

Transfer Pricing in Developing Countries
An Introduction

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Section 1

Abstract

The aim of this paper is to highlight thoroughly the problems with the current approach and practice of MNE (cross-border) taxation in general and in particular the transfer pricing methods which are used to derive an arm's length price. Further, it is substantiated as to why Formulary Apportionment (FA) should be considered as an alternative to the currently recommended transfer pricing methods, especially for developing countries.

Background

To understand how to move forward we first need to understand how we got here. In the next two sections we take a look at the development of international taxation and understand how the current approach of using Arm's-length prices for transactions came into being.

We refer readers who are interested in tracing the history of international tax further to Jinyan Li's in-depth introduction[1] from which we have quoted key passages below.

Section 2

International Tax Law & its sources

Taxes on international income are imposed by national tax laws[1]; “there is no global body which imposes income taxes; in that sense the term International Tax Law really refers to the tax treatment of international transactions”[2]

In reality International tax law is “domestic law rules of a given state applied to cross-border flows, taking into account (or not) that such flows may be subject to taxation in more than one jurisdiction”[2]

Every nation has evolved its own taxation system and decides what income is appropriate to tax. Today the globalization of most countries economies have made it imperative to address international elements in the country's tax base and so countries enter into **Treaties** with one other voluntary. Such Treaties limit a country's tax jurisdiction and represent the compromises that two countries have reached in respect of the sharing of the tax base arising from cross-border transactions[3].

Thus, there are 2 underlying sources of international tax law[3]:

1. Domestic tax laws of nations
2. Law of Treaties (bilateral or multilateral) amongst Nations

Section 3

A brief history of international tax law

The international tax system of a country is an integral part of its income tax system and is developed keeping in mind the country's policy objective. The basic idea, though, is always **to draw as much as possible a territorial 'slice' out of the international income 'pie'**.[4]

Jinyan Li describes it succinctly when she states that "**the development of treaty law has been influenced by the aim of minimizing the overlap (and more recently the gap) of territorial circles drawn by competing countries in order to promote cross-border trade and investment**"[4].

The model conventions drafted by international organizations (like the UN and OECD) have served as benchmarks for actual Treaties between countries. In as much as they are the source of the actual Treaties between countries that are drawn up, the model conventions are of immense importance to the countries of the world.

It must be noted that the Model conventions are for bilateral treaties, which are the most common form of Treaties prevalent in the world today. It is, thus, instructive to see how the model conventions were developed over a period of time.

3.a) League of Nations model[5]

The League of Nations was, very likely, the first truly global body to deal with problems of international double taxation; the results of which are found in a series of bilateral conventions later on. Initially, the League of Nations appointed 4 eminent economists (Prof. Bruins of Netherlands, Prof. Einaudi of Italy, Prof. Seligman of the USA, Prof. Stamp of UK) to conduct a theoretical study of international double taxation. Their expert report published in 1923[6] was used as the basis of the 1928 models[7] which in turn find their pattern repeated in many of the Treaties of today.

3.b) 1935 Model convention[8]

The 1935 Model Convention defined the term “business income” and was the first model treaty to contain specific provision on allocation of profit from one company to an associated company. Though the 1935 convention was never formally adopted it was of great significance because of the issues it dealt with.

The 1935 draft adopted the principle of income attributable to a permanent establishment based on separate accounting. Interestingly, it provided two more methods –

- a) empirical method (percentage of turnover for example)
- b) fractional apportionment under which net business income was determined by various factors.

Further, the 1935 model provided for all items of income other than those allocable to specific sources to be grouped together as “business income” and rendered taxable on a net basis.

The 1935 draft was mainly based on the “Carroll Report” [9] which was compiled based on Carroll's visit to 27 countries to extensively study their tax systems. Carroll described three common methods of allocating profits to permanent establishments:

- a) Separate accounting which took the declaration of income buttressed by the accounts of the local branch as basis of assessment. Followed by Japan, UK and USA[10]

- b) Empirical methods used by tax administrators when they believed income declared was insufficient or false and used in the UK, USA and continental Europe[10]
- c) Fractional apportionment determined the 'income of one establishment of an enterprise by dividing total net income in the ratio of certain factors – for example, assets, turnover, pay-roll, or a fixed percentage' [11]. This was used by Spain and Switzerland[12].

It is interesting to note that Carroll indicated a clear preference for separate-accounting method for allocating profits to permanent establishments and the "independent person" approach for allocating profits to associated enterprises. Carroll rejected the apportionment method on multiple grounds[13] including

- a) that states would likely choose formulas that allocate more income to their tax jurisdictions.
- b) separate-accounting was "preferred by the great majority of Governments, and business enterprises presented in the International Chamber of Commerce, as well as by other authoritative groups".

Carroll recommends the arms-length approach. Stanley Langbein, the American legal scholar, critiqued the Carroll report for being in favour of arms-length and ignoring the fractional apportionment methods in Spain, Switzerland and certain other states[14]

3.c) Mexico & London Models[15]

The Mexico model of 1943 and London Models of 1946 were the next step in the evolution of model treaties; neither were formally fully and unanimously accepted. The Mexico Model reflected an insistence on taxation at source, with the apparent burden of tax relief shifted to the country of residence[15]. It called for the country of residence to retain the right to tax the entire income of the taxpayer but to provide deduction on taxes paid in source country to the extent they did not exceed the proportion of the tax effectively due in the residence country. Income allocation rules for permanent establishment and associated enterprises were included in this accord. The London Model also imposed the threshold of permanent establishment for business profits to be taxable in the source country

3.d) OECD Model[16]

The Organisation for European Economic Co-operation (OEEC) which subsequently became the OECD, in 1956, set up on the task of working on a draft bilateral convention “that would effectively resolve the double taxation problems existing between OECD member countries and that would be acceptable to all Member countries”[17]. The Fiscal Committee used the London model as its reference and revised it extensively taking into account practices embodied in tax treaties negotiated by member countries[16]. The OECD model was published in draft form first in 1963 and then revised in 1977 and again in 1992. It has been hugely successful[16]

Jinyan Li[18] makes a good point that such success makes it next to impossible to change the Model which has pretty much remained the same since 1963 and thus changes are effected through changes to the commentaries.

The OECD Model has four parts[18]:

- 1) Provisions on scope, coverage and general definitions
- 2) Assignment of tax jurisdiction for main categories of income
- 3) Methods for elimination of double taxation
- 4) Special provisions on cooperation

Overall the OECD model favours capital-exporting countries over capital-importing countries; the OECD model compared to the UN model favours residence taxation and in order to eliminate double taxation requires the source country to give up some or all of its taxation on certain categories of income. When the flow of trade and investments between two countries is unequal the capital importing country tends to loose source taxation under the OECD model[18]

3.e) UN Model[19]

The UN Model was published in 1980[20] ; it is not updated frequently and the only update has been in 2001 which did not contain any major changes to the 1980 model. The UN model follows the pattern of the OECD model and reproduces many articles of the OECD with

commentaries. The main difference is that the UN model allows for more source taxation – for example UN model allows source country to tax royalties whereas article 12 of OECD prohibits it[19]

Section 4

Who gets the pie?

The interplay between source and resident based taxation is the core of international taxation; indeed the whole of international taxation revolves around the question: in a cross-border transaction, which country gets what portion of the pie? Jinyan Li in her seminal work[21] enumerates the following four possibilities:

- **Exclusive source taxation** where the income is taxable in the source country and untaxed in the residence country. An example is when the residence country assets only territorial jurisdiction or provides an exemption of certain foreign-source income
- **Primary source taxation and residual residence taxation** where the income is taxable in the source country at a rate lower than that of the residence country and the residence country taxes the same income but provides a foreign tax credit for the source-country tax.
- **Exclusive residence taxation** where the income is not taxable in the source country and the residence country has a worldwide tax basis for its residents
- *b* in either the source or the residence country where the income is not subject to tax in either country

The current consensus is that the source country has the primary jurisdiction to tax **active income** (business income and income from services) and limited jurisdiction to tax **passive income** (royalties, interest, capital gains, dividends). The residence country has the residual jurisdiction to tax the income that is subject to limited source taxation and also has exclusive jurisdiction to tax international shipping and air transportation income

Section 5

Arm's length principle (ALP) - a cornerstone of international tax law

Given the backdrop of separate accounting (SA) being accepted by the OECD as the method of allocating the profits to permanent establishments, there appears to be international consensus on using the Arm's-length principle (ALP) for allocation of income derived from such related-party (subsidiaries, branches etc) transactions.

A simple scenario which arm's length principle attempts to provide a solution is as follows[22]

Suppose a corporation manufactures products in country A and sells the finished products in country B (via its subsidiary S) to unrelated parties (say, the public at large). In such a case S's taxable profit is determined by three factors:

- a) price at which it resells products to the unrelated parties
- b) price at which the products were obtained from its parent corporation
- c) its expenses other than cost of goods sold

Now if country A where the products are manufactured has a tax rate much lower than B's tax rate where the products are sold to unrelated parties, then the corporation would try to book as much profit as possible in country A and towards this show a very low sale value of products to country B. If the tax rate were higher in A than in B then the corporation would show a very high sale value and concentrate almost the entire profit in the hands of the manufacturer (country A).

In other words, when independent enterprises deal with each other, their financial relations are usually determined by market forces. When associated enterprises deal with each other, their financial relations may not be directly affected by market forces but other considerations. Towards this the ALP seeks to determine whether the transactions between related taxpayers reflect their true tax liability by comparing them to similar transactions between unrelated taxpayers at arm's length.[22]

In the international arena given that there are widely varying rate of taxation, this leads to tax avoidance practices and the ALP (via the transfer pricing methods) has been, till date, the main weapon in the fight to prevent tax avoidance by MNE's[22]

Guidelines for applying the Arm's-length principle

The OECD provides guidance for applying the arm's-length principle[23]. These guidelines which we outline below provide a good understanding on how OECD expects the separate accounting principles are to be applied to arrive at an arm's-length price for cross-border transactions.

The OECD guidance for applying arm's-length principle are as follows

5.a) Comparability Analysis

Factors determining comparability:

- 5.a.1) Characteristics of the property or services
- 5.a.2) Functional analysis (Functions, assets & risks analysis - FAR)
- 5.a.3) Contractual Terms
- 5.a.4) Economic circumstances
- 5.a.5) Business strategies

5.b) Recognition of the actual transactions undertaken

5.c) Evaluation of separate and combined transactions

5.d) Use of an arm's length range

5.e) Use of multiple year data

5.f) Losses

5.g) The effect of government policies

5.h) Intentional set-offs

5.i) Use of custom valuations

5.k) Use of transfer pricing methods

What we learn from this guidance is that :

1. Comparables play an important role in arriving at arm's length prices
2. Computing an arm's-length price is a very complex task; it requires lot of groundwork & research. There are a variety of exceptions and set-offs which necessarily have to be applied to the system to provide useful results.
3. OECD provides for a set of transfer pricing methods to use, discussed in the next Section in more detail

Section 6

Transfer pricing methods

The OECD provides five major transfer pricing methods; usually the appropriate method has to be applied to arrive at the appropriate arm's length price for a transaction.

Before considering the methods we need to establish certain key terminology used in the International tax regimes, covered by Elizabeth king[24]

“Controlled group of Companies” - a multinational firm

“Tested party” is an individual member of a controlled group that one selects to be the subject of analysis under certain transfer pricing methods.

“Profit level indicator” refers to one of several financial ratios that constitute accounting measures of operating results

The OECD transfer pricing methods are:

1. **Comparable Uncontrolled Price (CUP)**
2. **Resale price**
3. **Cost-plus**
4. **Profit-splits**
5. **Profit-Comparison (TNNM)**

The first three methods are called “**traditional transaction**” methods and are “**recommended**” by the OECD and the last two are called “**profit-based**” methods; all these methods are generally accepted by national tax authorities. It must be noted that the US provides

for the use of additional methods applicable to global dealing operations like Comparable Uncontrolled Transactions (CUT) [25]

We quote from Jinyan Li[26] to provide an overview of each method:

6.1) Comparable uncontrolled price method (CUP)[26]

The CUP method compares the price charged for a property or services transferred in a controlled transaction to the price charged for property or services transferred in a comparable uncontrolled transaction in comparable circumstances. This method is reliable where an independent enterprise sells the same product as that sold between two associated enterprises.

6.2) Resale price method[26]

The resale-price method is used to determine price to be paid by reseller for a product purchased from an associated enterprise and resold to an independent enterprise[26]. The purchase price is set so that the margin earned by reseller is sufficient to allow it to cover its selling and operating expenses and make an appropriate profit. What is left after subtracting the gross margins can be regarded, after adjustments for other costs associated with the purchase of the product, like custom duties, as an arm's-length price for the original transfer of property between the associated enterprises. This method is usually applied to marketing operations.

6.3) Cost-plus method[26]

The cost-plus method is used to determine the price to be charged by a supplier of property or services to a related purchaser. The price is determined by adding to costs the supplier incurred an appropriate gross margin so that the supplier will make an appropriate profit in the light of market of conditions and functions he performed. What is obtained after adding markup to costs maybe regarded as arm's-length price of the original controlled transactions. When semi-finished goods are sold between related parties on the basis of joint agreements or for the provision of services in controlled transactions this method is used.

6.4) Profit-split methods[26]

Profit-split methods take the combined profits earned by two related parties from one or a series of transactions and then divide the profits using a defined basis that is aimed at replicating the division of profits that would have been anticipated in an agreement made at arm's-length. Arm's-length pricing is derived from both parties by working back from profit to price. Both the OECD and US allow for profit-split methods and the main ways of applying profit-split are as follows:

1) Contribution profit-split (OECD)

Under the contribution profit split method the relative contribution of each member of a controlled group to the profits derived from integrated transactions is valued on the basis of the activities and risks undertaken by each member. The combined profits are then allocated among the members of the controlled group on a pro-rata basis according to their contributions; to determine their relative contributions the transactional methods may be used.

2) Residual profit-split

This applies typically when the combined profits of the controlled group because of mutual economies of scale or become unique and valuable assets owned by the group. This method involves 2 stages: first each member of the controlled group is allocated sufficient profit to provide it with a basic return appropriate to type of transactions it undertook (primarily measured by traditional methods). Then next stage is calculating residual profits based on analysis of how it might have been allocated among independent enterprises

6.5) Profit-Comparison Methods (TNNM) [26]

These methods seek to determine the level of profits that would have resulted from controlled transactions if return realized on the transaction had been equal to the return realized by the comparable independent enterprise. The TNNM under OECD guidelines compares the net profit margin of controlled transactions with the net profit margins of uncontrolled transactions. The OECD does not recommend this method because it allows only comparison of net margins on a transactional basis and only in last-resort situations i.e places where "transaction methods cannot be reliably applied alone or exceptionally cannot be applied at all"[26]

The OECD clearly prefers transactional methods over profit-based methods[27]. The hierarchy of methods is using the transactional methods first and if they don't fit then apply profit-based methods next. The OECD does prescribe a **hierarchy of results** which is in contrast to the '**best-method rule**' adopted by the USA which allows any of the methods which best represent the transfer price to be chosen.

Mutual Agreement Procedure (MAP)

The above sections provided a short introduction into the arm's-length principle and its application today using the transfer pricing methods. However there is a question on what to do about disputes between authorities of countries having tax treaties? The Models[17-19] prescribe a **Mutual Agreement Procedure (MAP)** for resolution of such disputes. The MAP is an instrument used for relieving international tax grievances, including double taxation. Although the specifics vary based on the laws of each country, they are only carried out between authorities of countries or principalities with existing tax treaties. Although most conventions require that each party to put forth all reasonable effort to resolve such disputes, they are generally not required to come to any agreement. This means that although mutual agreement procedures can be an effective tool for the relief of taxation grievances, they are not fail-safes.

Some countries are beginning to insert into their tax treaties provisions for the mandatory arbitration of mutual agreement procedures that do not reach resolution after a period of time. Such arbitration provisions, for example Article 25 of the OECD model tax treaty as at 2008, are intended to ensure that double taxation disputes under tax treaties reach a final and relatively independent resolution within a fixed period of time.

Conclusion

The preceding part of this document provides have a basic understanding of the current international taxation system; we now move onto discussing the problems which plague the current international taxation system.

Section 7

Problems with source taxation of MNE's

In concurrence with Avi-Yonah et al[29], it is clear that there are a host of issues with the current approach of source taxation of cross-border transactions by MNE's. The separate entity or separate accounting concept, by itself, has flaws which need to be addressed; furthermore the transfer pricing methods used to arrive at the arm's-length prices envisaged by the separate accounting concept are complex to implement and lead to results which are often arbitrary.

Thus, the issues with the current regime can be split into two categories – issues at the higher-level (“Macro-level” or “conceptual level”) which are more generic to the separate accounting system itself and issues with the specific transfer pricing methods expounded by OECD (“Micro-level” or “implementation level”)

7.1) Conceptual level: Difficulties with Separate-entity & Separate accounting concept

7.1.1) Inequitable results

The existing transfer pricing laws and regulations are not based on defensible economic principles, or on transparent rules that all countries apply uniformly, they produce arbitrary results. Arbitrary apportionments of MNE's income across the countries in which they operate are inherently inequitable[29].

If a birds-eye view is taken on the current international taxation system, one would see a tangled and confusing web of tax flows with tax treaties negotiated on a bilateral basis with various exceptions and violations of internationally accepted norms, one would see each nations taxation authorities using different transfer pricing methodologies in analyzing the same case, one would see the “estimates” resulting in arbitrary and inequitable results to one or more nations involved, one would see tremendous resources being spent by both Revenue

and taxpayers in fighting over these “estimates”. In short one would see a system which grows organically, if not chaotically, without any state of equilibrium or homogeneity.

A common refrain is that because the current international taxation system ‘works’ it must be left as-is[30]. At the very least, whether it is to be fixed or not, there doesn’t seem to be much dispute that the current international taxation system comes up short in a variety of respects.

Furthermore, it’s clear that the principles of equity and fairness should be the cornerstone of international taxation but in reality the implementation of such principles breaks down due to each nation going its own way for its own reasons. What results is in an inequitable result for countries involved in cross-border transactions.

7.1.2) Inherent nature of MNE's (corporate synergy) is in contrast to ALP

Most economists and business experts would emphasize that the very nature of a MNE arises due to organizational and internationalization advantages relative to purely domestic firms; such advantages imply profit is generated in part by internalizing transactions within the firm.

In fact it would not be too much to suggest that MNE’s may achieve a **synergy** where the *sum is greater than the parts*; here the sum being the profitability of the MNE as a global entity and the parts being the individual entities in various jurisdictions closely knit together and working together in an integrated fashion to meet a global objective.

In such a scenario, holding related entities to an arm’s-length standard for the pricing of intra-company transactions does not make sense.

7.1.3) Outdated concept of “Permanent establishment”

Avi-Yonah states that “Tax treaties implement the international consensus of shifting passive income taxation to the residence country while providing for source taxation of active income attributable to a permanent establishment”[29].

Article 7 of the OECD model convention provides for this function by stating that a Contracting

State may not tax business profits therein unless they are attributable to a permanent establishment (PE, as defined in Article 5 of the OECD MC)[29]. The importance of the PE concept can be seen from the following extract from paragraph 1 of the Commentary on Article 7 of the OECD Model Tax Convention

When an enterprise of a Contracting State carries on business in the other Contracting State, the authorities of that second State have to ask themselves two questions before they levy tax on the profits of the enterprise: the first question is whether the enterprise has a permanent establishment in their country; if the answer is in the affirmative the second question is what, if any, are the profits on which that permanent establishment should pay tax. It is with the rules to be used in determining the answer to this second question that Article 7 of the OECD Model Tax Convention on Income and Capital (OECD Model Tax Convention) is concerned. Rules for ascertaining the profits of an enterprise of a Contracting State which is trading with another enterprise of another Contracting State when both enterprises are members of the same group of enterprises or are under the same effective control are dealt with in Article 9 of the OECD Model Tax Convention

However the arcane concept of a Permanent Establishment (P.E) as a fixed place, carrying on a business or trade, needs a fundamental rethink in the light of:

1. Electronic commerce (which has made it much easier to sell products into countries without using a subsidiary or a P.E). Section 8, through various case studies, talks about the impact of the Internet on concepts like P.E and substantiates why a fundamental rethink is necessary.
2. The increasing importance of financial services and global trading, which is frequently conducted via branches;
3. The proliferation of tax planning using PE structures. Today, the PE definition is, used or abused, to make sure the source country does not get anything of the tax base.

These new developments, namely e-Commerce and global trading, moved OECD to publish a major report on the attribution of profits to permanent establishments[83]. This OECD report advocates an 'authorized OECD approach' to the interpretation of Article 7:

"The authorized OECD approach is that the profits to be attributed to are the profits that the PE would have earned at arm's length if it were a legally distinct and separate enterprise performing the same or similar functions under the same or similar conditions, determined by applying the arm's length principle under Article 7(2)"[84]

7.1.4) Artificial distinction among legal entities (subsidiaries, branches etc)[30]

The current system is not homogeneous. For one, it taxes companies differently based on whether they employ subsidiaries or branches. Hybrid entities exploiting this asymmetry for double non-taxation wherein they are treated as subsidiaries in one country and branches by another have sprung up.

The current system has led to a spate of "**inversion transactions**"[30] where MNE's formally shift the location of their parent's incorporation to an offshore tax haven while retaining the location of their real business activities.

7.1.5) System drives MNE's to low tax jurisdictions ("Inversion transactions")[30]

It is evident that the current taxation system creates artificial tax incentive to locate profits in low-tax countries[30], whether it be shifting profits to lower taxed jurisdictions or shifting economic activity to such jurisdictions. A recent study suggests that corporate income tax revenues in the USA were approximately 35% lower due to income shifting in 2002[32]

7.2) Implementation level : Difficulties with transfer pricing methods

7.2.1) Comparables: Whither art thou?

The traditional transfer pricing methods (CUP, Resale price, Cost plus) rely on comparables. The comparables have to be exact in order to be of use for the transfer pricing analysis and in OECD's own words this can be a problem. The OECD report[33] states

Both tax administrations and taxpayers often have difficulty in obtaining adequate information

to apply the arm's length principle. Because the arm's length principle usually requires taxpayers and tax administrations to evaluate uncontrolled transactions and the business activities of independent enterprises, and to compare these with the transactions and activities of associated enterprises, it can demand a substantial amount of data. The information that is accessible may be incomplete and difficult to interpret; other information, if it exists, may be difficult to obtain for reasons of its geographical location or that of the parties from whom it may have to be acquired. In addition, it may not be possible to obtain information from independent enterprises because of confidentiality concerns. In other cases information about an independent enterprise which could be relevant may simply not exist. It should also be recalled at this point that transfer pricing is not an exact science but does require the exercise of judgment on the part of both the tax administration and taxpayer.

The above is OECD being euphemistic about the problem of locating adequate comparables. The fact is it is an administrative nightmare in many cases to obtain data on comparables and to apply it in situations which are pertinent to the associated enterprises. It must further be asked about companies which are doing research work or providing new kinds business and services using the Internet --- where are their comparables?

7.2.2) Complexity

Observers have described the current transfer pricing regime as a "cumbersome creation of stupefying complexity" with "rules that lack coherence and often work at cross purposes".[20]. Altshuler and Ackerman found the system "deeply, deeply flawed"[34].

In the US, the contemporaneous documentation rule adopted by the Congress, which requires taxpayers to develop documentation of their transfer pricing methods at the time the transactions are undertaken rather than when they are challenged on audit, as well as the complexity of the new SA methods (such as the Comparable Profits Method), have led the major accounting firms to develop huge databases and expertise.[35]

In short, the current regime consumes a disproportionate share of both the Revenue authorities and . the taxpayers resources. Transfer pricing opinions run into hundreds of pages, litigation involves billions of dollars[35]

The current regime, based on using methods which "estimate" the transfer price, consist of transfer pricing reports - huge documents prepared by taxpayers based on benchmarks and comparables (often flawed due to absence of exact comparables) running into hundreds of pages; on the other side the Revenue authorities typically contend such comparables and benchmarks as incorrect and come up with their own set of criteria and documents. The back and forth which result tends to generate such voluminous quantity of information that the whole point is sometimes lost in the bedlam and what essentially results is a markup value in between those suggested by the taxpayer and the Revenue. Clearly, this is too cumbersome a system of taxation.

Further, such a system is inherently untenable given that it is based on an "estimate" of comparables and this "estimate" has to be validated by the Revenue authorities who might not have the resources or the skill-sets to evaluate cases which involve complex technicalities or e-commerce related transactions. The system is thus reduced frequently to an absurdity.

7.2.3) Location Savings & Transfer Pricing

More and more MNE's, based out developed countries, are setting up captive units in developing countries like India and China. An economic factor gaining tremendous attention in recent times in determining the arm's-length price is the potential of "location savings" which arises to the MNE by virtue of relatively lower costs of operations in the developing countries. Revenue authorities typically argue that the economic benefit arising from moving operations to a low-cost jurisdiction should accrue to that country where such operations are actually carried out.

Accordingly, a key transfer pricing issue is the determination of location savings, and its allocation between the group companies (and thus, between the tax authorities of the two countries).

The issue is the transfer-pricing guidelines issued by OECD and the developing countries **do not provide any guidance on the issue of "location savings"** though they do recognize geographic conditions and ownership of intangibles. Only the US regulations provide some

sort of limited guidance in the form of recognizing that adjustments for significant differences in cost attributable to geographic must be based on the impact such differences would have on the controlled transaction price given the relative competitive positions of buyers and sellers in each market.

Economic theory tells us that allocation of gains between two parties depends on their relative bargaining power, which in turns depends on the goals, resources and constraints on each side. It's clear that applying these principles is highly subjective. Another factor that needs to be recognized is that the location savings are distinct from cost savings arising on account of lower cost of inputs and capital[88]

Reference is made to the Sundstrand and Baush & Lomb case., where Courts have accepted that taxpayers are free to create a subsidiary in a foreign jurisdiction which acts as an entrepreneur and receives technology for an arm's-length license fee thereby leaving a large part of the location savings in the low-cost location thereby keeping the location-savings in the low-cost jurisdiction itself.

7.2.4) Economic critique of Transfer Pricing[36]

It has long been argued by economists that the transfer pricing methods are not based on sound economic principles. Elizabeth King in her excellent work on this subject observes the same and states that there are arguably more effective methods to calculate the arm's length price of cross-border transactions and suggests alternatives like Modified Comparable Uncontrolled Price Method, Required Return Method, Joint Venture Method, Franchisee Model[86].

Below, we quote key observations, from Elizabeth King[36], for an economics-based critique of the current transfer pricing regime.

7.2.4.1) Economic critique of the CUP method[37]

With respect to tangible property and services, prices and fees may or may not be equalized depending on the degree to which the market at issue is competitive.

Furthermore, items of intellectual property are inherently distinctive to some degree and closely similar alternatives available from different entities are unlikely to exist.

Also, licensees generally cannot obtain rights to highly valuable “comparable” intellectual property from separate licensors. One cannot automatically assume that a single licensor will charge two unaffiliated licensees the same royalty rate for the same rights to identical intellectual property. Similarly, two licensors are unlikely to charge their respective licensees the same fees for the same rights to comparable intellectual property. The fact is market pressures equalizing royalty

Therefore, absent internal arm's length licensing arrangements, the comparable uncontrolled transactions method will rarely apply to these types of intellectual property transactions

7.2.4.2) Economic critique of the Resale price and Cost plus methods[38]

Comparisons of an individual distributor's resale margins or an individual manufacturer's gross markups on internal transactions with related and unrelated parties, respectively, are valid in certain hypothetical circumstances, but are rarely feasible in practice. Comparisons of resale margins or gross markups across firms have the same shortcomings of comparing account rates of return, operating markups and other accounting measures of performance.

7.2.4.3) Economic critique of the Profit-comparison methods[39]

In theory the economic rates of return, as distinct from the accounting rates of return, are equalized, albeit only in competitive markets and equilibrium. There are no market mechanisms at work to equalize accounting-based profit level indicators across firms, and by implication, no reason to expect similarly situated firms to earn the same accounting rates of return, operating margins or operating markups, even in competitive markets.

The corollary assumptions that product markets are generally competitive and normally in long-run equilibrium are equally invalid. Moreover the traditional concept of long-run equilibrium is a theoretical construct, rather than a description of real product markets at any point in time.

Further, affiliated manufacturer's accounts receivables and affiliated distributors accounts payables reflect intercompany pricing. As such, their asset bases will potentially be distorted by intercompany pricing and cannot reliably be used for purposes of evaluating such pricing. Also the book value of assets, as shown on financial statements, reflect particular accounting conventions over which firms have some discretion and hence all other things being equal, different firms will have different accounting rates of return for this reason alone. Finally, individual firms rely on intangible assets to widely differing degrees.

So clearly differences in accounting rates of return across firms could not be ascribed solely to transfer pricing, even if such comparisons were otherwise meaningful.

7.2.4.4) Economic critique of the Profit-split methods[40]

The pool of allocable income is incorrectly measured both in total and as a residual under the residual profit-split method. After-tax free cash flows should be used in lieu of before-tax operating profits and the portion of free cash flows that is attributable to tangible assets should be netted out of this total, rather than arbitrary markups over cost, as determined by the application of TNMM. The relative values of all assets combined, both tangible and intangible, should be used to allocate free cash flows.

In short, the magnitudes that are allocated under the residual profit split method and the approximation of relative asset values used for purposes of allocating residual income, are incorrectly defined and inaccurately measured.

The comparable profit split method, similarly, incorrectly measures income attributable to combined tangible and intangible assets. While assets are not explicitly valued under the comparable profit-split method , an entirely bogus connection is forged between the functions, risks and book values employed on one hand and the relative fair market values of total assets employed on the other hand. The application of this method could result in arbitrary allocations of income.

7.3) Conclusion:

The current international taxation regime is a hodge-podge system full of bandages and exceptions and needs to be re-evaluated. From the above critique, it should be clear that the current systems has problems across the board, at the both the concept level and the implementation level.

Conceptually speaking, the “economic allegiance” and “benefit theory” form the core basis of the international taxation system[10]; however the current system, based of the OECD model, fails to reflect fully neither theory. It is seen that this failure is biased against source countries on the following counts[85] :

- It restricts the source country taxation of active income to that attributable to a PE and
- It denies source-country taxation of royalties
- It does not recognize consumption or place of sale as factor in establishing jurisdictional nexus
- It provides the residence country residual rights to tax income
- Transfer pricing methods tend to be not based on sound economic principles

The need for re-evaluation of accepted international taxation principles has been advocated by numerous commentators. Richard Bird states that “present tax treatment of international capital flows is inefficient and inequitable, almost irrespective of how one defines those words”[41]. David Tillinghast echoes that the reform efforts must be made because the alternative could be a breakdown of the international tax system[42]

Section 8

The Internet: Achilles heel of the current international taxation regime?

8.1) Background

If the above issues with the current international tax regime weren't enough, the growth of intangibles usage by companies and the advent of the Internet as a business medium have

completely rendered ineffective the current international tax concepts. This entire section is devoted to analyzing the effects of this unique medium on international tax concepts.

8.2) Introduction

The Internet is a disruptive medium; it has completely changed the way the world works by changing how information is exchanged and business is transacted. Physical limitations, which have long defined traditional taxation concepts, no longer apply and the application of international tax concepts to the internet and related e-commerce transactions is problematic and unclear.

Richard Bird and Scott Wilkie argued that “the old rules of the international tax game....decreasingly serve to carve up the international tax base in a reasonable and sustainable way”. [43] It is widely believed that electronic commerce does not create new problems in international taxation, it is exposing all the old problems more quickly at a global level[44]

In short, unless the international taxation concepts are rethought in the light of technologies which are not only emerging but used by a large body of people today, there will be, as David Forst says, precious few black-letter rules specifically tailored for electronic commerce[45]

Given below are an overview of interesting challenges and obstacles that the Internet throws to international taxation. By no means is it comprehensive and in fact represents only the tip of the iceberg in terms of how the technical cognoscenti, who are an increasingly large group, use the Internet today.

8.3) Internet-based case studies

Case study 1: Content Delivery Network (CDN's)

We first examine a case which has been dealt with by Elizabeth King in her excellent book on Transfer Pricing and Corporate Taxation[46]

1.1) What is a CDN?

A content delivery network or content distribution network (CDN) is a system of computers containing copies of data, placed at various points in a network so as to maximize bandwidth for access to the data from clients throughout the network. A client accesses a copy of the data near to the client, as opposed to all clients accessing the same central server so as to avoid bottleneck near that server[46]

A simple hypothetical example would highlight the use of a CDN: a cricket website hosted in one central server (say, in the UK) provides ball by ball audio and text commentary for a match played by the Indian team. This website will have a huge spike of traffic during the day of the match due to visitors from all over the world; if the cricket website management signs up to use a CDN service, like Akamai[62], the bandwidth problems caused by the huge spike can be mitigated to a large as most of the users will be routed to servers (carrying the same information i.e commentary) closest to their geographical region and hence distribute the load onto the edge servers.

1.2) Technology behind CDN[47]

The capacity sum of strategically placed servers can be higher than the network backbone capacity. This can result in a significant increase in the number of concurrent users. For instance, when there is a 10 Gbit/s network backbone and 100 Gbit/s central server capacity, only 10 Gbit/s can be delivered. But when 10 servers are moved to 10 edge locations, total capacity can be 10×10 Gbit/s.

Strategically placed edge servers decrease the load on interconnects, public peers, private peers and backbones, freeing up capacity and lowering delivery costs. It uses the same principle as above. Instead of loading all traffic on a backbone or peer link, a CDN can offload these by redirecting traffic to edge servers.

CDN nodes are usually deployed in multiple locations, often over multiple backbones. These nodes cooperate with each other to satisfy requests for content by end users, transparently moving content to optimize the delivery process. Optimization can take the form of reducing

bandwidth costs, improving end-user performance (reducing page load times and user experience), or increasing global availability of content.

The number of nodes and servers making up CDN varies, depending on the architecture, some reaching thousands of nodes with tens of thousands of servers on many remote point of presences. Others build a global network and have a small number of geographical PoPs.

Requests for content are typically algorithmically directed to nodes that are optimal in some way. When optimizing for performance, locations that are best for serving content to the user may be chosen. This may be measured by choosing locations that are the fewest hops, the fewest number of network seconds away from the requesting client, or the highest availability in terms of server performance (both current and historical), so as to optimize delivery across local networks. When optimizing for cost, locations that are least expensive may be chosen instead.

In an optimal scenario, these two goals tend to align, as servers that are close to the end user at the edge of the network may have an advantage in performance or cost. The Edge Network is grown outward from the origin/s by further acquiring (via purchase, peering, or exchange) co-locations facilities, bandwidth and servers.

The Internet was designed according to the end-to-end principle[48]. This principle keeps the core network relatively simple and moves the intelligence as much as possible to the network end-points: the hosts and clients. As a result the core network is specialized, simplified, and optimized to only forward data packets. Content Delivery Networks augment the end-to-end transport network by distributing on it a variety of intelligent applications employing techniques designed to optimize content delivery. The resulting tightly integrated overlay uses web caching, server-load balancing, request routing, and content services.

1.3) International Taxation issues:

1.3.1) Attribution of profits to P.E

The first problem a CDN throws up is about the location of the PE; assume the HQ of the cricket website company is the USA and their main server is the UK. Now if they use a CDN, where is the PE in this case located? It would be easy to say UK but then what about the

dozens of edge servers which served the actual content to the end-users and were located in various geographical regions? A case could be made that the main content is derived from the UK server to the various edge servers around the world and hence the UK server is indeed the PE but firstly it seems unfair to attribute all the profits to the UK PE alone in this case; furthermore the content itself might be, technically speaking, fed directly and simultaneously to the edge servers along with the UK server thereby going against the “central” nature of the UK server

1.3.2) Arm's-length fees for exclusive use of tangible property related to CDN[46]

Assume a typical CDN where the network engineers, software engineers and administrators employed by company C located in North America. The Company has numerous switches, routers, auxiliary network equipment etc deployed outside North America – these tangible assets are owned by the foreign affiliates of company C.

The question becomes what is the arm's length fee for exclusive access rights to these tangible assets? Under the Cost-plus and Resale-price method the assumption is that the tangible property is sold outright and used or resold by the recipient. These methods do not even apply when the transactions are not structured in this way. Only the Comparable Uncontrolled Price (CUP) may apply; if under the CUP method one were to look to arm's length lease fees for dedicated servers

Case study 2: P2P: The use of “torrents”

2.1) Introduction

The way media is accessed, whether it be plain text files or richer media, over the Internet has completely changed the face of information exchange in the world.

Peer-to-peer (P2P) protocols are at the forefront of this change and essentially allow users to share data directly between each other (instead of the traditional client-server concept which could be compared to customer-retail outlet in the real world). In the p2p world, simplistically

speaking, everyone is both a consumer and producer. This turns on its head many traditional notions of business exchange.

BitTorrent[49] is one such successful p2p file-sharing protocol based on an intuitive idea whose time has come. Below is a technical explanation which is necessary to understand what p2p, showcased by BitTorrent, is and how it challenges traditional concepts of taxation

2.2) What is a BitTorrent?[49]

BitTorrent is a peer to peer file sharing protocol used for distributing large amounts of data. BitTorrent is one of the most common protocols for transferring large files, and it has been estimated that it accounts for approximately 27-55% of all Internet traffic (depending on geographical location) as of February 2009.

BitTorrent protocol allows users to distribute large amounts of data without putting the level of strain on their computers that would be needed for standard internet hosting. A standard host's servers can easily be brought to a halt if extreme levels of simultaneous data flow are reached. The protocol works as an *alternative data distribution method that makes even small computers (e.g. mobile phones) with low bandwidth capable of participating in large data transfers.*

First, a user playing the role of file-provider makes a file available to the network. This first user's file is called a *seed* and its availability on the network allows other users, called *peers*, to connect and begin to download the seed file. As new peers connect to the network and request the same file, their computer receives a different piece of the data from the seed. Once multiple peers have multiple pieces of the seed, BitTorrent allows each to become a source for that portion of the file. The effect of this is to take on a small part of the task and relieve the initial user, distributing the file download task among the seed and many peers. With BitTorrent, no one computer needs to supply data in quantities which could jeopardize the task by overwhelming all resources, yet the same final result—each peer eventually receiving the entire file—is still reached.

After the file is successfully and completely downloaded by a given peer, the peer is able to shift roles and become an additional seed, helping the remaining peers to receive the entire

file. This eventual shift from peers to seeders determines the overall 'health' of the file (as determined by the number of times a file is available in its complete form).

This distributed nature of BitTorrent leads to a flood like spreading of a file throughout peers. As more peers join the swarm, the likelihood of a successful download increases. Relative to standard Internet hosting, this provides a significant reduction in the original distributor's hardware and bandwidth resource costs. It also provides redundancy against system problems, reduces dependence on the original distributor and provides a source for the file which is generally temporary and therefore harder to trace than when provided by the enduring availability of a host in standard file distribution techniques.

A BitTorrent client is any software program that implements the BitTorrent protocol. Each client is capable of preparing, requesting, and transmitting any type of file over a network, using the protocol. A peer is any computer running an instance of a client.

To share a file or group of files, a peer first creates a small file called a "torrent". This file contains metadata about the files to be shared and about the tracker, the computer that coordinates the file distribution. Peers that want to download the file must first obtain a torrent file for it, and connect to the specified tracker, which tells them from which other peers to download the pieces of the file.

Though both ultimately transfer files over a network, a BitTorrent download differs from a classic download in several fundamental ways:

- BitTorrent makes many small data requests over different TCP connections to different machines, while classic downloading is typically made via a single TCP connection to a single machine (i.e traditional client-server)
- BitTorrent downloads in a random or in a "rarest-first" approach that ensures high availability, while classic downloads are sequential.

Taken together, these differences allow BitTorrent to achieve much lower cost to the content provider, much higher redundancy, and much greater resistance to abuse or to "flash crowds" than regular server software. However, this protection, theoretically, comes at a cost: downloads can take time to rise to full speed because it may take time for enough peer connections to be established, and it may take time for a node to receive sufficient data to become

an effective uploader. This contrasts with regular downloads (such as from an HTTP server, for example) that, while more vulnerable to overload and abuse, rise to full speed very quickly and maintain this speed throughout.



Variations: A software program, Vuze[50], was released, introducing support for "trackerless" torrents through a system called the "distributed database." This system is a Distributed Hash Table[51] implementation which allows the client to use torrents that **do not have a working BitTorrent tracker**.

2.3) International taxation issues

2.3.1) Source rules

When a user gets a file using a torrent, he has obtained pieces of the file from dozens if not hundreds of people all over the world. In such a scenario, what is the source of the file? It can be argued to be the location of the master or "tracker" node but then new variations of "trackerless" systems are coming into vogue. The huge use of torrents, unfortunately both legally and illegally, clearly shows that existing source rules are stretched

2.3.2) Permanent Establishment

The torrent file is distributed by random people all over the internet; if a company incorporated in the USA has a server in India which distributes intangible property (say, media files) to

customers. If the Indian server uses torrents to distribute this media file will the server in India be considered the P.E to which the profits of the intangible property transaction are to be attributed to? If so, how much of the profits should be attributed to it - if 1000 copies are distributed not all of them will be through the server, most of the data would be distributed through other "peers". If the system were "trackerless", then the server itself can't be regarded as the master or central repository

Case study 3: Transfer of Bundled Intellectual Property – Web-based business model

3.1) Introduction

The traditional notion of software has been a company hiring engineers who sit in a building writing code to create a software program used for a specific purpose and such program once developed is sent to customers in the tangible form of CD's or DVD's . This model equated well with the assembly line manufacturing process and an age-old model of tangible products.

However, the above is not how a majority of software is developed nowadays; the Internet has brought forth new business model – both business to business (B2B) & business to consumer (B2C) models

Today there exists "web" companies which are valued at billions of dollars whose "crown jewels" are usually the intangible intellectual property they own or their patented business models or their proprietary technology web-service platforms. Examples of such web companies are Google, Facebook, eBay[52] etc

3.2) A simple web-based business model

In this case study we take a web-based business model related to the online advertising market (also called SEM – Search Engine Marketing), one of the fastest growing markets in the world. This is similar to the case study presented in Elizabeth King's case study on Replication of Internet-Based Business Model[52]

Search engines like Google[53] derive most of their income from such markets which allow

advertisers to bid on keywords in an auction-model on their technology platforms; when users search for the keywords which have been bid upon they are shown text ads sorted in the descending order of their bid. Such a market gave rise to a host of web companies who provide service to advertisers to efficiently and optimally bid on millions of companies – they are essentially providing SEM solutions to online advertisers.

We consider a USA company, USCo, which provides SEM i.e Search Engine Marketing solutions using its unique and patented algorithmic techniques for efficient and optimal bidding; in simple terms the company takes control of advertisers online campaigns of its clients and bids on keywords in the online advertisement marketplaces offered by search engines like Google Adwords[54]. USCo's clients are typically two-fold: companies who wants to advertise online to boost traffic to its website and sales of its products & services, advertising agencies who provide full-service to their clients and provide both offline (TV, newspapers etc) & online advertising solutions for clients.

USCo has a successful and established business model and handles over \$500 million in advertising spend on the various search engines. Parts of USCo's business model are patented. Further, USCo has developed proprietary software for its internal usage – to process, analyze & model the huge amount of data it churns daily. USCo has also developed online marketing & solicitation tools which it uses to market to, obtain, test and sign-up clients.

Now an Indian company, lets call it IndCo, wants to replicate USCo's business model in India. Towards this the top management gets training in USCo and on doing so provides the USCo's business model of online advertising solutions to clients & ad agencies in India.

To summarize:

1. USCo transfers the intellectual property of its proprietary software modified to suit local conditions.
2. USCo also provides the right to use of its marketing and solicitation online tools to IndCo, again these pages have to be modified slightly for local conditions.
3. USCo will perform routine service, maintenance and upgrades on the proprietary software given to IndCo
4. USCo will provide legal and financial planning and advisory services to IndCo

5. IndCo has been issued the rights to use USCo's trademark and name in the Indian market

3.3) International taxation issues:

The above model is akin to a business format franchise[70]. The key question is what are the arm's length services fees payable by IndCo to USCo ?

The resale and cost-plus methods presuppose a particular division of labour that is not characteristic of the USCo and IndCo. The profit-comparison methods would require quasi-comparable companies in the same startup stage and would probably yield no residual profits to USCo.

In short, none of the recommended transfer pricing methods will provide a conclusive answer to this problem of transferring a bundle of intangible assets in a franchisee model.

Case study 4: Conferencing systems

The traditional approach of services being rendered by professionals face to face is no longer the reality. The reality is using phone or video conferences to render services is now becoming common; if anything technology will progressively make distances a thing of the past. This flies totally in the face of the definition of a permanent establishment

Take the case of a UK IT company whose services are essentially providing software training; their bill might run into hundreds of thousands of dollars and they might have a "software program manager" to video conference three days a week and coach Indian engineers on using Design Patterns[55] and other best practices in Software Engineering. Their profit can't be attributed to a PE in India as there is no fixed base of carrying on business here though the people who benefit the most are the engineers in India.

The scenario is the same if a lawyer firm regularly advises clients on Skype[52] calls or emails. The legal fees billed might run into hundreds of thousands of Rupees benefiting the Indian clients but there is no share of the pie by the Indian Revenue authorities.

Similarly, if a hospital practices “tele-medicine” and diagnoses ailments of Indian patients sitting in the UK by a combination of videoconferencing and accessing the patients medical records online, they won't be paying any taxes in India whatsoever.



The use of immersive communications or tele-presence systems like Halo[56] will take things a step further. Its just clear that permanent establishment as a concept has to change and change quickly to adapt to the pace of change driven by the world of science and technology.

8.4) Bottomline:

In short, the Internet is a disruptive not only in the science and technology world but also in the international taxation world! It completely skewers the traditional concepts of Permanent Establishments and brings to stark reality the problems with source-taxation under the current tax regime.

The response to the advent of e-commerce has been classic by the powers that be – either it

is to invent even more complex systems by coming up with new and arbitrary taxes like a “bit tax”, “net tax” etc (or) trying to shoe-horn Internet and e-commerce taxation into existing models with exceptions and caveats. None of these approaches are likely to work well; we cannot fix something which is fundamentally broken. It would appear to be more beneficial to take a step back and go to the first principles and arrive at a simpler and more intuitive system of taxation – such an option already seems to exist in the form of global formulary apportionment (FA) and is dealt with in the following sections.

Section 9

Formulary Apportionment

9.1) Why do we need Formulary Apportionment?

In earlier sections of this document we have extensively critiqued the existing systems of Separate Accounting and using transfer pricing methods to get the arm’s length price. Such a critique leads one to the question of “**what then**”?

The answer to the above question, we believe, lies in Global **Formulary Apportionment**

9.2) What is formulary apportionment (FA) ?

It denotes a method where a predetermined formula, including factors such as the value of all assets employed in the business, payroll paid, number of employees, turnover or expenses is used to apportion income between jurisdictions[60-62]

9.3) How would a global formulary apportionment system work?

Many authors have investigated the mechanics of FA and come up with varying suggestions. We closely follow the systems propounded by The Hamilton Project (pure sales-based formula)[61] and Jinyan Li (uniform withholding tax with global split) [62] with minor modifications.

The Hamilton Project[61] describes how FA will work concisely:

1. A unitary business is first defined. Issues around this are dealt with in following sections
2. This unitary business is treated as a single taxpayer and its income calculated by subtracting the global expenses from its global income.
3. The resulting net income is apportioned among jurisdictions based on a formula which takes into account various factors.
4. Each jurisdiction applies its tax rate to the income apportioned and gets its share of the pie of tax from this.

Their suggestion is to use purely sales-based formula[61]; we however suggest a three-factor formula (property, payroll and sales) with a double-weighted sales factor, as having a sales factor alone , we believe, would tend to provide incentive for MNE's to book sales in different locations.

The three factors to consider in the formula are **payroll, property and sales**[62]:

- Payroll would consist of cost of the labour compensation irrespective of legal form
- Sales factor would be crucial and reflect the sale of products or services to parties that are not participants in the integrated business. Jinyan Li notes[64] that the sales factor needs to include transfers from MNE integrated to non-integrated units (deemed sales at fair market value).
- Property (assets) can be divided into two factors tangible and intangible property. The former can be evaluated precisely; the latter however poses problems as it cannot be evaluated easily. The definition of intangibles given by the OECD guidelines would include commercial and marketing intangibles and can be measured by cost. Though the by-cost valuation of intangibles has issues in terms getting historic costs and linking costs to value, it will be simple to apply and use[59]

The question is whether to include this by-cost intangible factor in the formula and authors have expressed differing views – some recommend not using intangibles at all as they are nebulous and in some form already represented in the other factors of sales ()and payroll (salaries paid towards doing research for example). McLure[57] suggests we should avoid intangibles in total and so does Hellerstein[58]. While debatable, we agree with Jinyan Li's

approach, in that it is probably best to include intangibles in the formula for reasons that the profit from such intangibles will at least get split across jurisdictions (due to other factors like payroll and sales) instead of being assigned to the “owner” of the intangibles alone like the current system.[60]

Finally, experts tend to agree that there must be a rule to “throwout” to remove apportionment to jurisdictions which don't impose income tax or have no jurisdiction to tax global profit of an integrated business[66].

One can see that the system is intuitive and simple; further given it looks at global income there is no incentive to move to tax havens and it does away with the messy definitions of permanent establishment. Problems posed by e-commerce get quite simplified – the income from such services is taken as part of global income without getting into the mess of source and residence; allocation is to the location of the customer. Overall this system seems like a step in the right direction.

Section 10

Current usage of Formulary Apportionment

Formulary Apportionment (FA) is already used in many places around the world. Typically it is used in the states, provinces or dominions of a country to allocate profits for the purpose of their sub-national corporation taxes

It is highly instructive for us to look at the existing systems and learn from their experience, their strengths and weaknesses. This section looks at the existing systems in practice around the world and we **quote key and relevant passages from the excellent work done by Stefan Mayer in his Doctoral thesis[67]** describing the existing FA systems around the world

10.1) United States of America[68]

Introduction: In the USA both federal and states levy some form of corporate income tax. For avoidance of international double taxation, the USA uses the credit mechanism. Corporate and personal income taxes are not integrated and the IRS applies the arm's length principle to separate US income from the foreign income of permanent establishments and affiliated companies on the basis of Sec 482 of the Internal Revenue Code and provisions of the double taxation conventions concluded by the USA.

None of the states applies separate accounting for determining the corporate profits earned within their jurisdiction; they use formulary apportionment instead.

Due Process and Commerce clauses: The Supreme Court interpret these rules as granting the states a very wide margin of discretion in designing their tax systems. The SC refuses to setup specific judicial rules on the apportionment of profits between the states and does not press the states on uniform rules. The Due Process clause grants protection from unlawful prosecution and in the context of state taxation, the Due Process clause prohibits extraterritorial taxation. The Commerce clause literally means that the Congress only has the power to legislate in the field of interstate commerce and in its absence the Courts interpret it as preventing the states from imposing an undue burden on interstate commerce.

A landmark decision in the Moorman case[69] clearly established that the Courts did not seek nor want uniformity of apportionment; in this case the SC upheld Iowa's single-factor sales formula which differed from the 'Massachusetts' three-factor formula states typically used; the decision gave the impetus for the states to experiment with weights for factors to create more favourable conditions for manufacturers in their state.

Consolidation : At the federal level groups of resident corporations linked through holdings of at least 80% by vote and value can elect to file a consolidated return subject to abuse rules. Most of the states follow the federal threshold. Consolidation implies all members of the group file a common tax return in which their respective profits and losses are summed up and effects of intra-group transactions are neutralized.

Combined reporting: Currently around 20 states require or approve combined reporting. Unlike the consolidated return the combined report is not a tax return but a preliminary

computation which is attached to the tax return of all group companies, which have to submit their tax returns individually. The important difference between consolidation and combined reporting are the rules for defining relevant corporate groups. The activities of one or more companies constitute a unitary enterprise if they are part of a common trade or business and are linked through factors such as centralized management and functional integration[40]. If a company or group is engaged in more than one distinct unitary business, it has to be submit a combined report for each of them.

Unitary business concept is the “linchpin of apportionability”[70]. The identification of a unitary business is probably the most complex and disputed aspect of state apportionment systems and its interpretation is far from uniform. In fact, the SC does not allow a “bright-line” test to resolve this issue[71]

Apportionable tax base: The states have a high degree of uniformity of their corporate tax bases, as many use one of the 2 possible lines of the federal corporation tax return as starting point for the computation of their state tax base. The Due Process & Commerce clauses prevent states from taxing income with which they cannot establish a rational relationship. The states are barred from including out-of-state income that does not arise from a unitary business in apportionable income; these items of income have to be allocated specifically to the state with which they are deemed to be related.

Territorial scope of unitary taxation: The states have developed different patterns of which entities and what items of income are to be included in a combined report; Reicker identified the following four basic models[72]

- a) Worldwide combination where the corporate group comprises all companies engaged in a unitary business regardless of place of incorporation and the jurisdiction in which activities take place or profits arise
- b) Domestic worldwide combination is more limited because in the case of non-US headed groups the foreign parent company and its non-US subsidiaries are excluded
- c) Domestic combination represents a model used by many states where a group’s combined report covers all profits arising from activities within USA and all profits earned by companies incorporated in the USA. Thus foreign branches of US-incorporated companies are included but foreign subsidiaries aren’t.

- d) Water's-edge combination is the narrow form where only profits arising from activities taking place within the USA are included

Today all states using unitary taxation apply some exclusion of foreign profits, they often do not exclude all foreign income

Dividends: In the USA system, owing to the Due Process & Commerce clauses the dividends from subsidiaries is not included in the combined report can only be apportioned if the payer company conducts a unitary business with the recipient company, or if the holding by the recipient company in the payer company serves an operational function rather than an investment function. Including dividends from foreign subsidiaries is actually not consistent with the water's edge taxation but it appears to be a trade-off for states relinquishing worldwide combination and it has been upheld by the SC in the case of unitary foreign subsidiaries.

Apportionment formulae: The states' apportionment formulae distribute profit according to the three factors:

1. Property
2. Payroll
3. Sales/Turnover

All of the above in separate factor fractions but the weights the state attributes to the different factors vary.

The General form of the formulae thus is represented as:

$$P_i = P_t * (c_i * (C_i/C_t) + l_i * (L_i/L_t) + s_i * (S_i/S_t))$$

where P_i denotes the profits apportioned to state i , P_t , total profits of the enterprise, c_i , l_i , s_i are weights in % attributed to the factors property, payroll, sales respectively by state i and C_i/C_t , L_i/L_t , S_i/S_t represent the portions of property, payroll and sales located in state i relative to total property/payroll sales of the enterprise.

The three-factor formula is called the "Massachusetts" formula" was applied formerly by most

states but now only around 12 states use it. A majority of the states double-weights the sales factor; the trend to increase weight of sales factor continues. The idea is to support more in-state manufacturing business that export to other states.

Let us look at the three factors further:

- a) Property factor: Only real and tangible personal property are taken into account in the calculation of the property factor whereas intangible property (financial assets or intellectual property) are excluded generally – though this is criticized heavily by experts. The basic rule for valuation of property is including assets at original cost.; the use of historical costs is condemned by authors as it tends to undervalue short-lived assets and may both under/over value long-lived ones and thus some states use the net book value of assets instead.
- b) Payroll factor: The wages and salaries connected with production of non-business income are excluded in calculating the payroll factor.
- c) Sales factor: Sales are defined as gross receipts arising in regular course of taxpayers trade or business and exclude sales creating non-business income as well as occasional and incidental sales. Receipts from transactions within a corporate group filing a consolidated return or combined report are ignored but otherwise sales are also taken into consideration if they are made to related entities. The basic rule for locating sales is it is attributed to the state in which purchase is located of the personal tangible property. Other sales like fees for services or rental income or intangible income are generally located where “the income-producing activity is performed” and if such activity is performed in more than one state then where the greater portion of income-producing activities takes place as measured by cost of performance is considered. If the purchase of personal tangible property is located in a state where the taxpayer is not taxable then sales are deemed to take place in the state of seller i.e., a “throwback”, though not all states apply this rule. The MTC regulations propose removing from the sales factor receipts from intangible personal property for which no income-producing activity can be identified or if activity is hard to localize, ex: interest, royalties and dividends from mere holding of intangible personal property. Furthermore the MTC regulations suggest excluding gross receipts and only including net gains

Industry-specific formulae: The standard “Massachusetts” formula is designed to provide for apportionment of income from manufacturing and mercantile business but is often less suitable for other industries. Therefore, the MTC and states have developed special provisions catering for a fair and practicable income distribution for specific industries.

Relief & incentives: The UDITPA recognized that there are some cases which the application of standard provisions leads to unfair and unsatisfactory results and to remedy distortions in distribution of profits included Section 18 which allows modification of apportionment formula, application of separate accounting or any other method suitable for achieving a reasonable allocation of profits. In terms of tax credits, many states offer them limited to investments within their jurisdiction in order to promote local development.

Overall, the American system of apportionment has been heavily criticized; the lack of uniformity is a major cause of concern according to experts and is harmful as regards to taxpayer fairness and administrative feasibility and neutrality. The sovereignty of states being firmly upheld, amongst other factors, is stumbling block from enforcing uniformity and effectively prohibiting double taxation. Other than non-uniformity the complex rules on unitary business principle, the water's edge accounting principles and the business/non-business distinction are also serious drawbacks.

10.2) Canadian provinces[68]

Introduction: Whereas the federal state (of Canada) has the comprehensive power for the raising of Money, the Canadian constitution explicitly confers the only the right of “direct taxation”, the taxation of non-renewable natural resources and generation of electrical energy and licensing to the provinces. Nevertheless, few effective limitations on provincial taxation seem to exist and hence there are federal-provincial overlaps in respect of most direct and indirect taxes. The largest portion of corporate income taxes is levied by the federal government whereas the provinces are responsible for 2/3rds of the capital and premium taxes. Both the federal and provinces levy corporate income taxes.

Tax collection agreements: Eight of the ten provinces have tax collection agreements with the federal administration, which govern and collect corporate income taxes by Revenue

Canada on behalf of the agreeing provinces. Only Alberta and Quebec are the “non-agreeing” provinces which don’t have tax collection agreement in respect of corporate income tax with the federal state.

Equalization: Canada follows a system of equalization payments by the federal government to the “have-not” provinces. The Canadian Constitution requires the federal state to make equalization payments that enable the provincial governments to provide “reasonably comparable” public services while maintain comparable levels of taxation[73]

Permanent establishment: Under the Canadian system, a company is taxable in and its profits are attributed to a province only if it has a permanent establishment in that province. The definition of permanent establishment is similar to that which is used in the international model conventions. In cases in which taxing rights of the federal government are limited by a narrower permanent establishment definition in double taxation conventions the non-agreeing provinces limit the exercise of their taxing rights accordingly[74]. In this way, the nexus practices of the non-agreeing provinces and the federal state correspond in the international context.

Apportionment formula: If a company has a permanent establishment in a province and at least one permanent establishment outside that province and provided that no industry-specific formula applies, then the standard formula with equally weighted gross revenue and payroll factors applies. The three-factor weighting formula used by most US states was not chosen because the draftsmen felt that it attributed too much income to the exporting provinces and in addition wanted to avoid the intricacies of a property factor

Industry-specific formulae: The federal allocation provisions included special rules for specific industries[75]. The Canadian practice in general consists of applying special formulae customized for the needs of a certain type of business, instead of modifying the factors of the standard formula.

- The profits of *insurance companies* are apportioned to a province in relation to the aggregate of net premiums for insurance of property located and persons resident in that province to the total of such net premiums.

- The formula used for *chartered banks* combines a payroll factor with a double-weighted “loans and deposits” factor
- The profits of *railway corporations* are apportioned using an equally weighted two-factor formula including the fraction of gross ton miles and the fraction of “equated track miles” in which different classes of tracks are weighted differently according to their relevance
- In the case of *airlines corporations*, 25% of income is allocated in proportion to the capita costs of fixed assets other than aircraft located in the provinces. The remaining 75% of the income is allocated in proportion of ‘revenue plane miles’ (weighted according to the take-off weight of the aircraft) flown in the provinces. Miles flown over provinces in which the companies have no permanent establishment are excluded from the denominator of the revenue plan mile fraction
- Formula for apportioning the income of *truck and bus operators* is a combination of the payroll factor and fraction of kilometers driven in provinces in which the company has a permanent establishment
- For *corporations operating ships* have a 2-stage apportionment; first all taxable income is apportioned to all jurisdictions in proportion to the ‘port-call tonnage’. Subsequently income that would be attributed in that way to countries other than Canada is redistributed to provinces according to payroll paid to employees not working on ships

For companies that comprise separate businesses subject to different allocation rules, Sec.412 of the regulations provides that the “corporation and the Minister may agree” to apply the specific formula to the separate portions of income that “might be reasonably considered to have arisen” from the respective business activities.

Tax credits: The agreeing provinces in the Canadian system have the possibility to devise tax credits in the framework of the tax collection agreements that are deducted after the tax base has been apportioned. In many cases, the provinces in fact limit their tax credits to activities undertaken within their borders.

Overall, the Canadian apportionment system has got positive appraisals from most experts[76]. It represents a compromise between the uniformity and the provincial level flexibility. The tax provinces enjoy a high degree of flexibility in devising their own tax &

economic policies due to possibilities of using their own rate schedules, tax credits and surtaxes.

10.3) Switzerland Cantons[77]

Introduction: Switzerland comprises of 23 cantons (3 of which are divided into half cantons). Vast differences between cantons exist both in respect of culture, economic power , languages and religious affiliations. The Switzerland system has a fairly weak central government politically; between the three levels of governments federal, state and cantons, the principle of subsidiarity plays an important role; administrative activity should take place at the lowest level possible.

The tax system of Switzerland is relatively complicated; the federal state has the right to tax income and capital of individuals and companies. All cantons levy taxes on income and capital of individual. Some of the cantons tax corporate income by applying progressive rate schedules that are graduated according to the profitability relative to the capital used; this method being rejected by experts many of the cantons have adopted proportional taxation instead. Most cantons also levy minimum alternative taxes, based on gross receipts and property or invested capital. The cantonal taxes are deductible from the federal corporate income tax base. Both the central state and cantons apply the classical system of company taxation; to avoid international double taxation the federal government generally applies the exemption with progressive method. In this respect, the cantons generally follow federal practice.

Allocation rules: The rules for allocation of allocation of tax bases between the cantons form part of federal law in Switzerland. The Federal Constitution govern cantonal taxation based on the following principles:

- a) equal treatment of taxpayers and taxation according to ability to pay (Article 127(2))
- b) prohibit inter-cantonal double taxation (Article 127(3))
- c) canton may not treat taxpayers who are taxable in that canton only with parts of their income less favourably than taxpayers who are taxable with all their income in that canton (Article 46(2))

The prohibition of double taxation in Article 127(3) of the Constitution is interpreted very formally by the Federal Court and double taxation is regarded as a collision of different cantonal taxing rights, regardless, of the actual taxation of specific part of taxpayers base. Therefore even potential double taxation is deemed to be unconstitutional

Group taxation does not exist in Switzerland income & capital tax laws i.e., separately incorporated businesses forming part of a corporate group are not taxed jointly and income of each entity is allocated independently. An exception is if an entity is only set up for tax avoidance purposes and principal of the entity retains control and beneficial ownership of profits and capital of the corporation; in this case the legal entity is treated as P.E of the parent company. To prevent the economic double taxation of distributed profits within affiliated group companies a participation tax credit is granted. This has to be granted by all cantons participating in apportioned profits that include qualifying dividends.

Tax residence: The main tax residence (*Hauptsteuerdomizil*) is the canton to which the taxpayer is deemed to have the closest personal relationship; all of the taxpayer's income that is not attributed to another canton is taxed in this canton. A legal person's registered office regularly constitutes its main tax residence. Only if the company has no other link with that canton apart from the formal registration, the actual place of management assumes the role of main tax residence.

Businesses have secondary tax residences in those cantons where they have a permanent establishment; income is apportioned between the main tax residence and all secondary tax residences. Summarizing, a company has the nexus required for apportionment in the canton of its registered office and in those cantons in which it has a permanent establishment

Apportionment: The type of nexus in a canton determines which of the two possible allocation methods is applied; either specific allocation or apportionment. The income of intercantonal enterprises which are defined as enterprises with at least one permanent establishment in a canton other than their main tax residence is apportioned between the main tax residence and all secondary residences. In this case, no canton in which a permanent establishment is located may tax the isolated income from the permanent establishment but instead has to take into account the profits and losses of other permanent

establishments and the main tax residence.

Both the federal state and cantons apply exemption method internationally. In the case of companies resident in Switzerland, profits of permanent establishments abroad are determined on the basis of apportionment, while the profits of Swiss permanent establishments of foreign companies are computed according to separate accounts.

Only profits of intercantonal enterprises are apportioned, as businesses without permanent establishments only have specific tax residences outside their main tax residence and therefore only specific allocation rules. Interestingly, the sum of all apportionment fractions may not exceed 100%.

Three different methods can be used for computing the apportionment fractions attributed to the main tax residence and the permanent establishments forming secondary tax residences:

- a) "Direct" method of apportionment wherein the aggregated apportionable income of the company is distributed among profitable subunits of the company in proportion of their separate accounting profits. In case a subunit incurs a loss, this method ensures not more than the total profits of the company are taxed. This is mainly used in practice to apportion profits of banks
- b) "Indirect" method of apportionment is similar to practice in US and Canada: a company's profits are apportioned according to the fraction of auxiliary factors such as turnover, payroll and sales that are located within a canton. It is applied only when the "direct" method cannot be used
- c) "Mixed" method combines the "Direct" and "Indirect" methods in a two-step process; first the total apportionable income is apportioned on the basis of separate accounting results ("direct method") to separate divisions of the company, which may be engaged in different lines of business. Subsequently those part profits are distributed within the divisions to the different cantons using the "indirect" method.

Präzipuum: This is a peculiar feature of the Swiss system wherein, if the apportionment formula is perceived to attribute too little to the contributions of the central government to profits, then the canton of the principal place of business (main tax residence) is attributed a certain % of profits before the remaining income is apportioned among the main tax residence

and the secondary tax residences. This advance allotment of profits is understood as a correction mechanism that ensures appropriate attribution of profits and is applied on a case-by-case basis.

Treatment of losses: The treatment of losses in the Swiss system is complex and the topic of Schärer's dissertation⁷⁹. If the principal place of business or a permanent establishment of an intercantonal company incurs a loss this loss is automatically set-off against the profits of the other establishments and this set-off is definitive..

It has not been decided as to what should happen if the company incurs an overall loss; there are 2 ways in which it can be carried forward: carry forward global loss and subtract it from consolidated profits of that period before apportionment (*Gesamtverlustvortrag*). Alternatively, loss can be apportioned in accordance with the general rules and part losses subsequently carried forward in each canton separately (*Teilverlustvortrag*).

Overall, the Swiss system represents a good compromise between the canton's tax sovereignty and the prevention of restrictions on intercantonal commerce. The constitutional prohibition of double taxation lead to the development of coherent system of allocation.

10.4) Germany[79]

Introduction: The federal state has exclusive power to legislate on customs and fiscal monopolies and is the main legislator on taxes. The trade tax in Germany is a key source of revenue for the municipalities. The trade tax, in theory, is a tax on objects (*Objektsteuer*, *Realsteuer*) i.e on the trades themselves. Though there have been movements to abolish this trade tax but the municipalities have so far prevented any move towards this.

Apportionment: The trade proceeds make up the tax base of trade tax; the trade income computed for the purposes of personal or corporate income taxes is the starting point of computation for trade tax. It is not the amount of proceeds itself which is apportioned among the municipalities but the basic tax amount (*Steuermessbetrag*). This basic tax amount is derived by subtracting the basic allowance and subsequently multiplying the remaining proceeds by a trade tax multiplier. The basic tax amount is then apportioned if necessary and

finally every municipality multiplies its portion of the basic tax amount with its rate of assessment to compute the trade tax due

Permanent establishment: Section 28(1) of the Trade Tax Act holds that the basic tax amount is apportioned if the trade maintains permanent establishment in more than one municipality or if the permanent establishment of a trade extends over two or more municipalities or if a permanent establishment is moved from one municipality to another during a tax year. So the nexus required for a municipality to be attributed a part of a company's proceeds is created by a permanent establishment or at least the relevant fraction of the multi-municipal permanent establishment (*mehrge-meindliche Betriebsstätte*)

Apportionment formulae: The basic tax amount is apportioned to the permanent establishment in proportion to the salaries and wages paid. This measure was deemed to be commensurate with the costs that are caused for the municipalities by the trade activities.

If a permanent establishment extends across the area of more than one municipality then Section 30 of the Trade Tax Act provides that the basic tax amount is allocated to those municipalities according to the "local situation, taking into account cost for the municipalities caused by the presence of the permanent establishment"

Section 33 of the Trade Tax Act provides for usage of alternative standards if the apportionment provisions result in an evidently inequitable result. The Section also provides that the taxpayer and all affected municipalities can agree on an alternative allocation of the basic tax amount and such an agreement is binding on all parties.

10.5) European Union[79]

In 2001, the European Commission presented its new approach to harmonization of corporation taxes. It was accompanied by an extensive study prepared by the Commission staff and two outside expert panels. Finally the Commission put forward in the communication and the study four models as possible bases of a comprehensive solution to most problems in the field. The basic thrust of three out of the four models is to offer groups of affiliated companies doing business within the Internal Market the possibility of using one set of

accounting rules to compute their tax base. This consolidated tax base would be divided among the different Member States by applying a mathematical formula based on fractions such as capital, payroll and sales located within each jurisdiction instead of applying the transactional method of transfer pricing. This approach of introducing formulary apportionment is a major departure from the European Commission's earlier proposals regarding direct taxation

In summary the general structure of the Commission's new approach is as follows[79]:

- a) Multinational companies and groups of companies are taxed on their EC-wide consolidated profits
- b) They have to apply only one set of tax accounting rules
- c) Formulary apportionment with a common formula is used to allocate profits among the Member States
- d) Member States remain free to set their own tax rates
- e) Corporation tax systems are not harmonized

These developments in the EU, which represents a majority in the OECD, have shown a clear movement towards FA by the European Commission. The work on the **Common Consolidated Corporate Tax Base (CCCTB)** is scheduled to lead to a concrete proposal by 2010[80]

10.6) Advance Pricing Agreements (APA)

An Advance Pricing Agreement is an agreement between a taxpayer and the tax authorities whereby the parties agree on a particular transfer-pricing methodology to be applied to a specific set of transactions for a specified term[87]; an APA can be unilateral or multilateral.

Many APA's (and cost-contribution agreements) tend to be formulaic in nature and are excellent examples of how formulary apportionment could work based on consensus. APA's are commonly used and allowed by the OECD transfer-pricing guidelines issued in Canada, USA, Japan and other countries.

Section 11

Developing countries & Formulary Apportionment

In the preceding Sections, we saw that FA is used mainly in the provinces or states of developed countries like USA, Switzerland etc. Our hypothesis is that developing countries need to adopt FA too.

There are a number of practical reasons for this claim:

1) Problems with current system as regards to source taxation of MNE's

In the earlier part of this document, we enumerated in great detail on how source countries get a raw deal with the concept of permanent establishments and loose out on crucial revenue. Today the system is such that, in tandem, tax havens and abuse of the P.E concept cause much of the revenue to be taxed in the residence leaving source countries with little or no scope for taxation.

2) Lack of comparables

Developing countries have a fundamental problem in their distinct lack of comparable data. There are quite a possible few reasons for this:

2.1) In developing countries there are usually few players in any given sector; getting proper comparable data is very tough and usually tend not to reflect the reality of the situation

2.2) Furthermore, whatever comparable data is available is costly and tends to be incomplete because the resources and processes are not in place at every level of the chain to get useful comparable data.

2.3) In many developing countries which are opening up its borders there are first-movers who have arisen in many areas; in such cases there is present a clear dearth of comparables

2.4) Sectors and companies tend to be non-homogeneous, typical of a developing

country (as opposed to advanced countries where there seems to be a modicum of homogeneity as the sector matures and grows over time). So even if a few companies were operating in the same sector in a developing country, their differences tend to be so vast that applying various changes, removing variations and doing set-offs etc end up sometimes distorting the comparison itself.

2.5) Intangibles, like licenses, tend not to be comparable easily. Most of them are distinguishable from one another in certain ways; many times this distinguishing characteristic itself is the USP of the intangible. To get comparable data for intangibles is an uphill struggle and for developing countries which tend to license technology from developed countries, which tend to use intellectual property originated in developed countries to advance and whose prime driver of growth is the 'intangible economy', comparables are incredibly hard to come by.

In short, in developing countries, getting comparables for analysis is quite possibly the biggest practical problem faced currently by transfer pricing experts. In this light, it makes a lot of sense to use FA instead to arrive at the share of the pie that a developing country gets.

3) Lack of knowledge & requisite skill-set

Transfer pricing methods are complex and time-consuming. TP reports opinions run into hundreds of pages with legal and accounting experts employed to create them. To compound matters, a lot of the Internet services and for that matter any cutting-edge technology are very different from any offline or physical comparable service (a simple example being the ability to make thousands of copies of a song, as a mp3 file, and send it to various corners of the world in a second as opposed to the old method of cassettes and tapes).

This kind of complexity and knowledge-requirement puts tremendous strain on both the Revenue authorities and the taxpayers which we believe cannot be coped with.

Introducing FA in this mix at the very least will greatly simplify things and reduce the

complexity to highly manageable levels

4) Overburdening of taxpayer

In a developing country, there doesn't exist sufficient resources at the taxpayers disposal to hire and arrange for costly transfer pricing reports.

Further, the assessment process by Revenue itself tends to be long-drawn, many times contentious and ultimately an "estimate" fraught with conflicting interpretations.

The use of dispute resolution panels (DRP's), like in India, for appeals related to transfer-pricing assessments underscore the complexity of administering and evaluating the current transfer-pricing methods. For companies in developing countries, following such a process is involved and costly.

In case of disputes between the Revenue authorities of countries itself, the current prescribed option is using a MAP – again this would lead to a protracted and involved dialogue, often between unequal economic powers and cause tremendous strain on the companies in questions and the resources of the Revenue authorities of the developing countries

Without a doubt, the current transfer pricing regime places a huge burden on the taxpayer who is already burdened with the inefficiencies of the systems and processes in a developing country. Thus, adopting a system like FA may not completely solve all the issues but it may help the taxpayer and authorities by reducing their burden with a simpler and more intuitive system.

5) Location savings

As noted earlier in this document, the current transfer-pricing guidelines are woefully

inadequate regarding location savings which accrue when MNE's move their operations to low-cost jurisdiction (typically, developing countries). Thus, in the current regime, there is no clear way to allocate the benefit from location savings between high and low cost jurisdictions causing an unequal distribution of such benefit (typically tending to remain wholly with the low-cost jurisdiction)

6) Growth of the “Intangible economy”

In developing countries, like India and China for example, the prime driver for growth is the IT (Information Technology) industry which has seen a huge growth curve over the last decade creating millions of jobs. It has been dealt with, above, at length as to how the Internet and its e-commerce applications completely distort the current International taxation concepts and how the current transfer pricing methods are rendered incompetent to deal with the different kind of challenges thrown up by web-based business models. It is imperative for developing countries to be able to get some portion of the pie without which crucial revenue which ought to be flowing into the system will be lost.

In conclusion, it is believed that developing countries should shift towards FA and that they would benefit in a lot of ways by moving to a FA system. Developing countries should take the bold leap and join developed countries like the USA, which has been essentially pushing for a formulaic apportionment for quite a while now.

Section 12

Critique of Formulary Apportionment

OECD has been a strong opponent of any formulaic approach and specifically rejects the use of Formulary Apportionment (FA). The principle opposition to Formulary Apportionment is on the following lines:

- 1. Formulary Apportionment inherently leads to arbitrary allocation of profits amongst jurisdictions[81]**

Using only a sales factor (or) weighting the sales factor doubly amongst others would lead to focus on the demand side of the value created by a MNE which is not the case in the current international tax regime – this alone does not make the FA scheme inherently arbitrary.

In fact, it is arguable that FA is based on more sound and intuitive economic principles than the current SA regime. The current system finds disfavor with economists who feel that the OECD recommended transfer pricing methods lack a sound economic base.

Further, we believe the FA approach is no less arbitrary than the current SA approach which clearly provides an impetus to shift to low-tax jurisdictions^[80]. The fact is that in the current regime an MNE will not pay taxes either where it produces (via tax havens) or where it distributes (by claiming it does not have a PE and hence no profit is attributable to the source jurisdiction)^[81]. One look at today's tax planning and pending legal cases will show a huge movement by companies to use tax havens and to use the arcane definition of P.E to escape the tax net. In developing countries the amount of revenue lost is non-trivial.

We do not dispute that there might be some industries who lose in the proposed system in their existing setup^[82] nor do we state that there are no inequalities in the proposed system; however the simplicity of the tax regime and the avoidance of double taxation should make FA a good alternative compared to the current mess that exists.

- 2. Difficulty in implementing a global system as it requires substantial international coordination and consensus. Furthermore, it is felt that even if some countries were willing to accept global formulary apportionment there would be disagreements because each country may want to emphasize or include different factors in the formula based on the activities or factors that predominate in its jurisdiction[81]**

Indeed the ideal case is for most countries to adopt the FA system and come to an agreement to use a formula for apportionment of global income. As mentioned above,

there are many countries and groups of countries pursuing this goal already – the USA, Canada, the EU etc

The fact is if some of the large developed economies of the world start using FA there will be a huge incentive for the developing countries to use it too. We believe that a fast-growing economy should seize this opportunity and allow for FA for companies in developing countries, like India and China, having global income and also participate

The Hamilton Project[61] makes a very good point that in a system which has both FA and SA countries, FA countries will immediately appear as a tax haven for SA countries. Example is a MNE operating in both FA and SA countries will have incentives to book its income in FA countries as the tax liability in such countries doesn't depend on the income booked but the portion of the MNE's activity in that jurisdiction and so such responses would clearly provide a huge impetus for SA countries to adopt FA, particularly if the developed economies like USA adopt FA.

The experience of US in using the weighted-sales formula which has been adopted now in most states and the experience of over 100 countries adopting destination-based VAT suggests that the USA will likely adopt a FA system pushing other countries to follow suit.

Thus the main worry with FA is if the other countries do not follow the suit, in terms of adopting FA or adopting the same formulae, countries like USA even if it adopts FA. are addressed by in-built incentives in the system in case of a FA-SA world and external incentives like the simplicity and cost-savings obtained by using the system

It should be pointed out that If the majority of the countries do agree to adopt FA, there is going to be a transition period which might lead to problematic instances of double taxation. It is acknowledged that there might be some problems of double taxation during this transition period

3. Issues in implementing FA due to :

i. Different accounting systems used by countries[81]

Unilateral adoption of FA by a country does not require the FA country and all the others to have the same tax base, though the ideal case is situation is all countries adopting FA using the same formula.

Given that MNE's use uniform accounting for worldwide financial reporting purposes it is quite plausible to use financial reporting as a starting point for calculating the global profit of the MNE[70]

Further, It must be noted that accounting standards differences are narrowing worldwide due to the adoption of the International Accounting Standards. In developing countries there is a clear mandate to push to adoption of such international accounting standards; EU and Japan have already adopted the

Alternatively, it may be possible for each MNE to use their home country accounting methods for calculation of the global tax base (this is EU's suggestion for inter-EU purposes). So USA MNE's would use GAAP for tax reporting in the EU and Japan; this would save costs and also have the advantage of more closely aligning book income and tax income[71]

ii. Difficulty In determination of unitary business & location of sales[81]

In FA, its crucial to define a unitary business. We need to look at whether the subsidiary acts under the legal and economic control of the parent for a test of unitary business[72]. Moreover, transactions amongst the MNE constituents itself can be used to figure out whether a unitary business exists[73]. As Avi-Yonah avers[74] imposing a hybrid legal control with minimum level of inter-MNE transactions would be overall quite effective.

It is also relatively simple to make sure “independent” agents are not used for sales by adopting a “look-through” rule[75]

Further, we believe that establishing the location of sales of goods shouldn't be a difficult task; for establishing the location of sales of services we can use the lessons learnt from the successful destination-based VAT system that has been successfully adopted in over 100 countries

iii. Treaty conflicts due to FA[81]

Existing treaties need not be modified for adopting FA as Avi-Yonah points out[76]. If FA were adopted, Article 9 would be redundant as the FA treats transactions between related parties as belonging to a single enterprise. FA would be governed by Article 7 and the existing model convention would apply as long as subsidiaries are treated as dependent agents

Thus were a country to adopt FA it could argue that resulting allocation of profits to the subsidiary is consistent with the arm's length principle in Articles 7 & 9; despite the OECD's hostility towards the FA there is no way to prove in the absence of comparables that any profit allocation deviates from an arm's length result. We discussed this in the above section where we spoke of the transfer pricing methods and FA being part of a whole continuum.

Overall the problems with FA do not seem insurmountable . We concur with the experts [61] that FA is less arbitrary than the current system and believe that makes economic and business sense for countries to use FA.

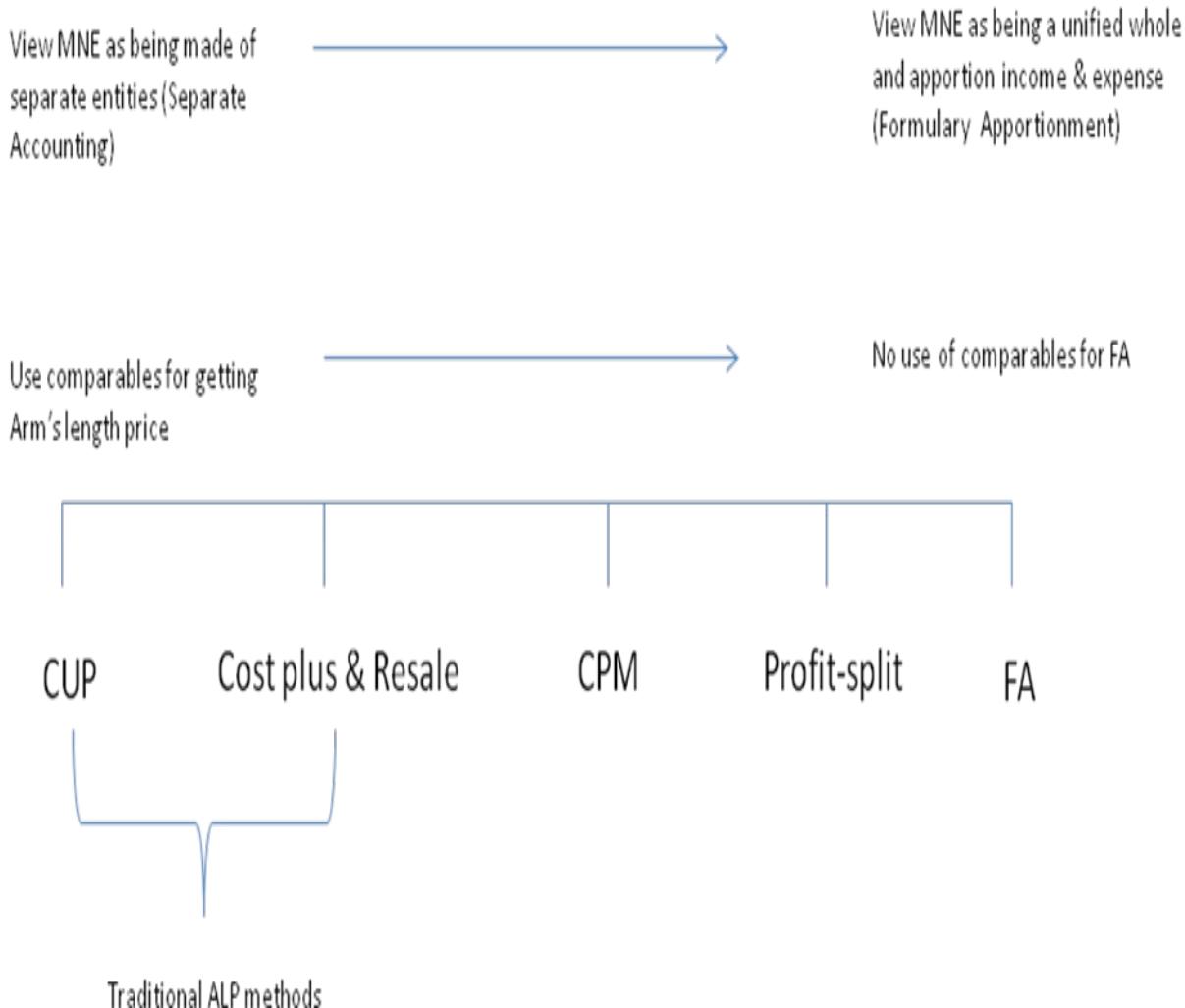
Section 13

Transfer pricing and FA : One continuum

The OECD seem to think that its recommended transfer pricing methods to arrive at an arm's length are completely orthogonal to the Formulary Apportionment method. This is disputed, in our view, rightly by Arnold/Mcdonell who call for a more harmonious view[82] and state that "the arm's length principle and formulary apportionment should not be seen as polar extremes; rather they should be viewed as part of a continuum of methods ranging from CUP

to predetermined formulae. It is not clear where the arm's length principle ceases and formulary apportionment begins, and it is counterproductive and unimportant to apply labels to the methods"

The formulary apportionment method and the other methods are not a dichotomy instead part of a wide continuum



Section 14

Conclusion

We have undertaken a detailed analysis of the current international tax regime, starting from its source and working our way to an analysis of the Separate Accounting concept, the Arm's length principle and the Transfer-Pricing methods used currently and have pointed out issues at both the conceptual level and the implementation level in the current international taxation regime. We have further demonstrated that the Internet and e-commerce applications render the current international taxaxtion regime ineffective.

In light of these problems, we suggested that Formulary Apportionment (FA) be used as a viable alternative to the current transfer pricing methods and have considered the mechanics of a workable FA system while addressing its shortcomings. Finally, we showed how FA would be suitable especially for developing countries.

In short, we believe the time has come for developing countries to move to a formulary apportionment (FA) system and we conclude quoting Victor Hugo -- "*On résiste à l'invasion des armées; on ne résiste pas à l'invasion des idées.*" ("an invasion of armies can be resisted, but not an idea whose time has come")

Section 15

Acknowledgements

Other than the text of the Models and guidelines published by OECD & the UN [17][19], we quote and derive much of our report from four excellent sources on the subject of formulary apportionment, though they concentrate on different aspects of the FA puzzle:

- **Transfer Pricing and Corporate Taxation: Problems, Practical Implications and Proposed Solutions[36-40]** which takes an excellent economists view of the current transfer pricing methods
- **International Taxation in the Age of Electronic Commerce: A Comparative Study by Jinyan Li[2]** which is a seminal book in dealing with e-commerce and its
- **A Proposal To Adopt Formulary Apportionment For Corporate Income Taxation: The Hamilton Project** by Reuven S. Avi-Yonah and Kimberly A. Clausing [61] (and) **Business Profits (Article 7 OECD Model Convention), Chapter 2, Vol 20 of EUCOTAX**

- Series[35], The Rise and Fall of Arm's length: A Study in the Evolution of the U.S. International Taxation[22]**, all by the same authors both of which are excellent treatises on the subject of providing mechanics of a possible FA system which can be applied by countries, the advantages of choosing a FA system and on answering the criticisms of FA.
- **Formulary Apportionment for the Internal Market by Stefan Moyer[67]** which goes in-depth into existing FA systems and how the EU can implement an FA system for its internal market i.e its member states

Section 16

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