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Transfer Pricing, Tax Havens and Global Governance

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Foreword

This study has been prepared as part of the Managing Global Governance Programme, an initiative of the German Ministry for Economic Cooperation and Development (BMZ), implemented jointly by the German Development Institute (DIE) and Capacity Building International Germany (InWent) in 2008. The author would like to acknowledge with gratitude the valuable suggestions and guidance of Thomas Fues of DIE, Quentin Dupriez and Mike Pfister of the United Nations Conference on Trade and Development (UNCTAD), Nagesh Kumar of Research and Information System for Developing Countries (RIS) and Khan Masood of Jamia Milia Islamia. The author is also grateful to Manoranjan Hota, Sachin Chaturvedi, S.K. Mohanty and Ram Singh for their help and encouragement. The views expressed reflect the personal opinion of the author and cannot in any way be ascribed to the Income Tax Department of the Government of India or to other institutions and persons referred to above.

Abstract

Tax-motivated transfer pricing has attracted world attention owing to the existence of low-tax jurisdictions and the volume of the activities of multinational corporations (MNCs). MNCs have many instruments for shifting profits through transfer pricing, and tax havens provide ample opportunity for this. Tax havens pose the threat of capital flight and income shifting from high-tax countries. At present, there are two ways of tackling this problem: by applying the arm's length principle to determine the tax payable by MNCs in a particular jurisdiction or by using a formula to allocate tax payable by MNCs between countries. Based on various studies conducted so far, this paper summarizes the advantages and disadvantages of these methods in solving the problem of profit-shifting by MNCs. The predicament is truly global in nature, and no single country or group of countries can hope to resolve it. It is high time a global institution was set up to calculate MNCs' worldwide income and to provide tax authorities with timely information.

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Abbreviations

BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung
CUP	Comparable Uncontrolled Price
DIE	Deutsches Institut für Entwicklungspolitik
DTAA	Double Taxation Avoidance Agreement
FA	Formula Apportionment
FDI	Foreign Direct Investment
GDP	Growth Domestic Product
InWEnt	Internationale Weiterbildung und Entwicklung
MNC	Multinational Corporation
OECD	Organisation for Economic Co-operation and Development
PI	Portfolio investment
R&D	Research and Development
SA	Separate Accounting
SCMS	Serial Copy Management System
TRIMS	Trade-Related Investment Measures
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

1. Introduction

Tax is the price of civilization. Tax havens are the price of globalization. They are the bulging pockets of the market economy. The dominant feature of the present wave of globalization is the global movements of capital and information, both brought about by information technology. Mobility of capital, low taxes and secrecy coupled with restriction on the free flow of information is the reason for the mushrooming of tax havens. Harnessing resources for the common good is the task of governments, and it is possible only if taxes are collected. Tax base flight poses a challenge to most nations, irrespective of their stages of development.

Multinational corporations (MNCs) are formidable players on the global landscape. According to the United Nations Conference on Trade and Development (UNCTAD) 2007 World Investment Report, MNCs account for 10 percent of world Gross Domestic Product (GDP) and one third of world exports. In 2006 their sales, value added and exports are estimated to have increased by 18, 16 and 12 percent respectively. They are growing faster than the average growth of the world economy's GDP. Like any enterprise in business, MNCs want to maximize their profits. By definition, they have units in more than one tax jurisdiction, and it is estimated that 60 percent of the trade done by multinationals occurs within the group. The prices set for these internal transfers are not verifiable and are not governed by market principles. This is the greatest irony of free market economics: a substantial proportion of world trade (that occurring within MNCs) is not governed by prices set by the market! The price set for a transaction within a business group (controlled transactions), i.e. between the parent company and an affiliate or between related entities within the business group, is known as the transfer price. Transfer pricing is one of the most important tax issues faced by MNCs (UNCTAD 1999). "*The problem addressed by the transfer pricing rules is the absence of market friction in transactions between controlled persons and the resulting need to verify prices in such transactions for income tax purposes and, if necessary, to adjust for that absence*" (Rosenbloom 2005).

Coupled with the existence of tax havens, these intra-firm transactions provide a façade of legality for the shifting of profit from one jurisdiction to another, low-tax jurisdiction as a normal course of business events. To illustrate the magnitude of the problem and the ingenuity of the actors, it suffices to mention here Rupert Murdoch's News Corporation, which has earned profits of US$ 2.3 billion in Britain since 1987 but has paid no corporation tax there (Economist 2000). The much discussed tax investigation in February 2008 into the financial affairs of Klaus Zumwinkel, the then chief executive of Deutsche Post in Germany, clearly shows how tax-dodging schemes in Liechtenstein, a tax haven, help the tax evaders. The issue of international transfer pricing is closely linked to tax havens. MNCs have no incentive to manipulate transfer prices if both home and host countries have similar tax structures. Apart from the tax differences between two normal countries, the existence of low-tax jurisdictions, coupled with mobile capital, complicates the issue of tax compliance.

Options available to countries for preventing tax-motivated transfer pricing are limited in the globalized world. There is an urgent need to augment policy instruments to keep the tax base intact and also to create a 'level playing field'. The objective of this study is to evaluate the ways and means available to governments to prevent tax-motivated transfer pricing. Juxtaposed with transfer pricing, tax havens emerge as part of the problem for tax administration. As transfer pricing is closely linked to low-tax countries, the magnitude and impact of tax havens is analysed in the second part of this paper. The third part gives an analysis of various motives for the manipulation of transfer prices, the instruments used by MNCs to carry it out and its impact on economies. The fourth part analyses the options available for stopping transfer pricing with income shifting as its objective, focusing on the advantages and disadvantages of separate accounting and formula apportionment methods. The fifth part briefly examines the efforts of international tax regimes to plug the loopholes and makes a number of policy recommendations. The initiatives taken by the G20 are considered. The major policy recommendation is that a multinational agency should eventually be established to calculate the tax bases of MNCs, with an organization set up in the short run to collect and share actionable information on MNC activities across the globe.

2. Opportunities and incentives presented by tax havens

Tax havens present tax evaders with opportunities and incentives. While the definition of a tax haven varies, the most common features of these territories are low taxes on foreign business activities and unwillingness to share information with other tax jurisdictions. Organisation for Economic Co-operation and Development (OECD 1998) provides a useful definition of a tax haven as a jurisdiction that imposes no or only nominal taxes itself and offers itself as a place for non-residents to escape tax payments in their country of residence.[1] On the basis of various parameters, 59 countries are classified as tax havens (Lorraine / Kudrle 2005; Dharmapala / Hines Jr. 2007).[2] Many of these territories are very small in geographical and population terms. They have fiscal autonomy even if they are not fully sovereign nations recognized by the United Nations. As they have strong administrations, they offer a guarantee against future rises in tax rates, expropriation and leakage of information to other tax jurisdictions. The available evidence indicates that tax havens have flourished in the years since 1982 (Hines Jr. 2004).

The existence of tax havens has left other countries with limited options as regards tax rates and tax regimes. The difference between portfolio investment (PI) and foreign direct investment (FDI) needs to be taken into account while analysing the FDI and taxation. Portfolio capital is much more mobile than FDI. The treatment of capital gains, the basis on which they are taxed (accrual or realization) and the tax rates applied (income tax or corporation tax rates or a different tax rate altogether) are the main differences between countries that give rise to tax arbitrage opportunities. The complex derivative instruments available in the portfolio investment market allow investors to arrange their investments in such a way that they are outside any country's tax structure. PI is much more volatile and highly sensitive to tax rates (Schjelderup 2001). Apart from the fear of the flight of portfolio capital, the low-tax jurisdictions have caused tax competition among countries wanting to attract FDI. There is ample empirical evidence to show that countries compete with each other on tax rates (Devereux / Lockwood / Redoano 2008). Tax competition is not only harmful to public finance, but also likely to harm local communities and the environment (Killian 2006). Tax differences cause income to shift from one country to another. Taking the manufacturing sector as their basis, Bartels-

1 Four key factors are used to determine whether a jurisdiction is a tax haven: 1. whether it imposes no or only nominal taxes; 2.whether there is a lack of transparency; 3. whether there are laws or administrative practices that prevent the effective exchange with other governments of information for tax purposes on taxpayers benefiting from no or nominal taxation; 4. whether or not it is required that the activity be substantial (OECD 1998).

2 See Appendix 1.

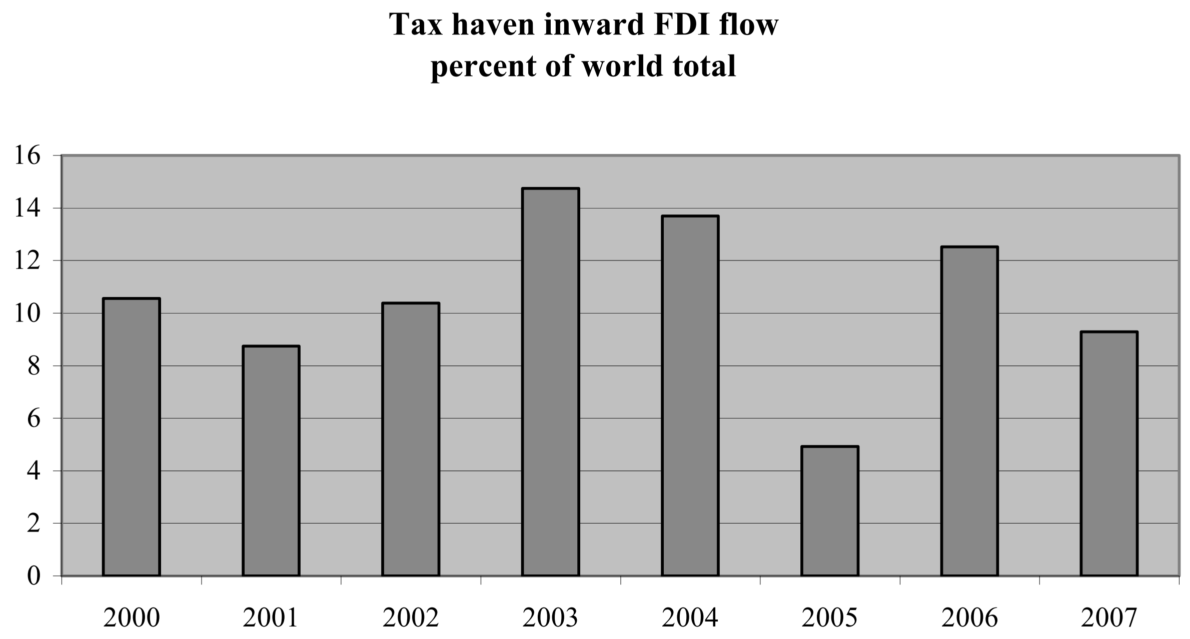
mann and Beetsma (2001) have estimated that, at the margin more than 65 percent of the additional revenue resulting from a unilateral tax increase is lost because of income shifting even among countries which are not tax havens. Weichenrieder (2007) has detected profit-shifting behaviour in MNCs based in Germany. Schwarz et al. (2008) have found that an MNC's profit shifting within a country depends on a weighted average of international tax rate differences among all the countries where the MNC is active. Affiliates in countries with low tax rates, which imply a high tax cost of repatriating earnings, hold more cash than other affiliates of the same firm (Foley et al. 2007).

2.1 The magnitude of FDI flows to tax havens

Tax havens are an enormous drain on other (non tax haven) countries' resources. To illustrate the problem, roughly 30 percent of US Treasury securities are held by some of these tax havens. The US Treasury's notes (30 April 2008) in its statistics clarify the buying and selling of US Treasury bills in tax havens by the residents in the tax havens. The US Treasury clearly recognizes that tax havens are conduits for the residents of other nations wanting to route their investments. FDI in tax havens in the Caribbean and South Pacific grew more than fivefold between 1985 and 1994, to over US$ 200 billion (Morisset / Pirnia 2001).

As Figure 1 shows, tax havens received around 9 percent of total FDI inflows in 2007, down from 12.5 percent in 2006. Figure 1 also demonstrates that FDI flows to tax havens show a great deal of variation over time. The greater volatility of FDI flows to tax havens when compared to FDI flows into non-tax havens is mainly due to fewer restrictions on the movement of

Figure 1: Inward FDI flows to tax havens, 2000–2007

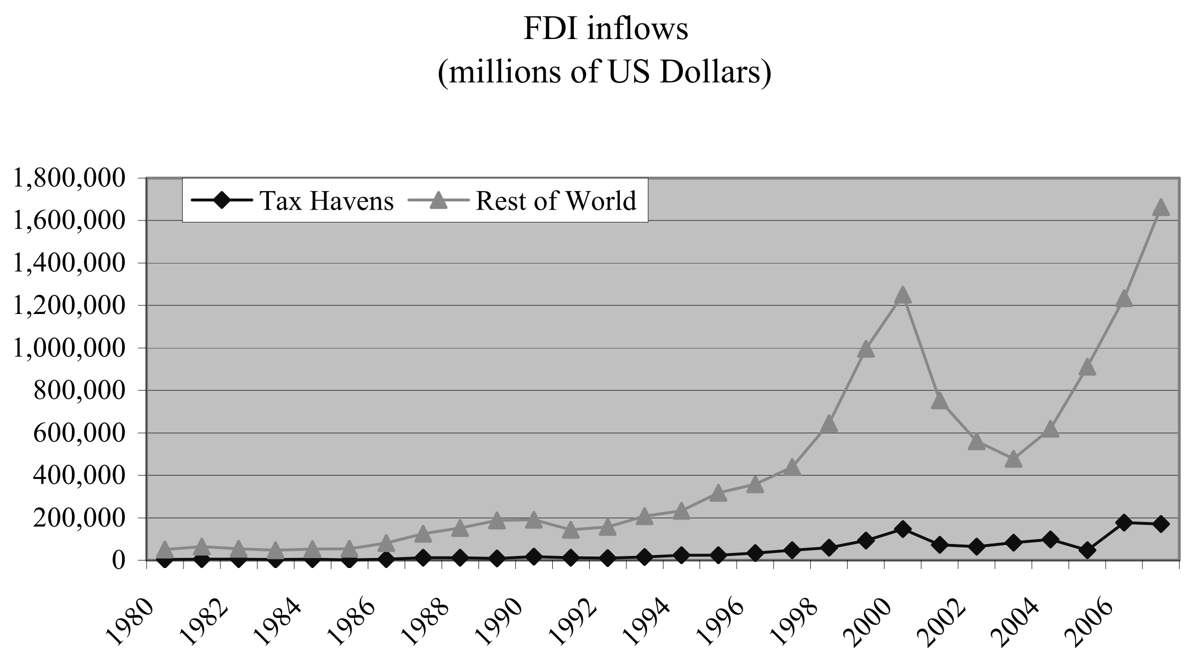


Source: UNCTAD (2008)
Note: Tax haven countries were chosen according to Dharmapala / Hines Jr. (2007); Lorraine / Kudrle (2005). See Appendix for details.

capital as well as the quality of FDI in these small tax jurisdictions, which may differ substantially from that of other countries.

Calculating the growth of FDI inflows between 1980 and 2007 by using the numbers presented in Figure 2 below indicates that FDI inflows to tax havens grew by 5,472.8 percent, whereas world FDI inflows to non tax havens (the rest of the world in Figure 2) grew by 3,159.5 percent (UNCTAD 2008).

Figure 2: Comparative FDI inflows into tax havens and non tax havens, 1980-2007



Source: UNCTAD (2008)
Note: Tax haven countries were chosen according to Dharmapala / Hines Jr. (2007) and Lorraine / Kudrle (2005). See Appendix for details.

On the question whether tax havens divert economic activity, evidence evaluated by Desai / Foley / Hines Jr. (2005) suggests that tax haven activity enhances activity in nearby non-havens. This would seem to be true, since it is mobile capital which is attracted to these territories, not investment in real production processes.

2.2 The rationale for tax havens

Tax havens have the backing of some economists, politicians and voices from the general public. They are said to help investment and capital formation by encouraging saving and therefore constitute a major source of capital in the world. As they are low-tax jurisdictions, they exert downward pressure on effective tax rates across the globe, because profits can be easily shifted to them. They are said to help countries to reduce wasteful expenditure on bureaucracy and ineffective public sectors, because countries cannot find enough resources to finance their wasteful spending. The issue of the good or bad effects that tax has on such mobile factors as capital and the possibilities of the flight of MNC capital is the subject of many studies e.g. Gordon (1986); Bucovetsky / Wilson (1991). Optimum taxation of mobile and immobile firms is the subject of the investigation conducted by Hong / Smart (2007); Peralta /Wauthy / van Ypersele (2004).

Box 1: Exodus of companies to low-tax jurisdictions: Recent evidence

"The United Kingdom has proposed tightening its anti-avoidance rules by taxing the passive income of companies with headquarters in the UK. In response to the proposed changes in the tax rates on their business assets, some big companies have already moved their headquarters from the UK. This recent movement is unambiguous evidence of the motives of the companies concerned, which have made it abundantly clear in their statements that they are leaving for tax reasons. Over the last decade, 6 percent of MNCs have relocated partly for tax reasons (Oxford University Centre for Business Taxation). Companies competing with rivals based in low-tax jurisdictions are under pressure to cut their tax bills. UBS, the investment bank, predicts a gradual erosion of governments' ability to tax. Under the UK government plans, non-domiciled foreigners who have been resident for seven years will have the choice of paying a £ 30,000 fee each year if they want to continue claiming the remittance basis. If they do not pay the fee, they will pay normal UK tax on their worldwide income and gains. As of today, they do not pay any tax in the UK unless they bring their earnings into the country. It is reported that the Greek shipping industry is planning to desert London in response to this proposed tax crackdown" (Hope 2008).

"Shire and United Business Media have moved to Ireland from the UK. Kraft, Google, Electronic Arts and Yahoo have shifted their European head quarters (HQs) from the UK to Switzerland. eBay, Amazon and Microsoft have moved to Luxembourg. International Power, Wire and Plastic Products plc (WPP), Astra Zenca and GSK have hinted that they are actively considering the matter. Halliburton has moved from Houston to Dubai. Experian, Hiscox, Omega and Shell have moved their HQs to low-tax jurisdictions. Nike, Starbucks and Cisco Systems have their HQs in the Netherlands. The Netherlands has also attracted Ikea from Sweden and Gucci from Italy. DaimlerChrysler based itself in Germany rather than the US after its merger in 1998 (subsequently unwound) because Germany exempts foreign profits from taxation" (Houlder 2008).

"Perhaps the most notable account of tax motivated portfolio investments and tax evasion is the German attempt to introduce a source tax on interest income in 1994. The first attempt in 1989 failed, since the German bank secrecy law enabled resident investors to evade taxation by a massive channeling of funds into Luxemburg. Later efforts by the German government allowed a substantial amount of income to be tax exempt, effectively sheltering most German households from taxation and making the tax into a source tax on foreign investors" (Schjelderup 2001).

A mathematical model constructed by Slemrod / Wilson (2006) demonstrates that the full or partial elimination of tax havens would improve welfare in non-haven countries, in part because countries would be induced to increase their tax rates, which they have set at inefficiently low levels in an attempt to attract mobile capital. But, using a similar model, Hong / Smart (2007) come to a totally different conclusion. According to their study, while shifting income to tax havens may reduce the revenues of high-tax jurisdictions and increase tax base elasticity, it tends to make the location of real investment less responsive to tax rate differentials.

In principle, then, the existence of international tax-planning opportunities may allow countries to maintain or even increase high business tax rates, while preventing an outflow of foreign direct investment. Investment-enhancing effects of international tax-planning may dominate revenue-erosion effects: an increase in international tax avoidance may lead to an increase in both statutory and effective tax rates on capital, if initial tax rates are not too high, and to an increase in the welfare of citizens of high-tax countries (Hong / Smart 2007).[3] This is in direct contrast to the conventional wisdom of the race to the bottom due to tax competition. Tax havens are not desirable even on the grounds of equity and the principles of 'the level playing field'.

Tax havens survive on tax arbitrages and secrecy clauses. The routing activities of MNCs through tax havens put pressure on the small investors who cannot afford to undertake this kind of routing. Faced with the threat of capital flight, government policies may be at the mercy of the MNCs. Thus tax havens provide ample opportunities for tax avoidance and tax evasion. Inequality of income and wealth is increasing owing to such operations and is having deleterious effects on society in general (Baker 2005). The loopholes in the taxation system and commercial expediency lead to the black hole of tax havens from which little information is forthcoming to enable tax laws to be enforced in a just and equitable manner.

3. Instruments and loopholes for transfer pricing

Transfer pricing is defined as the pricing of the intermediate products or services supplied by one or more related entities to other entities within the same group. MNCs have various affiliates or branches across countries, each unit being a profit centre. The transaction value of a good or service between related enterprises may not always reflect market values. Transfer pricing refers to the distortion between transaction values and market values (OECD 2008). Trade among MNC affiliates is huge because of the vertical integration of their production processes. Prices can be set in three ways in such a situation: the headquarters sets the price, affiliates negotiate with the parent company or related entity and set the price, or the market price is taken as the price of the goods and services supplied within the group.

3.1 Motivations for transfer pricing

It is important to bear in mind that, while economic activity is highly responsive to taxes, there are many aspects of behaviour that are difficult to reconcile with such simple microeconomic incentives as taxes (Gordon / Hines Jr. 2002). Transfer pricing decisions have an impact on accounting, managerial efficiencies, profitability, investment and taxation as well as product and factor prices.

The motives for transfer pricing manipulation can be broadly classified in four categories: managerial, market, government policy and taxation.

3 For the reasons why these two models differ in the conclusions they draw, see pages 17 and 18 of Hong / Smart (2007).

Box 2: Motives and choices of a typical MNC when the parent company is located in a low-tax country and affiliate in a high-tax country

The choice before a company is either to produce in the home country and export to the foreign-country market or to set up a manufacturing unit on foreign soil and supply the foreign market (or the home market) from it.

Once the company decides to set up a production unit in a foreign country, the kind of production activity it undertakes may be decided by various conditions prevailing in the home and foreign countries. Let us assume that the foreign subsidiary (or associate or related party) is producing spare parts used in the company's home-country manufacturing process and further that the foreign affiliate of the home company does not supply these spare parts to anyone else, but exclusively to the home-country parent company. The question now is how to determine the prices of the spare parts. This is the question addressed by transfer pricing regulations. If we now also assume that the tax rates in the two countries are different, with the foreign country, say, having higher rates of corporate tax than the home country, then the typical 'profit maximization behaviour' of the company is expected to be as follows:

	Low-tax jurisdiction	**High-tax jurisdiction**
Loan	Loan provider	Interest payer since it is deductible from profit
IPR	IPR holder	Royalty payer
Technical know-how	Technical know-how	Technical fee payer
Management services	Management services provider	Management fee payer
Brand	Brand holder	License fee payer
Repatriation of dividend		Retained earnings and refinancing
Cash	Holding high cash balance	Holding low cash balance

Managerial motives:

International transfer pricing may be used as a tool to achieve management objectives with strategic consequences (Cravens 1997). There is a tension between managerial and tax objectives of transfer pricing when each unit of an MNC is regarded as a profit centre and if managerial remunerations reflect the profitability of these centres (Göx / Schiller 2006). Even though the 'profit centres' (affiliates or branches) may have a decentralized administrative structure, the group enterprises as a whole may require a centralized financial strategy to ensure efficient coordination of the group's business. To achieve this, MNCs set the transfer pricing of intra-firm flows of goods, services and other assets centrally, thereby taking control over pricing policy away from individual profit centres. This may avoid misallocation of resources and distortion of final prices of the products. In a typical MNC set-up, where some of the costs are related to product components transferred in from related entities, the decision on prices has a huge impact on profitability. The cash flow requirement may be easier to fulfil centrally than locally, and this may distort transfer prices. The high profit figures of a particular subsidiary may lead to a request for a rise in wages by the workers, which may provoke the MNC to reduce its profits by manipulating transfer prices. MNCs may supply goods and services to newly established subsidiaries at below normal cost. And if a particular entity lacks liquidity, then transfer-pricing manipulations will allow for the transfer of funds. To share the costs of Research and Development (R&D) between various subsidiaries and the parent company in different lines, transfer prices may be manipulated even though the R&D concerned is not directly related to the subsidiary's product line.

MNCs may be under the pressure from shareholders to show high profitability in a particular entity. Transfer pricing has further implications in joint ventures, where the local partner in a joint venture with an MNC may not have the necessary capabilities for checking or understanding the MNC's transfer pricing manipulations. A study by Al Saadon / Das (1996) demonstrates, that transfer pricing also has implications for the distribution of ownership shares. Revenue will not be allocated fairly between MNC and non-MNC partners if transfer pricing manipulation occurs. Apart from the above reasons, centralized price-fixing can influence the worldwide long-term strategies of MNCs.

Market motives:

It is difficult to set an optimum price in such a situation because (a) open *market prices* for intra-firm transfers may not be available or applicable, (b) profit centres may not be allowed to purchase *inputs* from the open market, or they may not be available in the open market, (c) MNCs use the know-how which is unique to them, (d) skills, the product line and the involvement of intangibles may be such that there are no comparables in the market or a monopoly situation may obtain in the market, and (e) MNCs may have different entry strategies in a particular market.

MNCs may be operating in a particular market in the host country where prices are regulated. If the price set by the regulator is high compared to the cost of production, then the MNC will benefit if it raises its prices by inflating the input cost applied by the parent company. To capture a particular market, an MNC may reduce its price by indulging in transfer pricing manipulations.

Motivating government policies:

Specific government economic-policy-related factors going beyond tax-related transfer pricing considerations may also motivate a MNC to manipulate transfer prices in a manner that affects the host or home country adversely: concerns about repatriation policies; the extent of the exchange risk; asset capitalization policies; anti-monopoly charges; dumping charges; cost-sharing issues; concern about political and policy stabilities. Exchange risks arise when the MNC has assets and liabilities in foreign currency whose value keeps changing vis-à-vis the home country's currency. The change is beneficial to the holder of foreign currency assets if the foreign currency is revalued or appreciates vis-à-vis the domestic currency, and an exchange loss occurs in the opposite case. MNCs would like to gain from future currency fluctuations by manipulating transfer prices, without waiting for the final repatriation of profits at the end of the financial/accounting year. To avoid anti-dumping requirements, MNCs may need to raise their prices. The assessment of the risk of expropriation, business expectations, interest rates etc. is not necessarily guided by taxes. It may so happen that the political regime is in the process of change or amending its policies towards business. To avoid the uncertainty of the future, MNCs may resort to transfer pricing manipulations.

Tax motives:

Transfer pricing may be used by MNCs as an income-shifting mechanism (Borkowski 1996). Transfer pricing manipulations are profitable whenever tax rates differ widely between host and home countries. Countries enter into avoidance agreements to prevent the same profits from being taxed twice in two tax jurisdictions. Many countries give tax credit for foreign tax paid by foreign subsidiaries when assessing their global income. And some countries exempt MNCs from paying taxes on the foreign source of income until the profits are actually remitted to the host country. Compared to corporate taxes as a reason for transfer pricing manipulations, customs duties are much simpler. By lowering the value of imports into a country where customs duty is high, an MNC gains. In such cases, the host country will not lose any revenue from customs because the same commodity is not normally subject to export duty in the home country and import duty in the host country. However, this leads to an increase in the profits of the subsidiary in such countries. As a rule, customs authorities throughout the world tend to increase the value of imports, whereas income tax authorities reduce the value of inputs. The policy of host governments towards profit and capital repatriation is also one of the incentives for transfer pricing manipulations. Countries may impose restrictions on payments of dividends; they may take the form of a certain percentage of net capital invested, of conditions on the reinvestment of profits, of the requirement that the dividends be converted into bonds or a multiple exchange rate system for different transactions. Where stringent restrictions apply, MNCs will gain by manipulating both trade and non-trade flows. The prices of sales by the parent company to the subsidiary can be raised or sales from the subsidiary to the parent company un-

Table 1: Motivation for transfer-price manipulations when a parent company sells to an affiliate abroad

	Motivation	Action by the MNC
1.	Corporate profits tax	• Underpricing
2.	Customs duties • Imports • Exports	 • Underpricing • Underpricing
3.	Repatriation of profits or capital	• Overpricing
4.	Exchange risks • Claims in strong currency	 • Overpricing
5.	Capitalizing machinery etc.	• Overpricing
6.	Supporting claims for price increase when government fixes prices	• Overpricing
7.	Responding to anti-monopoly charges	• Underpricing
8.	Responding to dumping charges	• Overpricing
9.	Mitigating claims for wage increases	• Overpricing, to lower reported profits
10.	Joint ventures	• Overpricing
11.	Supporting an "infant" foreign affiliate	• Underpricing
12.	Enlarging market share through penetration pricing	• Underpricing, provided lower costs to foreign affiliates are reflected in lower prices to the consumer

Source: Plasschaert (1994)

derpriced. In the same way, non-trade payments, such as technical fees, may be overpriced by the parent company or underpriced if the subsidiary supplies the parent MNC. Tax havens may also be used for this purpose. The MNC may not purchase from or sell to a subsidiary directly but through another of its subsidiaries located in a tax haven.

It is important to recognize that, whatever the motivation, once transfer prices differ from real prices, they have an impact on profitability in either the host or the home country and so affect tax collection.

3.2 Limitations of transfer pricing

However, an MNC's manipulation of transfer pricing is subject to various limitations. Transfer pricing manipulation implies a high level of concentration of decision-making, centralizing planning and a monitoring system at the MNC's headquarters, which runs counter to good management practice in a large MNC. Transfer-pricing manipulation may lead to low profits or even losses in some subsidiaries, which may be resented at local level. It also requires a large degree of specialization in pricing, which may in itself be a prohibiting factor for manipulation. The cost involved in terms of detailed supervision and the complexity of the exercise will prevent manipulation. If the market in which the MNC is operating is a competitive market, it will not have any additional incentive to engage in transfer pricing manipulation because it may arouse the suspicion of the regulatory authorities. The frequent changes in corporate taxes, import duties and other variables that reward transfer pricing manipulation deter frequent changes in prices. The conflict between different transfer-pricing motivations may itself be a deterrent. For example, high import duties and high corporate taxation compared to another country, exchange risks and import duties may have the opposite effect of transfer pricing manipulation. Conflicting policy regimes within the same jurisdiction or between two countries may preclude transfer pricing manipulation. In addition to all the above, governments enact legislation especially to prevent such manipulation.

3.3 Undertaking transfer pricing manipulation

It is presumed, on the basis of various evidence, that MNCs' affiliates in countries with higher tax regimes undercharge for their exports to low-tax countries and overcharge for exports to high-tax countries. The pre-tax profitability of foreign affiliates correlates negatively with host-country tax rates (Hines Jr. / Rice 1994). Transfer pricing therefore tends to distort trade magnitudes.

Using data contained in point-of-export customs documents tracking every US international export transaction between 1993 and 2000, Bernard / Jensen / Schott (2006) find that export prices for intra-firm transactions of US MNCs are significantly lower than prices for the same goods sent to an arm's length customer. After matching related-party sales by a firm to arm's length sales by the same firm for the same product exported to the same country in the same month using the same mode of transport, they find that the average arm's length price is 43 percent higher than the related-party price. Consistent with incentives to minimize taxation and import duties, the study finds that the difference between arm's length and related-party prices is negatively associated with destination-country corporate tax rates and positively associated with destination-country import tariffs. For each percentage point of reduction in the foreign tax rate they detect a 0.56 to 0.66 percent increase in the price difference. Using monthly data on intra-firm trade prices between 1997 and 1999 obtained from the US Bureau of Labor Statistics, Clausing (2003) has established that there is substantial evidence of tax-motivated transfer pricing in US intra-firm trade. As this study takes direct account of the actual prices of items transferred between MNCs' affiliates/subsidiaries, it is direct evidence of tax-motivated transfer pricing. Demirguc / Huizinga (1998) have found that foreign-owned banks pay lower taxes in several developed countries; the taxes they pay tend to fall as the statutory rate rises owing to transfer pricing manipulation. However, firms can also manipulate 'transfer prices' other than commodity prices, which is the subject of this study. The *instruments* available for tax-motivated transfer pricing in the MNCs' books are various costs incurred by them and their affiliates, such as financial costs, the transfer of technology, the cost of shared services, R&D costs, administrative costs, costs charged for the use of brands and royalties for various IPRs. The value of these items is rated far more highly in MNCs' accounts. In addition, MNCs can so structure their interest and dividend payments that they avoid paying taxes in any jurisdiction.

According to Hines Jr. (2001), the taxation of corporate income encourages entrepreneurs and managers to structure and conduct their business operations in ways designed to avoid taxes. Corporations generally reduce their tax obligations, and those of their shareholders, by using debt rather than equity finance, investing in assets that can be rapidly depreciated for tax purposes and those for which generous tax credits are available, and avoiding dividend payments or other tax-disadvantaged distributions to investors.

The *loopholes* in taxation regimes that can be exploited by MNCs to manipulate transfer prices are also numerous. Accounting standards and disclosure requirements differ from one country to another. The tax law of each jurisdiction defines in its own way the manner in which corporations are to calculate their taxable income. Each country has its own incorporation rules and definition of taxable entities. Withholding taxes, dividend taxes, capital gains taxes and their adjustments are not uniform across jurisdictions. Tax credit systems too vary from country to country; as some countries levy tax only when income is repatriated, it is advantageous not to repatriate profits from tax havens. A variety of entities are taxed unevenly on the basis of their legal status. They are known as hybrid entities. Nor is the basic principle of taxation the same in all tax jurisdictions: some adopt the residence principle, others territorial or source principles.[4] These variations are easily exploited by MNCs to their advantage. They can plan their repatriation strategy in such a way that the least tax is paid in any jurisdiction.

'Hybrid securities' are another planning device that can sometimes achieve the same results as hybrid entities. These are instruments that are regarded as debt by the host country and as equity by the country to which income payments are made. They exploit the difficulties that tax authorities have in determining the distinction between tax-deductible debt and taxable equity.

4 Under the exemption (or territorial taxation) system, foreign income taxed in the host country is exempt from taxation in the parent company's home country. Hence, profits are taxed only in the country where the subsidiary is located. Under a credit (or worldwide taxation) system, tax liabilities in the subsidiary's host country are credited against taxes in the parent country's home country, although firms are usually permitted to claim credit for their domestic tax liability only in the case of excess foreign credits.

These hybrid securities are particularly effective in saving taxes when the receiving country employs a dividend exemption or ‘territorial’ system, as it is sometimes known. Examples are the Netherlands, France and Canada, which exempt dividends paid from an active direct investment abroad. Thus a Canadian company can capitalize an operating subsidiary in the United States with a hybrid security and receive payments that are deductible in the United States, but exempt at home. Once again, income completely escapes taxation at corporate level.

Hybrid securities can be combined with hybrid entities to ensure a deduction in the paying host country, no taxation in the receiving foreign country and no taxation in the home country (i.e. the United States of America) (Altshuler / Grubert 2002). MNCs have layered structures with complex and far from transparent transactions and normally have holding companies, most of which are located in tax havens. The problem of enforcement is aggravated by the secrecy shelter provided by the tax havens. A recent study on US MNCs by Altshuler / Grubert (2005) concludes that approximately 40 percent of the growth of intercompany income (in the USA) took the form of payments deductible in the host country (and presumably not taxable in the receiving country). They estimated that MNCs saved about US$ 7 billion in taxes in 2002 compared to what they would have paid if they had continued to behave in the same way as in 1997. This is equivalent to about 4 percent of foreign direct investment income and more than 15 percent of total host country tax burdens.

Furthermore, as part of their investment facilitation measures, governments enter into bilateral double taxation avoidance agreements (DTAAs) with their partner countries. These DTAAs have multiplied over the past ten years or so. There are now 2,651 of them throughout the world (UNCTAD 2007). The transfer pricing issue is closely related to many aspects of DTAAs, such as the arm’s length principle, exchange of information, treaty shopping and dispute settlement mechanisms. MNCs have a long list of motives because of their structure and organization, and there are enough instruments within their operations and gaping loopholes in tax regimes for them to indulge in income shifting activities through transfer pricing.

4. Tackling the problem: Separate accounting (SA) (arm’s length prices) vs formula apportionment (FA)

The activities of large MNCs, coupled with governments’ dependence on corporate taxes as a major source of revenue, make the transfer pricing issue more contemporary and important. Overzealous tax administrations can cause intermediate product prices to rise (also leading to double taxation in other tax jurisdictions), and the final price of products may be so distorted that the benefit of trade and FDI is cancelled out. Internationally accepted transfer pricing regulation is therefore necessary if tax policy is to be predictable and FDI is not to be discouraged. It should give investors legal protection. Attempts are being made at multilateral levels to introduce appropriate transfer pricing policies which can sustain and guarantee original investment decisions. There are two approaches to solving these problems of tax-motivated transfer pricing; one is separate accounting, which is linked to the principle of the “arm’s length approach,” and the second is the formula apportionment approach.

4.1 Separate accounting: Arm's length principle

The arm's length principle is in vogue in many countries. In separate accounting (SA) the taxable income of MNCs' affiliates is calculated by each tax jurisdiction as if it were the value of transactions of independent entities in the market. The international standard that OECD member countries have agreed to follow, which is used to determine transfer prices for tax purposes, is set out in Article 9 of the OECD Model Tax Convention as follows: where

> *"conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly"* (OECD 2001).

This principle governs many bilateral tax treaties.

Paragraph 1.7 of the OECD Guidelines reads:

> *"There are several reasons why OECD Member countries and other countries have adopted the arm's length principle. A major reason is that the arm's length principle provides broad parity of tax treatment for MNEs and independent enterprises. Because the arm's length principle puts associated and independent enterprises on a more equal footing for tax purposes, it avoids the creation of tax advantages or disadvantages that would otherwise distort the relative competitive positions of either type of entity. In so removing these tax considerations from economic decisions, the arm's length principle promotes the growth of international trade and investment"* (OECD 2001).

The OECD Guidelines assert that the arm's length principle should govern the evaluation of transfer prices among associated enterprises because it is sound in theory since it provides the closest approximation of the workings of the open market in cases where goods and services are transferred between associated enterprises. They acknowledge that they may not always be straightforward to apply in practice; they are meant to produce appropriate levels of income between members of MNC groups, acceptable to tax administrations (OECD 2001).

This is also known as the separate entity approach because transactions within an MNC group are separated, each entity being considered an independent entity in the market and its transactions with related entities being treated as if they were unrelated and separate. These transactions are in turn compared to arm's length transactions in the market which have been effected in similar circumstances between comparable parties in uncontrolled situations.

The 1995 OECD Guidelines advise on the application of the arm's length principle. They insist on a comparability analysis, where the issues compared are the types of property or service involved in the transaction. The functions performed, risks taken and assets employed should be similar when comparisons are made. Contractual terms, economic circumstances and the business strategies of the parties compared need to be understood. This comparability analysis must take into account the actual transaction that has taken place in the market. The use of multiple-year data is allowed for comparison purposes. Other factors, such as intentional setoffs of various transactions and the impact of government policies on the decision taken must also be compared and considered. Various transfer pricing methods are used to apply the arm's length principle: 1. comparable uncontrolled price (CUP) method, 2. resale price method,

3. cost plus method, 4. profit split method and 5. transactional net margin method (see OECD Guidelines for details). Using these methods, tax authorities can modify the declared profits of any of the enterprises on the basis of this principle.

4.2 Drawbacks of the arm's length principle

The arm's length principle suffers from theoretical as well as practical defects. Tax administrations the world over assess the taxpayer's income after a lapse of time when a particular transaction has taken place**.** The time elapsing between two sets of events may cast a shadow on the arm's length price even in comparable cases. The information available for applying the arm's length principle may not be adequate.

The intermediate market is assumed to be perfectly competitive in this approach, which means there are many buyers and sellers of the same goods and services produced by the MNC's units, and its upstream or downstream units can buy them in the open market. This is a naïve application of the market principle and runs counter to the purpose of MNC activity, which consists in vertical integration, economies of scale and the exercise of IPRs that generate synergy of profit. These form the *raison d'être* of MNCs.[5] Moller / Scharf (2002) have shown that, a non-cooperative equilibrium between tax jurisdictions is characterized by an above-optimum level of effective taxation. Harmonization of transfer pricing rules leads to Pareto improvement, but the arm's length principle – the form of harmonization advocated by the OECD – may not be Pareto-improving.

In fact, there are many practical problems making it an extremely difficult principle to implement in reality. The profit split method is akin to formula apportionment, but very rarely applied owing to the jurisdictional problem and the lack of details on MNCs' global activities available to the tax authority of a particular tax jurisdiction. All four methods (comparable uncontrolled price method, resale price method, cost plus method, transactional net margin method) prescribed by the OECD hinge on the comparability analysis. If really comparable uncontrolled prices exist in the market, no MNC will ever resort to transfer pricing manipulation. In the absence of direct comparison, the other three methods attempt to compare entities at the gross profit or net profit margin levels by making various adjustments, which leaves much to be desired.

The entire dispute in transfer pricing auditing is about the right cases for comparison. Transactions within the group are unique in nature, with no parallels in the outside world. One example is the issue of intangibles held by the group. Transactions within the group may concern the buying or leasing of these intangibles within the group, even when the market potential is not fully understood, explored or exploited, because of the certainty that the intangibles will be protected within the group. This can never happen between two independent, unrelated parties

5 The principle that transfer prices should equal market prices or at least be derived from market prices if they exist is one of the most fundamental rules for transfer pricing. It is not only the theoretical basis of the arm's length principle constituted in the OECD's Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (OECD 2001), but also strongly recommended as best practice in all major managerial accounting textbooks. For the theoretical debate on transfer pricing between units of a single firm see Göx / Schiller (2006).

in the market. In fact, the greatest challenge facing the tax authorities is the valuation of intangibles and royalty payments between related parties. Documentation and its presentation to tax authorities entails a huge compliance cost. It is difficult to prove, after a lapse of time, that a transaction that has taken place was in fact effected at arm's length. Comparable cases may not exist in reality, leading to approximation, which will distort the prices set for adjustment, since, in any uncontrolled transaction, many factors influencing decisions cannot be explained rationally. The availability of information needed to make a rational choice, the time available for decision-making, subjective market assessment and patience, or its absence, are some of the real-life factors in the market. There are no comparable situations even between two uncontrolled transactions. Information asymmetry is a major issue, and neither tax authorities nor taxpayers can use hindsight to justify a transaction that has already occurred. It is not clear precisely when in a business transaction the arm's length principle should be applied or whether it is to be applied to both parties (controlled entities, i.e. the MNC and its subsidiary) or to only one. It also has to be decided what kind of adjustment is required for the interplay of government rules and regulations, which may distinguish between controlled transactions and uncontrolled transactions. Quantifying the risk taken and suggesting a suitable adjustment form a further challenge. Making adjustments to the MNC's market strategy is also highly contentious.

The best illustration of the issue is probably the US Tax Court's decision in Bausch & Lomb, which concerned a US taxpayer who had licensed valuable technology to its wholly owned (and newly formed) Irish subsidiary and then bought back the subsidiary's products for distribution in the United States. The production could have been undertaken by the US parent company at a cost of US$ 1.50 per unit. As a result of the transactions between the US parent and its Irish subsidiary, the parent paid approximately US$ 6 per unit – US$ 7.50 for the product purchased less a 20 percent royalty for the subsidiary's use of the intangible asset. The US government observed that no business enterprise in its right mind would pay substantially more for goods than the cost it would incur in making them itself. The court concluded otherwise, deciding in favour of the taxpayer, because it applied the arm's length principle only to the behaviour of Irish subsidiary and after production had started (Rosenbloom 2005). This exemplifies the problem of precisely when and by whom the arm's length principle must be applied. It also reveals how apparently incorrect business decisions can be justified when the arm's length principle is applied. The jurisprudence in transfer pricing cases is still in its infancy since it is relatively new law. Owing to the nebulous nature of business transactions and the inherent problems of finding comparable cases, the taxpayer in the USA prefers to settle disputes with the tax authorities at a mutually agreeable price, which also explains the limited amount of case-law on this subject. Many countries have introduced rules in this decade, following the USA which has these rules in their statutes for a long time, and the problem of tax adjustments is just emerging.

The arm's length principle thus sounds attractive, but in reality, even in the best of situations, adjustments based on the arms length principle result in a poor approximation. It can lead to serious double taxation if the tax authorities in two jurisdictions do not agree on the price to be charged. In fact, two tax jurisdictional authorities are unlikely to agree once one of them has increased the taxable income of the MNC, because the taxpayer will ask for a corresponding reduction in the other jurisdiction, causing a loss of revenue for the first. In such a situation, the dispute between the taxpayer and the tax authority in one country will spill over into the other and become a bilateral dispute. Dispute settlement procedures, for which all bilateral tax treaties provide, are administratively costly and time-consuming. An alternative solution therefore needs to be found to stop the revenue leakage due to transfer pricing.

4.3 Formula apportionment (FA)

The formula apportionment (FA) approach disregards controlled transactions as inherently unreliable and instead applies a formula to the combined profit made or loss incurred by commonly controlled persons (MNCs) as a result of dealings with unrelated persons. The aim is to work with objectively verifiable results and to assign an appropriate portion of those results to each of the controlled persons contributing to them (Rosenbloom 2005).

The rationale of the formula approach is that the MNC functions as one entity and has adopted the goal of maximizing global profit. All its entities are created by the MNC artificially to suit local laws or for other purposes. It is therefore logical to treat them as a single global entity. The formula will have weights of relative activity measures in each tax jurisdiction. Under this system there will theoretically be no transfer pricing to a low-tax country because the global profit of the corporation is taken as the tax base. If all countries agree to the formula and harmonize their tax laws and accounting standards, there will be no chance of double taxation (Nielsen / Raimondos-Møller/ Schjelderup (2001).

4.4 The advantage of FA

The advantage of the formula apportionment approach is that it is expected to reduce the compliance cost to the taxpayer as well as to the tax administration, since the formula is fixed and certain. It assumes that all countries will have the same accounting standard and there will no longer be any need to comply with different tax and company law systems anywhere in the FA union. It would obviate the need for ‘correct transfer prices’ within a group operating within the FA union. It would mean that, as tax bases would be consolidated, a loss in one unit could be offset against the profit of another unit in another country within the FA union. Cross-border mergers and acquisitions would be facilitated by closer coordination in respect of capital gains tax within the FA union. It is expected to be closest to market reality in that the unique nature of an MNC as a whole will be captured by this approach, since the contribution of each part of its operations cannot in fact be determined and captured. The USA and Canada have adopted an FA system for the allocation of income across states. FA, as used in the USA, regards the proportion of a multi-regional firm’s income earned in a given state as a weighted average of the proportion of the firm’s total sales, property and payroll in that state. Thus, as the firm’s activities in a specific region are approximated by the share of these factors in the region, the firm is not required to keep different accounts (Pinto 2007).

Doubts are expressed about the advantages of changing to formula apportionment. Nielsen / Raimondos-Møller / Schjelderup (2001) have concluded on the basis of a theoretical model that the choice between formula apportionment and a separate accounting system is not very clear and that it is not certain the problem faced by today’s separate accounting can be eliminated by switching to formula apportionment. But Riedel / Runkel (2007) have concluded that in a three-country model, where two countries form an FA union while a third country sticks to SA practice (many previous studies failed to capture the interaction between the two systems in their models) in the short run, for given taxes, the transition from SA to FA is likely to reduce the shifting of profits from the FA union to non-FA tax havens.

Even in the long run the negative externality of FA is likely to be outweighed by the profit-shifting externality had there been no FA union. The study conducted by Kind / Midelfart / Schjelderup (2005) has shown that a reduction in trade barriers lowers equilibrium corporate taxes under SA, but leads to higher taxes under FA. In a study conducted within the USA, Goolsbee / Maydew (2000) have found that the apportionment formula has a significant real effect on a state's economy. In the context of the USA, the impact of the introduction of FA in other countries is likely to reduce US taxable income, and some degree of double taxation is expected, depending on the weight attached to sales. However, the impact of this on any single MNC could be significant (Devine / O'Clock / Sceaton 2006).

4.5 Requirements for FA

FA requires significant international coordination among the countries where a particular MNC has operations. Agreement on a single mathematical formula, using various data sets, such as input costs, payroll, sales and capital employed, to name a few, is difficult to achieve in the absence of an agreed uniform accounting standard in the world. Each country would like to have what is for it the most favourable weighting of factors in the formula. This may become impossible to handle politically. Apart from affecting the resources of the exchequer, taxation being one of the most visible symbols of sovereignty, countries would have difficulty in giving up the power to tax. How should an MNC group be defined for the consolidation of its global profit? Should the legal approach or the economic approach be adopted?

Legally, incorporation rules enable some entities to be classified as group entities, but such ownership definitions can be very hard to determine, especially when the entities are located outside an FA union. Such other issues as the use of exchange rates and the accounting year also need to be agreed by the countries concerned. Compliance costs may not in fact be low because the taxpayer has to present global transaction details to various jurisdictional tax authorities. Even the tax authorities have to invest a great deal of time, manpower and resources in auditing these massive transactions spanning the entire globe. In the absence of common accounting standards, the valuation of tangible as well as intangible assets will pose a serious problem. The FA method may not ultimately capture market reality because the specific advantages or disadvantages of locations of MNC activities across countries will not be covered once the group as a whole is considered for tax purposes. It will work only if all countries agree to the formula. Otherwise, it will lead to serious double taxation. A single country cannot apply FA because of the size and volume of the transactions involved. Even if only one country in the group is omitted, the only alternative left will be the arm's length approach with that country. How is the law to be enforced in cases where a substantial proportion of an MNC's activity is conducted outside the tax jurisdictions of the FA union? What happens when the entities of the MNC group within the FA union suffer losses and entities outside the union earn profits? Will countries be generous enough to share profits in the reverse situation? All these political and legal issues need attention before the FA approach is adopted. With multiple national jurisdictions legitimately seeking a slice of the cake, no one formula can command universal respect. That way lies disharmony, as each claimant develops an approach based on its own situation and perceptions (Rosenbloom 2005).

The major advantages and disadvantages of both the two approaches are summarized in Table 2 below.

Table 2: Comparisons of the SA and FA approaches		
	Arm's length principle	**Formula apportionment**
Advantages	1. Each country can use its power to determine taxable income and protect its tax base. 2. Sounds like a good principle that considers real market condition to set prices. 3. Already being applied in many countries and is therefore familiar to the taxpayer. 4. Obviates the need for tax harmonization efforts.	1. Closer to the market reality of an MNC's operations since it treats it as a single entity. 2. No possibility of profit shifting since it considers the real activity of the MNC as a whole when apportioning the tax base. 3. Reduces compliance costs. 4. Opportunity to offset losses of one unit against profits in another jurisdiction.
Disadvantages	1. Based on an unrealistic assumption of perfect competetion in the intermediate product market. 2. To compensate for this assumption, it suggests making adjustments to the imperfections, which leads to distortions and litigation. 3. Comparable cases and situations are very rare. By its very nature, MNC activity seeks to internalize, economize on scale and use IPRs. Real compareables may not therefore exist, leading to the above comment on unrealistic adjustments. 4. When and by whom the arm's length principle is to be applied is not clear or may lead to indeterminate solutions. 5. Existing tax law or evidence fails in these cases because the adjustment made to taxable income is at best an approximation and may not pass the test of "proof beyond doubt." 6. Apart from leading to double taxation, serious bilateral disputes may occur if each tax jurisdiction wants to save its tax base.	1. Requires significant coordination and cooperation between countries on a particular apportionment formula, which is hard to imagine happening in near future. 2. Each country would like to have the most favourable weighting in the formula, which leads to dissatisfaction. 3. Definition and legal treatment of an "MNC group" can create further opportunities for tax planning. 4. Use of exchange rates and accounting standards needs to be agreed upon by countries. 5. Even if some countries are left out of the FA union, the problem with the countries omitted remains. 6. FA disregards the specific locational advantages and disadvantages of MNC affiliates, while capturing global profits.

Both of these approaches thus suffer from serious disadvantages, which may exasperate both the taxpayer and the tax collector.

5. International coordination efforts

Transfer pricing issues are economic, and it is impossible to legislate for all eventualities. The strict rules of evidence and existing legislation cannot cope with transfer pricing issues effectively when disputes come to court. Advance pricing agreements or out-of-court settlements may at least raise eyebrows, if not give rise to a suspicion of corruption. Consequently, there are many failures; the market principle as applied in the arm's length approach is naïve, adjustments lead to litigation or distortions and possibly double taxation, jurisprudence and global formula apportionments have not evolved.

5.1 Policy options

Countries can respond to the problems of transfer pricing in four ways: they can try to solve them alone, by modifying their own tax codes; secondly, they can compete on tax rates and incentives, which is harmful; thirdly, they can cooperate, which is not effective with cooperation in its present form; and the last option is the reassignment of policy-making authority upward, and the stage is set for such action.

Individual countries are endeavouring to combat the harmful effects of tax havens. In its hunt for tax evaders who have stashed money away abroad, the US government is using a frequently forgotten law enacted in 1970. Under this law, citizens or residents must inform the Internal Revenue Service each year if they have any foreign bank or financial account holdings equivalent to more than US$ 10,000. The US Senate is investigating US nationals using offshore shell companies to avoid taxes (Browning 2008). This merely highlights the endemic nature of the problem.

Important though transfer pricing issues are for tax bases and tax collection, many developing countries do not have an administrative and legal framework to govern transfer price practices (UNCTAD 2000). Considerable efforts are being made by governments to harmonize the rules on international taxation. Tax harmonization is expected to be a more efficient way of reducing tax evasion by MNCs (Blocha / Lefebvre 1999). It is also expected to improve aggregate social welfare (Elitzur / Mintz 1996). The OECD constantly emphasizes the harmful effects of tax havens. In 2000 it published the names of thirty-five countries, blacklisting them as 'uncooperative tax havens'. Some tax havens have at least signed commitment letters, agreeing to cooperate with other governments and committing themselves to transparency and effective exchange of information on tax matters. The policy of naming and shaming tax havens has brought a certain amount of pressure to bear on these jurisdictions. High standards of transparency and exchange of information are also strongly supported by international organizations, including the G8, the G20 and the European Union (OECD 2007).

Schjelderup (2001) feels that the EU agreement on information exchange is unlikely to work. His scepticism is due to the absence of an institution that can effectively ensure an exchange of honest information and to the strong commercial incentives for tax havens to conceal either transactions or the identity of taxpayers. Even if an information exchange system were partly successful in that it led to the closure of some tax havens, the benefits to those remaining would rise substantially, thus presenting them with a very strong incentive not to comply.

However, according to Gregory Rawlings (2007), the OECD approach of 'responsive regulation' (rather than penalization and coercion by the OECD) may eventually have the opposite effect to that intended, where the enforcement peak of the regulatory pyramid is absent. This has resulted in the strengthening of the sovereignty of these tax havens and an increase rather than a reduction in international tax competition. About half of all tax havens have quasi-outsider status because they are linked to an OECD member country as a former colony, dependency or possession, by free association or under a double taxation treaty. For example, Aruba and the Netherlands Antilles are linked to the Netherlands. Most Caribbean islands still have tax treaties with the United Kingdom.

Other tax havens are islands off the coast of OECD member countries (e.g. the Channel Islands).[6] The umbilical cords linking them to developed countries have made tax havens less cooperative with smaller and less developed countries. The European Union is also actively propagating tax harmonization, with the Commission working through the EU Joint Transfer Pricing Forum. The Pacific Association of Tax Administrators is another such organization, its members being Japan, Australia, Canada and the USA. It meets once a year to exchange information and identify specific deterrents to tax evasion activities that can be implemented quickly (Borkowski 2008). The multilateral approach to this problem has not been uniform. Such regional groupings as ASEAN have considered tax issues. Studies in these areas suggest that international agreements have the potential to improve the efficiency of tax systems worldwide (Gordon / Hines Jr. 2002).

5.2 Obstacles and limitations in current regimes

Plugging the holes caused by tax-related transfer pricing poses theoretical as well as practical problems. As mentioned earlier, many countries do not have any transfer-pricing-related regulations. International coordination is tortuous and time-consuming. Even developed countries do not have strong penal measures on their statute books to deter tax-motivated transfer pricing. As many of the offshore centres are closely associated with major powers, it seems impossible to take coercive action against them if they fail to meet transparency and information exchange requirements. Disclosure norms should have teeth and be uniform across countries, so that MNCs come forward with information voluntarily. The possibility of information being exchanged discourages tax avoidance and evasion. Efforts are needed to enforce existing regulations with rigour so that precious resources are not lost to tax havens. Although several multilateral agreements include clauses on incentives and investment rules, their coverage remains limited. For instance, the World Trade Organization (WTO) regulates FDI incentives in its agreements on subsidies and countervailing measures (SCMs) and trade-related investment measures (TRIMS), but these agreements leave a great deal to the discretion of national decision-makers and apply only to 'specific subsidies' directed to individual enterprises (Blomström / Kokko 2003).

The EU's attempt to bring about an FA union is, at best, a half-measure. As discussed earlier, even if small numbers of countries in which MNCs are operating are left out of this FA union, the problem of transfer pricing will persist. The mutual agreement procedures for which tax

6 For a detailed discussion of the status of these tax havens see Lorraine / Kudrle (2005).

treaties provide are bilateral and highly time-consuming. Corporate social responsibility is another area of concern that needs to be addressed at multilateral level as a matter of urgency. It should rank higher on the agenda for the WTO negotiations, and the possibility of transfer pricing issues being covered by the negotiations at some stage should be considered.

5.3 Towards an international effort

In the present phase of the world economic crisis, generated by the inventions of opaque financial instruments which obscure the nature of obligations, the focus is again shifting to the institutional setups which can protect the health of the world economy.

The annual Group of Eight summit originated in 1975 as a meeting of six industrial democracies to chart their economic and social futures during the first energy crisis (Canada was added in 1976, Russia in 1998). How to restore these institutions to their original purpose (primarily to issues affecting the long-term health of the global economy, including enabling societies that have been left behind to participate in global growth) is the concern of many such statesmen as Henry Kissinger. He suggests the inclusion of India, China and potentially Brazil in this process (Kissinger 2008).

The Washington statement of 25 September 1999 issued by the G7 Finance Ministers and Central Bank Governors declared:

> "*We are deeply concerned there has been growth in illicit international financial transactions, including money laundering, broad scale tax evasion, and other financial crimes. We will therefore ensure that our experts on such matters will coordinate and actively seek to contribute to ongoing efforts to address these problems through mutually reinforcing initiatives within the Financial Action Task Force (FATF) and the Organization for Economic Cooperation and Development (OECD)*".

The aim and focus was *"to protect the international financial system against criminal proceeds"* (G7 1999). It should be borne in mind that tax crimes are not "criminal" in many countries. This was pointed out at the time when the G20 was established.

The main motivation for launching a new international group was the crisis in emerging economies which had begun in Thailand in mid-1997 and which widened and intensified through the next two years, affecting other important Asian economies, before spreading to Russia and Latin America. The birth of the G20 also reflected the "tectonic" shifts in the global economy over the previous 20 years, shifts that continue today. While it had been possible for the major industrial countries to address most global economic problems among themselves – through the G5 or subsequently the G7 – during the 1970s, and even, to a large extent, during the 1980s, it had become increasingly difficult by the late 1990s, as the weight of the G7 countries in the global economy declined, owing largely to the rapid growth of emerging economies, especially those in Asia (G20 2008). The direction taken by the G20 as regards the exchange of information seems to be limited to the statement of 21 November 2004.

However, it is progress in the sense that the declaration refers not only to "criminal" offences but also to civil offences. The statement in itself is laudable because it clearly recognizes the need of the hour:

> *"Financial systems must respect commercial confidentiality, but confidentiality should not be allowed to foster illicit activity. Lack of access to information in the tax field has significant adverse effects. It allows some to escape tax that is legally due and is unfair to citizens that comply with the tax laws. It distorts international investment decisions which should be based on legitimate commercial considerations rather than the circumvention of tax laws. The G20 therefore regards it as a mark of good international citizenship for countries to eliminate practices that restrict or frustrate the ability of another country to enforce its chosen system of taxation.*"

Box 3: The Group of Twenty

There seems to be a great deal of confusion in the minds of general readers about the country grouping, since a similar grouping exists at the WTO negotiating level. The Group of Twenty (G20) Finance Ministers and Central Bank Governors was established in 1999. The G20 is an informal forum that promotes open and constructive discussion between industrial and emerging-market countries on key issues related to global economic stability. By contributing to the strengthening of the international financial architecture and providing opportunities for dialogue on national policies, international cooperation and international financial institutions, the G20 helps to support growth and development across the globe. The G20 was created as a response both to the financial crises of the late 1990s and to a growing recognition that key emerging-market countries were not adequately included in the core of global economic discussion and governance. Prior to the G20's creation, similar groupings for promoting dialogue and analysis had been established on the initiative of the G7. The G22 met in Washington D.C. in April and October 1998. Its aim was to involve non-G7 countries in the resolution of global aspects of the financial crisis then affecting emerging-market countries. Two subsequent meetings comprising a larger group of participants (G33) held in March and April 1999 discussed reforms of the global economy and the international financial system. The proposals made by the G22 and the G33 for the reduction of the world economy's susceptibility to crises showed the potential benefits of a regular international consultative forum embracing the emerging-market countries. Such a regular dialogue with a constant set of partners was institutionalized by the creation of the G20 in 1999. The members of the G20 are the finance ministers and central bank governors of 19 countries: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom and the United States of America. The European Union is also a member, represented by the rotating Council presidency and the European Central Bank. To ensure that global economic fora and institutions work together, the Managing Director of the International Monetary Fund (IMF) and the President of the World Bank, plus the chairs of the International Monetary and Financial Committee and Development Committee of the IMF and World Bank, also attend G20 meetings on an ex-officio basis.

The G20 thus brings together important industrial and emerging-market countries from all regions of the world. Together, member countries represent around 90 percent of global gross national product, 80 percent of world trade (including EU intra-trade) and two thirds of the world's population. The G20's economic weight and broad membership gives it a high degree of legitimacy and influence over the management of the global economy and financial system.

Apart from calling on all countries to adopt the high standard set by the OECD Model Agreement on Exchange of Information on Tax Matters, the statement recognizes the importance of information from banks and other financial institutions:

> *"High standards of transparency require that governmental authorities have access to bank information and other financial information held by financial intermediaries and to beneficial ownership information regarding the ownership of all types of entities. High standards of exchange of information require that such information be available for exchange with other countries in civil and criminal tax matters.* ***Exchange of information in tax matters should not be limited by dual incrimination principles in criminal tax matters or by the lack of domestic tax interest in civil tax matters****. There must be appropriate safeguards on the use and disclosure of any exchanged information. Exchange of information should therefore be implemented through legal mechanisms providing for the use of such information only for authorized tax purposes, thus ensuring the protection of taxpayers' rights and the confidentiality of tax information. (...) The G20 therefore strongly support the efforts of the OECD Global Forum on Taxation to promote high standards of transparency and exchange of information for tax purposes and to* ***provide a cooperative forum*** *in which all countries can work towards the establishment of a level playing field based on these standards"* (G20 2004, emphasis added).

This declaration recognizes the need for a long-term solution and for institutional support. But hardly any attempt has been made to create such an institutional framework; nor, indeed, has it attracted much interest. The present focus of the G20 seems to be on measures to combat the financing of terrorism.

6. Concluding remarks and recommendations

Three principles underlie the international tax regime: the international equity principle – determining which jurisdiction has the right to tax, the international neutrality principle – ensuring that the international tax system does not distort private decisions, and the taxpayer equity principle – ensuring that taxpayers are treated fairly by the tax authorities (as quoted in Lorraine / Kudrle 2005). Double taxation treaties are negotiated on the basis of these principles. As mentioned above, there were some 5,500 international investment agreements (2,573 bilateral investment treaties and 2,651 double taxation treaties) at the end of 2006, and the numbers continue to rise. There are 241 free trade agreements and economic cooperation agreements containing investment provisions (UNCTAD 2007). The periodic negotiation of such treaties, their ratification at national level and their administration impose an enormous burden on nations. Quantification of the costs involved is difficult. An overarching agreement, giving national governments sufficient policy space, seems more cost-effective.

The main obstacle to coordination through delegation at international level is, of course, the absence of global institutional structures (Wildasin 2002). A global agency[7] could calculate the

7 Morisset / Pirnia (2001) see the global agency as an issue for the future: "Today, those areas offer more questions than answers, but it has to be recognized that a global approach is increasingly needed because national boundaries are fading away, and national tax administrations are losing their control over taxpayers". Wildasin (2002, 25) analyses the historical developments, but does not come up with concrete suggestions for setting up a global agency.

profit of a multinational company worldwide and then allocate it to an individual country on the basis of a formula that reflected the firm's presence in that country. Countries could have their choice of tax rates and incentives, but the MNCs' tax base could be determined by the global agency, in a transparent manner, and allocated rationally and effectively. This agency could be modelled along the lines of an international criminal court or tribunal with a clear mandate based on a multilateral treaty. Once such a body had established its credibility, and the advantages were known, countries would join, and it would have the long-term benefit of promoting global integration. It should have representatives of the countries concerned (where the transactions are taking place) when cases are taken up, and the formula of apportionment of the tax base should be negotiated and changeable at certain intervals. At present, there is no multilateral forum where these issues can be legally settled. The creation of such an agency may go a long way to achieving a "level playing field" in international business and global governance as well as helping to mitigate the huge administrative cost to both governments and taxpayers. Realistically, such an agency for the calculation of MNCs' tax base or the conclusion of an agreement is unlikely in the medium term.

Information asymmetry is visible between governments and the MNCs. It is more acute in the developing world. MNCs employ advisors who have the reach and networks across the globe to guide them in planning their taxes. Governments have no such agency to detect tax losses. The need for such an agency is illustrated by the German tax investigation into the affairs of banks located in Liechtenstein, which were providing shelter for tax evaders. Germany obtained details of the tax dodgers on a computer disk provided by an informant, which contained information not only on German nationals but also on other nationals. The German government has offered to share the information with other governments (Benoit / Wiesmann 2008). If there was an agency that could collect such information regularly, the problem of tax evasion by individuals as well as corporations could be kept in check. Pending the creation of an entity to apportion MNCs' global incomes, there might be, in the short run, an entity like Interpol, with the power to collect information across borders and having reliable data bases. It should have operational independence and wide representation of the participating countries if it is to be credible and reliable. A flow of information on the activities of tax evaders could work wonders. The existing bilateral exchange of information is clearly not working because of the sheer volume of data involved. It is a burden on the administration and can be frustratingly slow. Current agencies, like Interpol itself, cannot handle this kind of tax issue because it is a specialized area needing expertise in a different set of skills. Any possibility of detection increases the cost of tax evasion. An independent multinational agency for collecting and sharing information will benefit all tax administrations, and its establishment should be considered in an appropriate forum, such as the G20, at the earliest opportunity.

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Appendix

Appendix 1
Tax havens

	Country or territory	**Affiliation**
1	Andorra	Co-principality between France and Spain
2	Anguilla	UK overseas territory
3	Antigua and Barbuda	Independent, Commonwealth member
4	Aruba #	Part of the Kingdom of the Netherlands
5	Bahamas	Independent, Commonwealth member
6	Bahrain	Independent
7	Barbados	Independent, Commonwealth member
8	Belize	Independent, Commonwealth member
9	Bermuda	UK overseas territory
10	British Virgin Islands	UK overseas territory
11	Canary Is #*	Autonomous community within Spain
12	Cayman Islands	UK overseas territory
13	Channel Islands	UK overseas territory
14	Cook Islands	Free association with New Zealand
15	Costa Rica	Independent
16	Cyprus	Independent, Commonwealth member
17	Djibouti #*	Independent
18	Dominica	Independent, Commonwealth member
19	Gibraltar	UK overseas territory
20	Grenada	Independent, Commonwealth member
21	Hong Kong *	Special administrative region of China
22	Ireland *	OECD member
23	Isle of Man	British crown dependency
24	Jersey #*	Independent
25	Jordan *	Independent
26	Labuan #*	Federal territory of Malaysia
27	Lebanon *	Independent
28	Liberia	Independent
29	Liechtenstein	Independent
30	Luxembourg *	OECD member
31	Macao *	Special administrative region of China
32	Madeira #*	Autonomous region of Portugal
33	Maldives	Independent, Commonwealth member
34	Malta	Independent, Commonwealth member
35	Marshall Islands	Independent, free association with USA
36	Mauritius #	Independent, Commonwealth member

Source: Dharmapala / Hines.Jr (2007); Eden Lorraine / Robert T Kudrle (2005)

Appendix 1 (continued) **Tax havens**		
	Country or territory	**Affiliation**
37	Monaco	Independent
38	Montserrat	UK overseas territory
39	Nauru #	Independent, Commonwealth member
40	Netherlands Antilles	Part of the Kingdom of the Netherlands
41	Niue #	Free association with New Zealand
42	Panama	Independent
43	Puerto Rico #*	USA possession.
44	Saint Kitts and Nevis	Independent, Commonwealth member
45	Saint Lucia	Independent, Commonwealth member
46	Saint Vincent and the Grenadines	Independent, Commonwealth member
47	Samoa (Western) #*	Independent, Commonwealth member
48	San Marino #	Independent, Commonwealth member
49	Seychelles #	Independent, Commonwealth member
50	Singapore *	Independent, Commonwealth member
51	Soloman Islands #*	Independent, Commonwealth member
52	Switzerland *	OECD member
53	Tonga #	Independent, Commonwealth member
54	Tunisia #*	Independent
55	Turks and Caicos Islands	UK overseas territory
56	United Arab Emirates #*	Independent
57	Uruguary #*	Independent
58	Vanautu #*	Independent, Commonwealth member
59	Virgin Islands (US) #	US overseas territory
	# Not on the Hines-Rice list of tax havens	
	* Not on the OECD (2000) list	
Source: Dharmapala / Hines.Jr (2007); Eden Lorraine / Robert T Kudrle (2005)		

Appendix 2
Foreign holdings of US securities, by country and type of security, for the major investing countries in the USA, as at 30 June 2007 (billions of dollars)

Country or category	Total	Equities	Long- term debt		Short- term debt
			ABS	Other	
Japan	1,197	220	133	768	76
China (Mainland)[a]	922	29	217	653	23
United Kingdom	921	421	160	316	24
Cayman Islands	740	279	236	186	38
Luxembourg	703	235	104	320	44
Canada	475	347	23	83	22
Belgium	396	25	56	313	3
Ireland	342	81	75	101	85
Switzerland	329	174	41	99	15
Netherlands	321	185	64	59	13
Middle East Oil Exporters[b]	308	139	18	107	44
Germany	266	100	51	105	11
Bermuda	238	90	53	80	15
France	221	132	36	48	6
Singapore	175	108	13	52	3
Australia	165	87	8	62	9
Russia	148	0	0	109	39
Korea, South	138	5	13	105	15
Hong Kong	138	31	24	75	9
Taiwan	121	11	27	80	3
Norway	109	56	26	22	5
British Virgin Islands	108	67	2	32	7
Mexico	107	19	2	74	13
Brazil	106	1	0	103	2
Sweden	99	60	4	32	4
Country unknown	214	0	1	211	2
Total	9,772	3,130	1,472	4,535	635
of which: Official	2,823	266	280	2,021	256
Rest of the world	762	228	87	342	106
Low-tax countries	**2898**	**1246**	**588**	**910**	**154**
Holding of low-tax countries in percent	**0.30**	**0.40**	**0.40**	**0.20**	**0.24**

a Excluding Hong Kong, Macao and Taiwan, which are included eported separately.
b Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates.
Report on Foreign Holdings of U.S. Securities at End-June 2007 (US Treasury, 30 April 2008)

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