage of the worldwide MNE amount of these factors however weighted, is multiplied by the MNE's total worldwide income to compute the tax to be paid in that jurisdiction.

Unitary taxation has been little used in practice. The U.S. states and the Canadian provinces use formulary methods to allocate domestic subfederal corporate tax revenues among themselves. In addition, a few of the U.S. states, in particular California, have taxed firms located in their jurisdiction on a *pro rata* share of the worldwide income generated by the MNE corporate group. Most recently, the IRS has signed several advance pricing agreements with international banks, using a formulary approach to allocate the income from global trading.

The OECD dislikes and has actively discouraged the use of global formulary methods on the grounds that they are arbitrary and do not satisfy the norm of the arm's length standard. While California and some other states use the method, the U.S. government has also discouraged its spread. The Canadian government is also on record as opposing to unitary taxation.

We discuss unitary taxation in several places in this book. Chapter 2 discusses the OECD's views on unitary taxation. In Chapter 6 we explain the economic effects of unitary taxation in a situation in which one government uses the method and another does not, and one in which all governments follow this approach. In Chapter 12 we discuss the pros and cons of unitary taxation and separate accounting, and evaluate two U.S. experiences with unitary taxation: the recent Barclays Bank case, and the global trading APAs. Finally, in Chapter 12 we suggest that formulary apportionment could be used for tax purposes for North American multinationals that derive most of their income within the North American Free Trade Area. It is clear from our study that the approach, long vilified by both multinationals and tax authorities, is slowly spreading throughout the OECD community; we expect it to spread more quickly within regional blocs such as NAFTA and the European Community in the coming years.

Explaining the Transfer Pricing Methods

Having briefly reviewed the history of U.S., Canadian, and international regulations on how to price intrafirm transactions, in this section we look at the five major methods now in place in the U.S. and Canadian regulations and the OECD's new guidelines. Our purpose is explain how each of the major methods works, apply it to a numerical example, and point out some of the strengths and weaknesses. In subsequent chapters we examine and assess these methods in much greater detail in their international and national contexts. Here we simply want to set the stage for what follows.

In the past, the OECD rules, and Canadian and U.S. practice, recommended that tax authorities use one of three methods to price intrafirm transactions: comparable uncontrolled price (CUP), resale price (RP), or cost plus (C+). Where none of these specified methods applied, the income tax auditor turned to fourth (other) methods. The new U.S. transfer pricing regulations detail two alternatives: the profit split (PS) method and the comparable profits method (CPM). In the new rules, the hierarchy of methods has been eliminated and the tax authority is supposed to apply the best method. In practice, we suspect that the de facto ranking is likely to remain, given the OECD and IRS commitment to using transactions-based (CUP, C+, RP) methods over profit-based (CPM, PS) methods.

The Canadian and U.S. regulations spell out how the tax auditor is supposed to apply these methods to estimate the arm's length price. The regulations are also meant as a guide for taxpayers – i.e., the multinational is supposed to also set its transfer pricing policy for different transactions using one of these methods. Thus, the tax authorities have attempted to make this trio of methods (CUP, RP, C+) not only the *regulator's* chosen transfer pricing methods but also the *multinational's* transfer pricing methods. We examine each of these methods briefly below.

For those readers who may not be familiar with the accounting terms that will be used in these examples a glossary of terms can be found at the end of the book. In addition, a simple income statement for a business can be found at the end of this chapter in Appendix 1.2, together with a list of some of the differences between economic and accounting terms in Appendix 1.3.

The Comparable Uncontrolled Price (CUP) Method

The CUP method looks for a comparable product to the transaction in question, either in terms of the same product being bought or sold by the MNE in a comparable transaction with an unrelated party, or the same or similar product being traded between two unrelated parties under the same or similar circumstances. The product so identified is called a *product comparable*. All the facts and circumstances that could materially affect the price must be considered – e.g., the

BOX 1.3
The Comparable Uncontrolled Price (CUP) Method

CANCO sells television sets directly to its U.S. subsidiary USCO. CANCO and other Canadian firms also sell TV sets in the United States to unrelated parties through commission sales agents. By custom, the product is sold FOB (free on board; i.e., without freight or insurance added) from the purchaser's plant. An average U.S. transaction price, based on sales by commission agents, is available from these agents.

The transfer price per television set is calculated as follows:

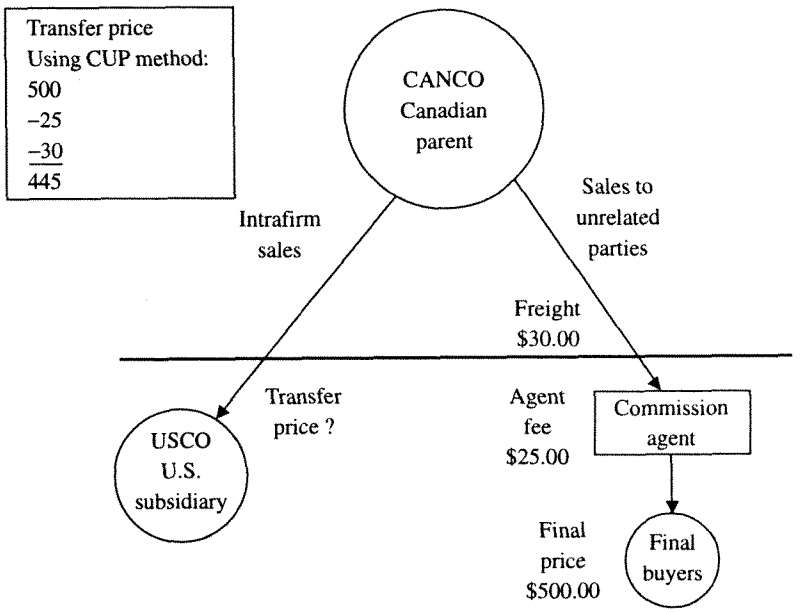
Average retail price in the United States	$ 500.00
MINUS	
Adjustment for saving the agent's commission (5 per cent of the transaction price)	25.00
Freight adjustment (amount reflected in average daily transaction price less actual cost)	30.00
Total deductions	55.00
Transfer price using the CUP method	$ 445.00

characteristics of the product, the market location, the trade level of the firms, and the risks involved. Adjustments are made to the external price to more closely estimate the arm's length price.

Box 1.3 provides a numerical example of the CUP method, which is illustrated in Figure 1.5. In this example, CANCO, a Canadian manufacturer of television sets, sells TVs both inside the MNE (to its U.S. subsidiary) and outside the MNE (to unrelated firms in the United States). The average external market price ($500), adjusted for the trade level (the agent's commission of five per cent) and for transport costs (the freight adjustment, $30), is used to calculate an FOB transfer price of $445 per unit.

This is an example of the second method for determining an arm's length price (see Figure 1.4). Where the MNE sells the same product under the same

FIGURE 1.5
The Comparable Uncontrolled Price (CUP) Method



circumstances both inside and outside the enterprise, the outside price can proxy for the transfer price. In this case, the products are the same but the circumstances are slightly different (i.e., there is a sales agent and freight costs are incurred in the outside sales), so some adjustment is required to find the correct price.

Tax authorities prefer the CUP method over all other pricing methods for at least two reasons. First, it incorporates more information about the specific transaction than does any other method; i.e. it is *transaction and product specific*. Since the arm's length standard is a transactional approach to valuing the MNE, the best method is the one that focuses most closely on the product and the transaction under consideration. Second, CUP takes both the interests of the buyer and seller into account since it looks at the price as determined by the intersection of demand and supply. The method assumes two firms are willing to bargain and that the comparable uncontrolled price is the outcome of that bargaining.

BOX 1.4
The Resale Price Method

CANCO is the Canadian distributor for its British parent's established line of automobiles. Comparable independent distributors in Canada earn profit margins of eight per cent. CANCO performs extra advertising and warranty services not normally provided by these distributors.

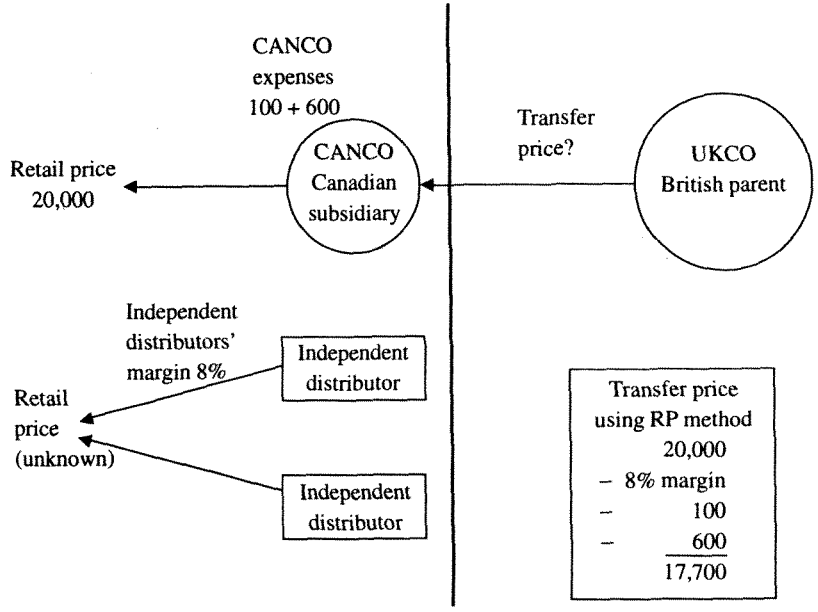
The transfer price to CANCO for a particular automobile is calculated as follows:

Final retail price in Canada	$ 20,000.00
MINUS	
Margin earned by comparable Canadian distributors (8 per cent off the retail price)	1,600.00
Allowance for expenses borne by CANCO not normally borne by comparable independent distributors	
– advertising	100.00
– warranty work	600.00
Total deductions	2,300.00
Transfer price using the resale price method	$ 17,700.00

The Resale Price (RP) Method

Where a product comparable is not available, so that the CUP method cannot be used, an alternative method is to focus on one side of the transaction, either the manufacturer or the distributor, and to estimate the transfer price using a functional approach. Under the resale price method, the tax auditor looks for firms at similar trade levels that perform similar distribution functions (i.e., a *functional comparable*). The RP method is best used when the distributor adds relatively little value to the product so that the value of its functions is easier to estimate. The assumption behind the RP method is that competition among distributors means that similar margins (returns) on sales are earned for similar functions.[11] A distributor is likely to charge the same or a similar sales margin for carrying TV sets as for carrying washing machines or other white goods.

FIGURE 1.6
The Resale Price (RP) Method



Given a large number of distributors, averaging over these unrelated firms can be used to proxy for the margin that the distribution affiliate would have earned in an arm's length transaction. Subtracting this margin from the retail price (the price to the consumer, which is known), one can estimate the transfer price.

In Box 1.4 we give an example of the resale price method for the case of a Canadian distributor of British-made cars. The example is illustrated in Figure 1.6. We assume the U.K. parent sells directly to its Canadian subsidiary. CANCO has the sole distribution rights in Canada for these autos, which retail for $20,000. The question is the transfer price that UKCO charges CANCO. The tax authority knows that the profit margins earned by independent Canadian distributors of automobiles average about eight per cent; however, the Canadian affiliate incurs advertising and warranty costs of $700 that are not normally borne by independent distributors. Subtracting the eight per cent discount from the retail price, and then adding in an adjustment for additional costs incurred by CANCO, yields a transfer price of $17,700, using the RP method.[12]

Thus the resale price method 'backs into' the transfer price by subtracting a profit margin, derived from margins earned by comparable distributors engaged in comparable functions, from the known retail price to determine the transfer price. As a result, the RP method evaluates the transaction only in terms of the buyer. The method ensures that the buyer receives an arm's length return consistent with returns earned by similar firms engaged in similar transactions. Since the resale margin is determined in an arm's length manner, but nothing is done to ensure that the manufacturer's profit margin is consistent with margins earned by other manufacturers, the adjustment is one-sided. Under the RP method, having determined the buyer's arm's length margin, all excess profit on the transaction is assigned to the seller. Thus the resale price method tends to *overestimate* the transfer price since it gives all unallocated profits on the transaction to the upstream manufacturer. We can call this the *contract distributor* case since, effectively, the manufacturer is contracting out the distribution stage to the lowest bidder.

The Cost Plus (C+) Method

In the cost plus method, the tax auditor looks at the other side of the transaction: the manufacturer. The method starts with the costs of production, measured using recognized accounting principles, and then adds an appropriate mark-up over costs. The appropriate mark-up is estimated from those earned by similar manufacturers. The assumption is that in a competitive market the percentage mark-ups over cost that could be earned by other arm's length manufacturers would be roughly the same.[13] Thus, this method is also a functional comparable like the RP method. The cost plus method works best when the producer is a simple manufacturer without complicated activities so that its costs and returns can be more easily estimated.

Box 1.5 gives an example of a perfume manufacturer, CANCO, that manufactures perfume for itself and three sister affiliates at a standard cost of $4.40 per ounce. This is illustrated in Figure 1.7. The formulations for the foreign affiliates are customized for tastes in each market; customizing normally adds an additional five per cent over standard cost. Since other perfume manufacturers in Canada prepare bulk formulations for a mark-up over standard cost of 20 per cent, this mark-up is taken as an estimate of the arm's length mark-up that should be earned by the manufacturer. Adding the mark-up to standard cost, together with the cost of the ingredients and the additional cost of customizing, gives a transfer price of $7.50 using the cost plus method.[14]

In order to use the cost plus method, the tax authority or MNE must know the accounting approach adopted by the unrelated parties. For example, what costs

BOX 1.5
The Cost Plus Method

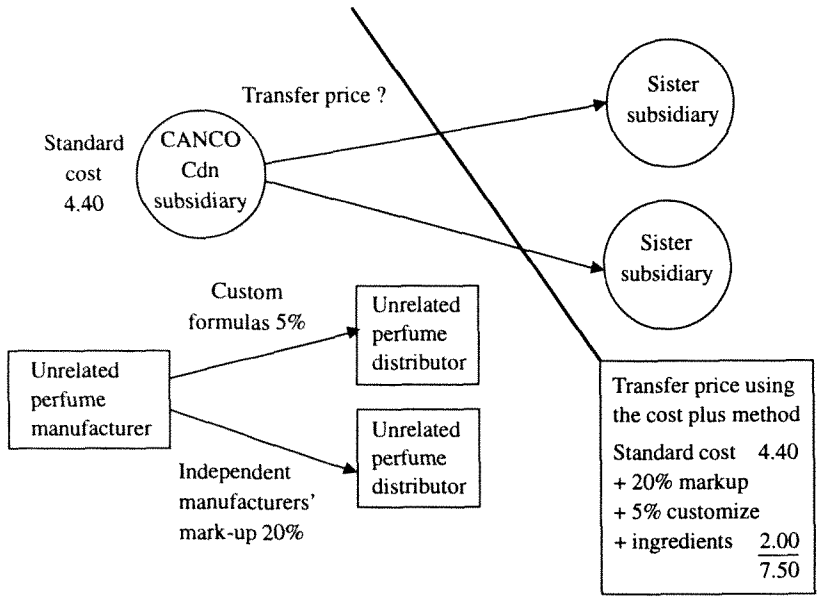
CANCO, a wholly owned subsidiary of a French perfume multinational, produces an expensive perfume for sale in Canada using active ingredients purchased at arm's length. The active ingredients cost $2.00 per ounce of perfume; CANCO's standard manufacturing cost is $4.40. The firm also does custom formulations for other affiliates of its French parent. The industry average mark-up for bulk formulations performed by other perfume manufacturers in Canada is 20 per cent above standard cost. Custom formulations normally add an additional 5 per cent over standard cost.

The transfer price per ounce of perfume for a particular shipment by CANCO to one of the foreign affiliates is calculated as follows:

CANCO standard cost per ounce (excluding active ingredient costs)	$ 4.40
ADD	
Cost of active ingredients	2.00
Mark-up received by functionally comparable manufacturers in Canada 20 per cent of standard cost	0.88
Additional cost of preparing custom formulation for the affiliates 5 per cent of standard cost	0.22
Total additions	3.10
Transfer price using the cost plus method	$ 7.50

are included in the cost base before the mark-up over costs is calculated? Is it *actual cost* or *standard cost* (costs which have been standardized for cyclical fluctuations in production as in the example in Box 1.5)? Are only *manufacturing costs* (cost of goods sold, which includes labour, overhead costs, including depreciation, and material input costs) included or is the cost base the sum of manufacturing costs plus some portion of *operating costs* (i.e., selling, general, and administrative (SG&A) expenses and R&D costs)? The larger the cost base (i.e., the more items put below the line and thus into the cost base), the smaller should be the profit mark-up, or gross margin, over costs.

FIGURE 1.7
The Cost Plus (C+) Method



As a one-sided method, the cost plus method focuses only on the profit mark-up of the seller and insists that the seller should earn only what arm's length sellers engaging in similar transactions would earn in a competitive market. Therefore the C+ method tends to *underestimate* the transfer price because it gives all unallocated profits from the transaction to the buyer. This argument is generally known as the *contract manufacturer* case where the transfer price is set such that the manufacturer earns only costs plus a small mark-up with the majority of profits going to the downstream firm.

In sum, the product comparables method (CUP) is the preferred transactional method for determining the transfer price. Where it cannot be used, functional comparables methods (RP, C+) are the second choice. Historically, the U.S. regulations used this hierarchical approach: CUP first, RP second, and C+ third. In the 1994 final section 482 regulations, the hierarchy of methods was abandoned in favour of the best method rule (i.e., use the 'best method' for the facts and circumstances of the case). In Canada, as in the OECD transfer pricing reports, the resale price and cost plus methods are given the same (second place) priority after CUP. The disadvantage of both the RP and the C+ methods, vis-à-vis

CUP, as we have shown, is that they only focus on one side of the transaction, either that of the seller or the buyer.

The Profit Split (PS) Method

Where none of the three basic transfer pricing methods can be applied, either because there are no suitable product comparables (the CUP method) or functional comparables (the RP and C+ methods), generally the regulations suggest the use of fourth/other methods. The most common other method in practice has been the profit split (PS) method, whereby the profits on a transaction earned by two related parties are split between the parties.

The profit split method allocates the consolidated profit from a transaction, or group of transactions, between the related parties. Where there are no comparables that can be used to estimate the transfer price, this method provides an alternative way to calculate or 'back into' the transfer price. Various ratios can be used to split the profits on the transaction between the related parties; the most commonly recommended one is return on operating assets (the ratio of operating profits to operating assets). An example of the PS method, using return on operating assets to divide the profits, is provided in Box 1.6; see also Figure 1.8. In the example, the financial statements of two related firms are shown individually and on a consolidated basis (so that intrafirm transactions cancel out).

Firm A, the manufacturer, produces and sells 100 lamps each time period to firm B at a transfer price of $1.50 per lamp, for total revenue of $150. A incurs cost of goods sold (COGS) or manufacturing cost of $120; this amount represents the costs of material inputs, labour, and overhead costs. After subtracting COGS from total sales, the firm earns *gross profit* of $30. In addition, the firm incurs operating expenses (SG&A and R&D costs) of $10, leaving it with $20 in operating profit. After subtracting cost of goods sold and operating expenses, the manufacturer makes an *operating profit* of 20 cents per lamp, which is a four per cent return on A's operating assets. Lastly, A has net interest expense on its debt of $3, for a final *net profit or income* of $17.

The purchaser, firm B, sells the lamps for $2.00 per unit, giving it an operating profit after costs of 30 cents per lamp, for a return of two per cent on its operating assets. The consolidated operating profit of the MNE as a whole is 50 cents per lamp, with an average return on assets of 2.5 per cent.

Note that firm A has only one-third the operating assets of firm B, yet it receives a higher return than B. If return on operating assets is used to divide the overall profit of $50, then one-quarter of the operating profits should go to A and three-quarters to B. Thus A's profit should be $12.50 and B's should be

BOX 1.6
The Profit Split Method (Based on Return on Operating Assets)

Assume firms A and B are related. Each period, A makes and sells 100 lamps at a transfer price of $1.50 to B, and B distributes and sells the lamps to consumers at a price of $2.00. A's and B's financial statements are reproduced below:

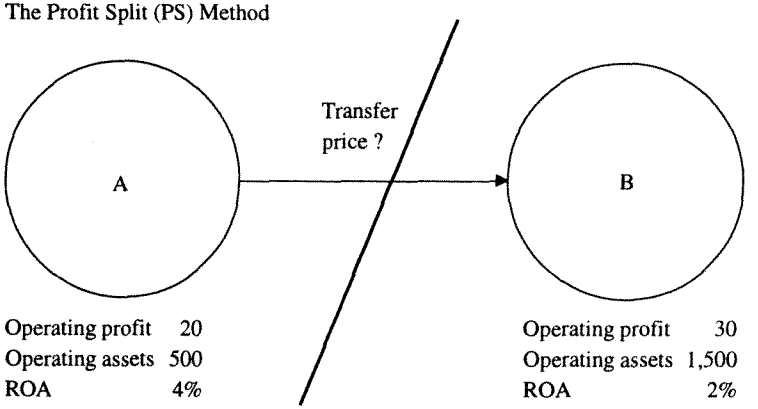
Financial statement	Firm A	Firm B	Consolidated
Quantity of lamps	100	100	100
Selling price	$ 1.50	$ 2.00	$ 2.00
Total sales revenue	$ 150	$ 200	$ 200
Cost of goods sold	120	150	120
Gross profit	30	50	80
Operating expenses	10	20	30
Operating profit	$ 20	$ 30	$ 50
Net income expense	3	2	5
Net income	$ 17	$ 28	$ 45
Operating assets	$ 500	$ 1,500	$ 2,000
Rate of return on assets (%) (ROA)	4.0%	2.0%	2.5%

Note that A's sales revenue of $150 is the value of intrafirm trade; it equals, and cancels, B's cost of goods sold when the accounts are consolidated. The operating profit earned by the two firms is $50. A's return on operating assets (the ratio of operating profit to operating assets) is 4 per cent, higher than B's return of 2 per cent. However, A has only one-third the assets of B.

Under the profit split method, the transfer price is set so that each party shares in operating profit in proportion to the party's share of MNE operating assets. The ratio of A's operating profits to B should therefore be one-to-three, the same as their ratio of operating assets. Another way of saying this is that each firm should earn the average ROA across both firms or 2.5 per cent.

Thus the transfer price should be set such that (1) total profits = $50, and (2) $ROR_A = ROR_B = 2.5$ per cent. This means A's profit should be $12.50 and B's should be $37.50. Working back in the financial statements, for A's operating profit to be $12.50, the transfer price must be ($12.50 + $10 +$120)/100 = $1.425. This lower transfer price gives B operating profits of $200 – $142.50 – $20 = $37.50. The ratio of operating profit of A to B is $12.50/$37.50 = 1/3, and the rate of return of both affiliates is 2.5 per cent.

FIGURE 1.8
The Profit Split (PS) Method



Using the profit split method
A's profit / B's profit 20/30
A's assets / B's assets 500/1,500

Since ratio of assets is 1/3, profit ratio should be 1/3. A's profit is therefore 12.50, B's profit is 37.50. Use profit = sales – costs to "back into" the transfer price.

$37.50, implying a transfer price of $1.425 instead of $1.50. Thus the profit split method 'backs into' the transfer price through the allocation of profits between the related parties.

The method is intuitively simple – split the profits – but the key questions are not simply answered, that is: (1) Which profit measure? (2) How should the profit be split? (3) On what activities? Answering these questions proves that the devil is in the details; i.e., the method is deceptively simple, and can give rise to results that are inconsistent with the arm's length standard. We come back to a discussion of the types, benefits, and costs of profit splits in Chapter 8 (the U.S. rules) and Chapter 13 (reforming the transfer pricing regime: rules and procedures).

The Comparable Profits Method (CPM)

Starting with the proposed section 482 regulations in 1992, the U.S. Treasury has advocated the use of the comparable profits method (CPM). The method

was widely criticized by tax practitioners, multinationals, other governments, and the OECD on the grounds that it was not compatible with the arm's length standard because (1) it was not a transactions-based method, (2) it did not take the contractual obligations of the parties into account, (3) did not reflect the facts and circumstances of the case, and (4) it could lead to substantial double taxation of income if other governments did not accept the method. The U.S. Treasury modified the method in 1993 and again in 1994, each time simplifying the method, and reducing its priority vis-à-vis the other methods. In the final 482 regulations, the CPM method is one of several possible methods, must be tested against the best method rule, and is generally considered a method of last result when transactional approaches (CUP, C+, RP) fail.[15]

In the U.S. regulations, there are nine steps to applying the CPM method:

1. The tax auditor or the MNE chooses the *tested party* – that is, one of the two related parties, preferably the one with the simplest functions and for which the best data are available.
2. The line of business activity to which CPM is to apply is determined; it may be one product or a product line or even broader.
3. Unrelated firms are selected as comparables; comparability is a question of facts and circumstances. Adjustments are made for differences in responsibilities, risks assumed, resource capabilities, and other material differences.
4. A *profit level indicator* is selected as the benchmark for determining the tested party's estimated profit; a common indicator would be the ratio of operating profit to operating assets.
5. The profit level indicator is calculated for each of the uncontrolled firms, and their ratios are applied to the tested party to determine a range of *operating incomes* (the *arm's length range*).
6. The firm's operating income is compared with the arm's length range. If it falls within the range estimated using the profit level indicators of the unrelated firms, the transfer price that generated this ratio is accepted by the tax authority.
7. However, if the firm's operating income lies outside the range, the government can set the firm's income equal to any point in the range, generally the median or mean of the range.
8. Given the final constructed income of the party (the *arm's length result*) the tax authority or MNE then 'backs into' the transfer price that would generate this arm's length result.
9. All remaining profits are allocated to the other related party, as determined by the final transfer price.

BOX 1.7
The Comparable Profits Method

Assume the example in Box 1.6 is continued – i.e., that A makes lamps and sells them to B at a transfer price of $1.50. A's financial statement, unchanged from Box 1.6, is reproduced on the left-hand side below. The right-hand side shows A's income after the comparable profits method has been applied to re-estimate A's operating income according to the return on assets earned by comparable uncontrolled manufacturing firms. The changes are highlighted in bold. We explain them below.

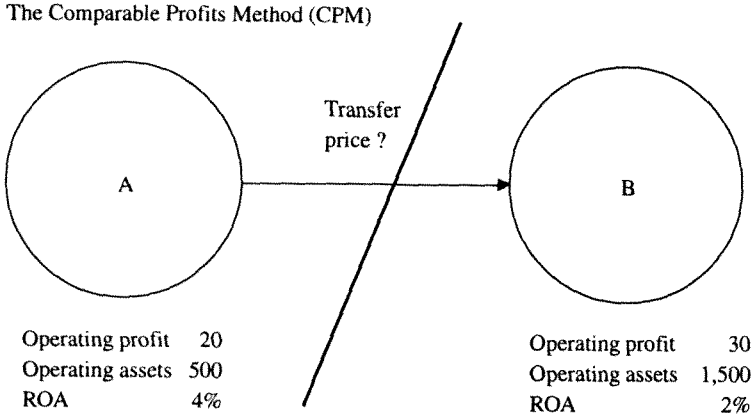
A's statement before CPM		A's statement after CPM	
Quantity of lamps	100		100
Selling price	$ 1.50		**$ 1.625**
Total sales revenue	$ 150.00		**$ 162.50**
Cost of goods sold	120.00		120.00
Gross profit	30.00		**$ 42.50**
Operating expenses	10.00		10.00
Operating profit	$ 20.00		**$ 32.50**
Net income expense	3.00		3.00
Net income	$ 17.00		**$ 29.50**
Operating assets	$ 500.00		$ 500.00
ROR on assets (%)	4.0%		**6.5%**

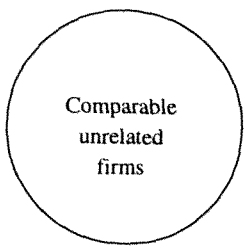
Assume the selected *profit level indicator* is the rate of return on assets as measured by the ratio of operating income to operating assets. The rate of return on comparable uncontrolled firms, as estimated by the tax authority, is as follows: minimum return = 5.0%, maximum = 8%, mean = 6.5%. Given these returns, the *arm's length range* for A's operating income can be calculated as follows:

Minimum constructed income = 5% ($500) = $25
Maximum constructed income = 8% ($500) = $40
Arm's length range = $25 to $40
Midpoint of arm's length range = 6.5% ($500) = $32.50

Since A's actual operating profit of $20 lies outside the arm's length range, the tax authority adjusts the profit to the midpoint of the range, i.e., to an *arm's length result* of $32.50. This implies a transfer price of ($32.50 + $10 + $120)/100 = $1.625. This price is shown above in the right-hand side of the financial statement. Note that a $1.625 transfer price leaves firm B with an operating profit of ($200 – $162.50 – $20 = $17.50, and a return on $1,500 worth of operating assets of only 0.117 per cent.

FIGURE 1.9
The Comparable Profits Method (CPM)





Industry profit level indicator
low ROA 5% high ROA 8%
avg. ROA = 6.5%

The Comparable Profits Method

Assume A is the tested party and ROA is the profit level indicator. Industry ROAs vary between 5 and 8% with a mean of 8%. Therefore A's profit should be in the 25–40 range. A's profit is 20, so it is outside the range. Set A's profit at the midpoint of the range (32.50). Then use profit = sales – costs to "back into" the transfer price.

It is not clear how CPM will be used by the Internal Revenue Service in practice. The comparability requirements, as outlined in step 3, could be quite daunting. On the other hand, if comparability is loosely defined and industry-wide statistics accepted, CPM can be calculated quite simply. All one needs to

do is look up industry rates of returns on assets, as available on the Compustat database for example, for firms performing similar functions. This means the tested party could be defined as a simple distributor or contract manufacturer, industry returns on assets for distribution or contract manufacturing calculated and applied to the tested party, and all remaining profits allocated to the other related firm.

For example, let us take the case presented in Box 1.6 and apply the comparable profits method. This is shown in Box 1.7 and illustrated in Figure 1.9.

Suppose the tested party was firm A, the manufacturer: the profit level indicator was the ratio of operating profit to operating assets; and a sample of contract manufacturers earned a rate of return on assets that varied between five and eight per cent. Applying this range of returns to A's operating profit implies an arm's length range of constructed operating incomes that varies between $25 and $40. Since A's operating income is only $20, it lies outside the range. The mean (average) of the range is $32.50. If the arm's length result is set at the mean of the range, the required transfer price to give A an operating profit of $32.50 is ($32.50 + $10 + $120)/100 = $1.625. This leaves firm B with an operating profit of ($200 – $162.50 – $20 = $17.50. Alternatively, since the median (50 per cent of the observations above, 50 per cent below) of the range could be either higher or lower than the mean, the final transfer price is dependent on the choice of mean versus median.

However, as this simple example illustrates, it also depends on several other choices: the tested party, the comparable unrelated parties, the profit level indicator, and the allocation mechanism. Each choice affects the final determination of the transfer price in ways that can only become clear with experimentation.

Note also that the outcome is quite different from that of a profit split. The PS method ensures that both related parties earn the same return on assets; the CPM, on the other hand, ensures that one of the two parties earns the average or median of returns earned by comparable uncontrolled parties. CPM is therefore somewhat like the cost plus and resale price methods in that it focuses on only one side of total profits – that generated by the tested party – whereas the PS method looks to both sides. We will come back to this discussion in Chapter 8 (the U.S. rules) and Chapter 13 (reforming the tax transfer pricing regime: rules and procedures).

Summary

These simple examples serve only to outline the basics behind the variety of methods that have dominated the transfer price regulations of most governments. The CUP-RP-C+ trio was first adopted by the U.S. Treasury in 1968, then spread to other countries including Canada, and now forms the core of the OECD's recommended transfer pricing methods. The profit split method has

been a fourth method on paper for some years, and in practice the method used by the U.S. tax courts to allocate taxable income in transfer pricing disputes. The comparable profits method is the newest of the five rules and the method which enjoys the least support outside of the U.S. Treasury. We will return to the methods in much greater detail in Chapter 5 (the simple analytics of transfer pricing), chapters 8 and 10 (the U.S. and Canadian rules, respectively), and Chapter 13 (reforming the transfer pricing methods).

This concludes our discussion of transfer pricing from the viewpoint of the multinational and from the regulator's perspective, both at the national and international levels. In the last part of this chapter we address the question of the importance of this topic, and provide a brief outline of the remaining chapters in the book.

The Importance of This Topic

Taxing Multinationals deals with the treatment of intrafirm transactions under the corporate income tax, focusing on the transfer pricing choices of the multinational, the U.S. and Canadian transfer pricing regulations, and the international tax transfer pricing regime.

Transfer pricing and tax policy is an important area of research for several reasons. First, the globalization of markets, the Canada–U.S. Free Trade Agreement (FTA) and its 1994 successor the North American Free Trade Agreement (NAFTA), and the growing importance of technology and services in international trade, are all issues dominated by the presence of multinationals. These are large integrated businesses, designed to maximize net-of-tax global profits, and engaged in strategic manoeuvres with their rival firms. How we tax their transfer prices can and does affect their output, sales, and intracorporate trade decisions. In a country as heavily populated with multinationals as is Canada or the United States, understanding the effects of the domestic tax system on multinationals, both domestic and foreign, can have important positive benefits for the economy.[16]

Second, MNE intrafirm trade in tangibles and intangibles has risen rapidly as a share of total Canadian and U.S. trade. About two-thirds of Canada's trade and investment flows are conducted with the United States. Manufacturing accounts for much of this crossborder activity. Roughly 30 to 40 per cent of shipments, value added, investments, and assets in Canadian manufacturing are generated by U.S.-controlled subsidiaries, and over half of their trade is intrafirm (i.e., between affiliates of the same multinational).[17] As we show in Chapter 4 approximately half of Canada–U.S. trade in goods is conducted within MNEs, and up to 70 per cent of trade in business services is in-house.

According to Revenue Canada (RC) officials, over 12,900 Canadian-based corporations were engaged in intrafirm, crossborder trade in 1995. The total dollar amount exceeded Can$318 billion, 69 per cent in tangible property. Three countries (U.S. 73.8%, U.K. 4.9%, Japan 4.4%) dominated this trade. Since most multinationals are headquartered in Ontario, a sizeable proportion (perhaps over 50 per cent) of these flows occur in one province. The dollar amounts are therefore huge and the tax implications clearly important.

Third, this study is a useful complement to studies in other areas. For example, differences in tax bases and tax rates are one of the factors influencing MNE output, pricing, and locational decisions. Therefore this book has implications for interjurisdictional tax comparisons and corporate investment decisions. Statistics on differences in marginal and average tax rates, as calculated by other researchers, can be combined with this study to examine the effects of tax revenue avoidance through transfer price manipulations, both at the federal and subfederal levels. As another example, since transfer pricing falls in the tax avoidance/evasion area, and large MNEs are best placed of all businesses to engage in such manipulations, this book can usefully complement other studies on tax administration, compliance, and enforcement costs.

Fourth, this book is innovative in that it explores transfer pricing from the viewpoint of several different disciplines, attempting to bring them together in a more holistic approach. Economists examine transfer pricing using complicated mathematical models of vertically and horizontally integrated firms to predict the effects of small changes in government policy (e.g., changes in tax rates or bases) on firm behaviour and performance. Lawyers examine transfer pricing from the viewpoint of redefining the laws in a constantly changing and difficult area of international taxation. Business professors look at transfer pricing as a management tool, while cost accountants worry about allocating revenues and expenses among units of the MNE. This book attempts to bring all these areas together, to lessen the 'dialogue of the deaf' that exists among the different disciplines in the transfer pricing area.

And, finally, the timing is right. The U.S. Treasury has finished its decade-long overhaul of its tax transfer pricing regulations. The final version of the section 482 rules are in place and the section 6662 penalty regulations are finalized. The Advance Pricing Agreement (APA) process is well underway and the first summary of the APAs (as applied to global trading) has been released. The U.S. Supreme Court has finally decided that the state of California can legally apply unitary taxation to foreign multinationals doing business in the state. So, inside the United States, the tax transfer pricing regime has finally clarified and settled. At the international level, the OECD's Committee on Fiscal Affairs has released its overhaul of the 1979 and 1984 transfer pricing reports in pieces as

OECD (1994b, 1995a, 1995b, 1996). The final, complete version will be OECD (forthcoming).

If the first period of the historical development of the international tax transfer pricing regime was from the early 1920s until the mid-1960s, and the second period began with the U.S. transfer pricing regulations in 1968, the third period clearly began with the U.S. Congress enacting the Commensurate with Income standard in 1986. That event unleased an enormous flood of legislative changes over the 1986–96 period. The 'baby has been birthed' in the United States; a new set of transfer pricing rules, developed over ten years (1986–96), is now in place. We may be at the beginning of a new phase of consolidation in transfer pricing regulation.

Where does Canada fit in this picture? The United States is Canada's largest trading and investment partner. Canada is an active participant in developing, and is committed to abiding by, the rules of the OECD. As the OECD and the United States change their tax transfer pricing rules, should Canada not look at its own policies? The Canadian regulations have been in place since 1987 when Revenue Canada issued Information Circular 87–2. The timing is right for examining the changing international regime at the OECD and U.S. levels to see whether or not Canada's rules and procedures should be overhauled in the light of events elsewhere. One purpose of this book is to provide such an examination.

APPENDIX 1.1
SEARCHING FOR A CUP: THE CHRISTMAS TREE CASE

This appendix provides an example of the information needed to find a comparable uncontrolled price for an apparently simple case – the pricing of Christmas trees.[1] In the 1950s, J. Hofert Corporation was a U.S. parent firm in the Christmas tree business, with a Canadian subsidiary that harvested and shipped Christmas trees to its parent. The dispute with Revenue Canada arose over the transfer price for the Christmas trees.

The Facts of the Case

The Christmas tree industry is a natural resource industry, based on the harvesting, processing, and shipping of evergreen trees for sale during the December holiday season. Trees are grown year-round, cut in the late fall, checked for size and quality, and shipped in bulk by truck or rail boxcar to urban centres, where they are distributed for sale primarily in small lots adjacent to shopping malls. It

appears to be a reasonably simple business, with a readily ascertainable price for the tree, depending on its height, type, and quality. Therefore a comparable uncontrolled price should be readily available; the Hofert case demonstrates that there can be many slips between the CUP and the transfer price.

J. Hofert Company was a U.S. corporation, headquartered in Los Angeles. In 1946, the firm (hereinafter referred to as Hofert USA) set up a Canadian subsidiary, J. Hofert Limited (hereinafter referred to as Hofert Canada), located in British Columbia. The subsidiary's purpose was to harvest and ship Christmas trees under long-term contract to its parent. (In terms of Box 3.3 in Chapter 3 the subsidiary was a category 2 affiliate, a processor.) In the early 1960s, Hofert USA was the largest dealer in Christmas trees in the United States.

The contract between Hofert USA and its Canadian subsidiary, originally written in 1946 and still in force in 1962 at the time of the court case, obliged Hofert Canada to sell and deliver each November as many Christmas trees to Hofert USA as the parent required. The subsidiary was to deliver trees of 'merchantable quality ... free from disease' and 'subject to inspection by Buyer, which shall have the right, prior to shipment thereof, to reject any trees not in conformity with the specifications' (62 DTC, 50–1).

The parent firm paid its subsidiary for the costs of 'buying, hauling, inspecting, grading, tagging, tying and loading' the trees onto railroad cars plus a mark-up of eight per cent over cost (62 DTC, 51). Where Hofert Canada cut down trees from its own lands, Hofert USA paid its subsidiary for the costs of cutting down the trees plus ten cents for each delivered bale[2] of trees. In addition, Hofert USA supplied Hofert Canada with twine, labels, and staples free of charge [3]and advanced $5,000 to the subsidiary as part payment for the trees; final payments were made in May of the following year.

The tax issue arose because Hofert Canada not only sold Christmas trees to its U.S. parent, but also sold them to unrelated buyers in Western Canada. Table A1.1 provides data on these sales for the tax years 1954–6, the period audited by the Department of National Revenue (what we now call Revenue Canada).

The department argued that Hofert Canada's sales to its U.S. parent had not been negotiated at arm's length, and that the price charged the parent firm (between $2.00 and $2.04 per bale) was far lower than the price charged to unrelated Canadian customers (between $2.75 and $3.19 per bale). As the table shows, the average difference over the three-year period between the two prices was 90 cents, making the average U.S. price approximately 31 per cent below the average Canadian price. Citing section 17(2), the predecessor of section 69(1), the department argued that the taxpayer had sold the trees to a related buyer at a price less than fair market value. Hofert Canada appealed the assessment.

TABLE A1.1
Hofert Canada's Total Sales, 1954–1956

	1954	1955	1956	Total
Number of bales to Hofert USA	124,824.00	138,491.00	139,462.00	402,777.00
Price to Hofert USA	**$2.00**	**$2.00**	**$2.04**	**** 2.01**
Total sales to Hofert USA	249,648.00	276,982.00	284,502.48	811,132.48
Number of bales sold in Canada	18,309.00	20,246.00	14,048.00	52,603.00
Price to Canadian buyers	**$2.75**	**$2.87**	**$3.19**	**** 2.91**
Total sales in Canada	50,349.75	58,106.02	44,813.12	153,268.89
Related sales as a % of total sales	83.22	82.66	86.39	84.11
Canadian price minus U.S. price	0.75	0.87	1.15	0.90
Difference in prices due to trade level	0.55	0.71	0.98	## 0.70
Price difference as % of the Canadian price	27.27	30.31	36.05	30.93
Basic cost of production	1.85	1.85	1.89	1.86
Estimated unit profit on Canadian sales	0.35	0.31	0.32	0.35
Estimated markup over basic cost on Canadian sales (in %)	18.92	16.76	16.93	18.82

** average price charged (total sales divided by total quantity sold).
calculated as the sum of the products of the price difference multiplied by the U.S. quantity, all divided by the total U.S. quantity.
SOURCE: Based on data in *J. Hofert Ltd. v. Minister of National Revenue* 62 DTC, pages 51–53

The Tax Appeal Board Decision (1962)

Judge R.S.W. Fordham, Q.C., heard the case at the Tax Appeal Board. The judge's decision began by defining fair market value as a 'commercial and not a legal term ... [that] involved a question of fact into which many considerations might enter' (62 DTC, 52). He then asked for the facts. 'What was the *fair market value* of Christmas trees in Western Canada in 1954, 1955 and 1956 and how was it determined?' (62 DTC, 52). Unfortunately, he said, the department had not provided any facts, other than the prices at which Hofert Canada sold trees to unrelated buyers in Canada. However, these prices, he argued, were not fair market value because the circumstances were 'entirely different from those that prevailed where the American purchaser was concerned' (62 DTC, 52). Judge Fordham then proceeded to outline the differences between the two sets of prices.

First, he noted, it cost Hofert Canada more to sell trees in Canada than to its U.S. parent because the trade levels were different. Hofert USA was a middleman, buying the trees and reselling them to distributors, wholesalers, and retailers in the U.S. market. About 60 per cent of the parent's sales were directly to

retailers. Canadian sales, however, were all to retailers. Therefore the subsidiary's expenses were higher on its Canadian sales because the firm was responsible for distribution and wholesale costs, for which it was not responsible on sales to its U.S. parent. These additional costs included 'the payment of wages and other expense incurred between roadside and delivery points ... of 55 cents, 71 cents and 98 cents per bale' respectively (62 DTC, 52). As Table A1.1 shows, these additional costs, averaging 70 cents per bale, account for almost 80 per cent of the average price difference (that is, $0.70/$0.90).

Second, the volume of sales differed significantly. Over 80 per cent of Hofert Canada's shipments went to its parent firm. Since bulk buying offers certain economies of scale, the U.S. price should be lower, reflecting these economies.

Third, in spite of the contract which allowed Hofert USA to reject any trees that did not conform with its specifications, in practice, all bales purchased by the parent firm were paid for by the parent even if some of the trees were unsatisfactory. The subsidiary's Canadian customers, on the other hand, did not pay for unsatisfactory trees. In addition, if trees were not sold by the end of the Christmas season, Hofert Canada had to take back the Canadian ones but not those sold to its parent. Therefore the U.S. price should be somewhat lower than the Canadian price, reflecting these differences.

Fourth, the parent firm provided twine, labels, and staples free of charge to the subsidiary, and also advanced it $5,000 in funds to carry out the agreement, again justifying a lower price.

Lastly, the judge noted that the yearly net profit on Hofert Canada's local sales was no higher than on sales to its U.S. parent. Since the profit-to-sales ratios were similar, Judge Fordham concluded it was difficult to argue that preferential treatment had been given to the parent firm. He therefore concluded that there was no essential relationship between the Canadian and U.S. prices and found in favour of the taxpayer.

An Economic Analysis of the *Hofert* Case

The Hofert case demonstrates that an appropriate transfer price depends on the facts and circumstances of the case. The price Hofert Canada charged its parent for Christmas trees was clearly *less* than the price the subsidiary charged its Canadian customers. That, however, did not automatically mean that Hofert Canada was undercharging its parent. The key issues, both identified by Judge Fordham, were (1) whether the two prices were comparable, and, if not, (2) what was a comparable uncontrolled price (CUP)?

Box A1.1 outlines some of the factors that must be considered in finding product comparables. For both homogeneous and differentiated products, factors that

BOX A1.1
Searching for a CUP – Guidelines for Comparables

General factors that must be considered in finding comparables:

Volume or lot size: How many are you buying? Is there a discount for larger sizes?

Contract duration and price protection: How long is the contract for?

Product form: Is the commodity purchased in bulk or packaged?

Delivery point: What is the method of transportation and what are the transport costs?

Quality: Is the good technical grade, 99 per cent pure or 99.99 per cent pure?

Trade level: What are the franchise's rights and obligations?

Warranty provisions and credit terms

Additional factors to be considered in finding comparables for differentiated products:

Product features: factors such as size, materials, weight

Price differentials that may be related to the product features

Intangibles: Are intangibles tied up with the product, e.g. the name and reputation of the company?

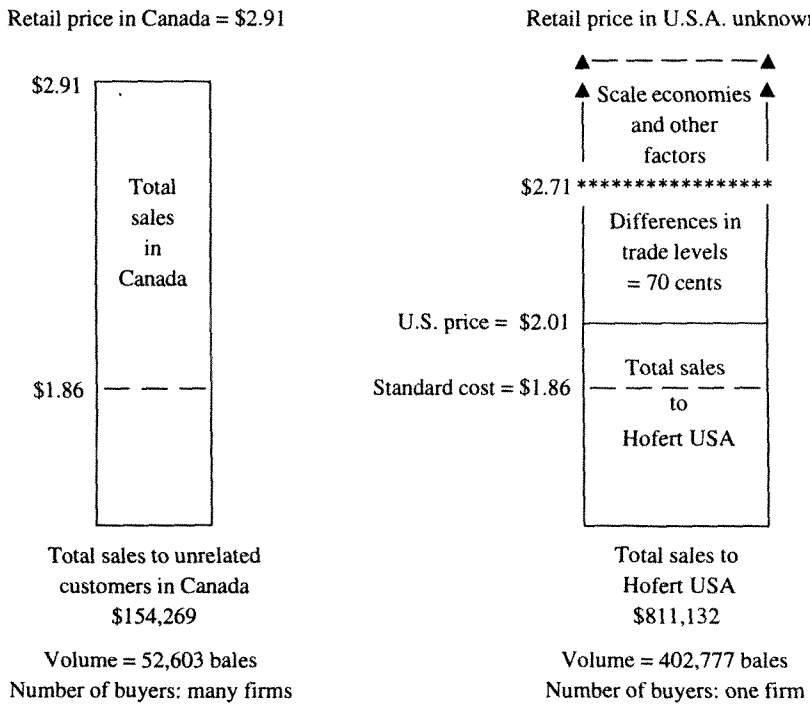
Place in product line: Is the product part of a line of differentiated products?

must be considered include volume, contract duration, product form, delivery schedule, quality, trade level, warranty and credit terms. In addition, differentiated products require additional consideration. Factors include product features, price differentials related to these features, where the product fits in the MNE's product line, and the uniqueness of any intangibles included in the package.

On the first issue, the court rejected the Canadian price as the fair market value on the grounds that the products were not comparables. The volume of shipments and the functions the taxpayer performed varied so much that the prices were not comparable. This is illustrated in Figure A1.1, which shows prices, quantities, and sales by Hofert Canada to its U.S. parent and to unrelated Canadian customers.

On the second issue, the judge noted that no one had presented evidence for

FIGURE A1.1
Explaining the Price Differential in the Hofert Case, 1954–1956



another suitable CUP. There was evidence that the differences in terms and conditions justified the U.S. price being lower than the Canadian one, and some evidence presented that perhaps 80 per cent of the difference (an average of 70 cents) could be explained simply by differences in trade levels. Adding volume discounts, credit advances, quality of the trees, and provision of free inputs, the judge concluded that the differences in the terms and circumstances fully explained the price differential (see Figure A1.1).

As a check against his calculations, the judge also used the rate of return Hofert Canada earned on sales, arguing that the net profit rates it earned on Canadian and U.S. sales were similar. Although the calculations are not in the case, we can interpret the judge's argument as follows.

Hofert USA paid its subsidiary for basic costs plus eight per cent; thus the

subsidiary was a cost centre for the parent firm, and paid on a cost plus basis. The final price was only known when the total amount paid by Hofert Canada was calculated on a per-bale basis; that is, the U.S. price was (1 + 0.08) times the average cost of production. Since the U.S. price was almost constant over the three-year period, this meant Hofert Canada's average costs were also constant. An average price of $2.01 implies an average cost of $1.86 and a mark-up over costs of 15 cents.

Since Hofert Canada incurred these basic costs on both its Canadian and U.S. sales, if we add in the costs due to the difference in trade level, and subtract that total from the Canadian price, we can calculate an upper bound to the firm's per-unit profit on its Canadian sales; that is, $2.91 – ($1.86 + $0.70) = $0.35 per bale of trees. (Annual estimates are shown in Table A1.1.) This mark-up is more than double the average mark-up over costs for U.S. sales of $0.15. As a per cent of the basic cost level of $1.86, the mark-up on Canadian sales averages 18 per cent compared with 8 per cent for U.S. sales. Clearly, some portion of the difference in mark-ups – perhaps as high as ten points – is really a discount to Hofert USA for its volume purchases, as was argued by Judge Fordham. A closer look at the data suggests this, in fact, is the case.

As Table A1.1 shows, the price in Canada rose 16 per cent over the three-year period, from $2.75 to $3.19, while the price to Hofert USA hardly moved from its initial level of $2.00. Since the basic cost of production also hardly moved, this meant either that some other costs associated only with Canadian sales increased between 1954 and 1956, or that Hofert Canada raised its price as the Canadian market tightened. Since Hofert USA's share of the subsidiary's total sales varied little over this period (between 83 and 86 per cent), we can rule out changes in purchasing economies as responsible for the increasing gap between the two prices. In addition, other terms of the long-term contract (e.g., the financial advance, provision of free inputs) did not change.

In fact, as the data show, one cost that did substantially increase over the period was that associated with the difference in trade levels; this cost increased by more than 50 per cent, from 75 cents to $1.15 over the three years. If we calculate the profit mark-up (after the difference in trade levels) over basic costs, the mark-up on Canadian sales stays roughly constant at 17–19 per cent of basic costs (see A1.1 Table). The mark-up on U.S. sales is eight per cent each year, according to the long-run contract. Therefore, even though the two price series diverge over the period, the mark-ups over cost do not change. From this we conclude that Hofert Canada was earning approximately the same per-unit net profit on its intrafirm sales to its U.S. parent as the subsidiary earned on unrelated sales to its Canadian customers, once we allow a discount for differences in the volume of purchases.

Lessons Learned from the *Hofert* Case

The Hofert case is a nice example of a dispute over the pricing of a tangible. Christmas trees vary by height, quality, and volume; the producer can sell at different trade levels in markets that vary by distance; the contract terms can vary in length and financial conditions. Each of these factors is part of the *facts and circumstances of the case* – facts and circumstances that can turn an apparent CUP into an irrelevant comparison, as Judge Fordham properly concluded.

NOTES

1 The summary of the Hofert case is based on *J. Hofert Limited. v. Minister of National Revenue* (62 DTC, pages 50–3). See also Nathan Boidman and Gary Gartner (1992).
2 A bale contained between one and eight trees depending on the size of the tree; the shorter the tree, the larger the number in a bale.
3 An extra wrinkle not discussed in any detail in the case is the tariff issue. Hofert Canada had to declare a customs value, and pay customs duty, on these imports of twine, labels, and staples, even if the parent firm furnished them free of charge. Hofert Canada then had to apply for duty drawbacks once the imported inputs were used on the trees and the trees subsequently exported to the U.S. parent.

APPENDIX 1.2
A TYPICAL BUSINESS INCOME STATEMENT

Income Statement	
	Net sales
minus	Cost of goods sold (COGS)
	Gross profit
minus	Operating expenses
	Operating profit
minus	Other income/(expenses)
	Earnings before interest and taxes (EBIT)
minus	Net interest expense
	Net income before taxes
minus	Provision for taxes
minus	Extraordinary items
	Net income after taxes

SOURCE: Based on Chandler and Plotkin (1993, 45)

APPENDIX 1.3
DIFFERENCES IN ECONOMIC AND ACCOUNTING METHODOLOGIES

Unit of analysis	Economic concepts	Accounting concepts
The firm	single proprietorship with one entrepreneur-cum-manager running the business and receiving all profits	legal entity
Profit	normal profit (opportunity cost of entrepreneur) and economic profit (any return over and above normal profit, competed away in perfect competition)	accounting profit
Costs	economic costs	accounting costs
How costs are measured	opportunity cost (next best alternative use, so that sunk costs are sunk)	contractual outlays
Gains	gains on an accrual basis	gains on a realization basis
Model of firm behaviour	profit maximization	market share plus profit floors; dividends to shareholders
Model of competition	perfect competition, all firms are price takers	oligopoly, firms are price makers but compete primarily on the basis of nonprice competition
How assets are valued	value assets at current replacement cost	value assets at historical cost

2

The International Tax Transfer Pricing Regime

Introduction

The purpose of this chapter is to explain how and why tax authorities regulate the transfer pricing policies of multinational enterprises. We see these regulations as having a coherent structure and focus, such that they may be characterized as part of an *international tax transfer pricing regime* (the *TTP regime*). International regimes are sets of functional and behavioural relationships among national governments in particular issue areas of the international political economy. We argue that there exists an international TTP regime in which national tax authorities have cooperated to develop certain principles, norms, rules, and procedures designed to facilitate state regulation of multinationals and to reduce conflicts between MNEs and nation-states in the corporate income tax area.

In this chapter, we first outline the general theory of international regimes and provide one example. We next develop the concept of an international tax regime, and examine its characteristics (purpose and scope, principles and norms, and rules and regulations). We argue that nested within the international tax regime is an international tax transfer pricing regime and then we explore the characteristics of this regime. Appendix 2.1, at the end of the chapter, outlines a variety of approaches to international taxation of multinationals that have been recommended by the United Nations, the Organization for Economic Co-operation and Development (OECD), and the Harvard University Model Tax Code.

The Theory of International Regimes[1]

Here we outline the theory of international regimes and then illustrate the theory with one well-known application, the international trade regime based on