The Case for Unitary Taxation of International Enterprises

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A. Introduction

The international tax system is comprised of national tax systems and the network of bilateral tax treaties. The OECD Model Tax Convention on Income and Capital\(^1\) and Commentary uses the arm’s length principle to allocate profits between associated enterprises or within international enterprises operating abroad through branches. The arm’s length principle is further developed in the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations\(^2\) (Transfer Pricing Guidelines) for associated enterprises which are required to set their transfer prices to reflect the prices used by independent entities operating at arm’s length. Developments in communication and information technology have provided international enterprises with the capacity to operate internationally, either through subsidiaries or branches, as highly integrated businesses. Globalisation has created an integrated international economy, and the implications of this change for the international tax system are profound.

An alternative method of allocating profits to jurisdictions from international transactions is unitary formulary apportionment. Unitary formulary apportionment treats an international enterprise operating through branches as a unitary business or a company group as a unitary business. Unitary formulary apportionment avoids the problems, of assuming the economic independence of each part of an international enterprise, and of transfer pricing, inherent in the current tax treaty system. While unitary formulary apportionment does overcome some of the problems associated with the arm’s length principle, it also has a number of shortcomings. Moreover, unitary formulary apportionment has not been tested at an international level. The European Union (EU) has recognised the flaws in the bilateral tax treaty system and in transfer pricing, and the European Commission is considering comprehensive reform measures such as implementing a multilateral tax treaty using formulary apportionment. This is an exciting and promising prospect for international tax reform.
This paper examines the case for implementing a multilateral tax treaty using unitary formulary apportionment to overcome the shortcomings of the present bilateral tax treaty system. Unitary formulary apportionment has important policy advantages over the arm's length principle because it reflects the economic reality that an international enterprise is a unitary business with a common profit-motive. The European Commission's proposals provide a significant development at the regional level for multilateral taxation of international enterprises using formulary apportionment. The paper considers the European Commission's proposals and the effectiveness of unitary formulary apportionment. International banks operating abroad through branches are highly integrated international businesses. It is suggested in this paper that the European Commission should test unitary formulary apportionment on banks operating within the EU through branches.

The paper begins with an outline of the problems of the current international system using bilateral tax treaties and the arm's length principle to allocate profits of international banks and non-bank enterprises. The paper then considers the benefits of a multilateral tax treaty over the current bilateral tax treaty system. A multilateral tax treaty is an essential framework for implementing a unitary formulary apportionment allocation system. The paper considers the case for the use of unitary formulary apportionment to allocate business profits to permanent establishments under a multilateral tax treaty. This section of the paper focuses on the European Commission's proposals. The paper concludes with a study of the issues that arise from the implementation of a unitary formulary apportionment system.

B. The need for international tax reform

The bilateral tax system for the allocation of profits of international enterprises is being challenged in a globalised international economy. The problems with the arm's length principle are becoming worse making the need for reform a pressing matter. The United Nations has noted that: ‘Transfer pricing is a worldwide problem. All countries have experienced difficulties in finding comparable transactions and comparable companies under the arm’s length rule. . . . Although the arm’s length approach is supposed to result

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1 (2005)
2 looseleaf (1995)
in realistic prices, it often falls short in reality. As it is estimated that over 60 per cent of world trade takes place within multinational enterprises, the search for comparables is difficult and costly and finding comparable prices for intangible property is virtually impossible. Another problem is the complexity of the transfer pricing rules in a number of developed countries.

International enterprises have the capacity to manipulate the international tax system through sophisticated tax planning and they are in many cases the only source of information on their operations in a particular jurisdiction. In a globalised economy international business are able to use high speed and high quality communication and information technologies to organise their international operations along business lines rather than geographic lines. This increasing international integration erodes the premise of the arm’s length principle for allocating profits from international business. The objective remains to establish an international tax system that allocates the profits of an international enterprise in a manner that is efficient and equitable.

An alternative system for the taxation of international enterprises would be a multilateral tax treaty using unitary formulary apportionment. As the shortcomings of the arm's length principle in a globalised economy are becoming more obvious, allocation methods using formulary apportionment are becoming an acceptable alternative method. Increasingly, commentators are advocating the need for a new international tax system. Unitary formulary apportionment is a simple profit allocation method, in which the profits of an

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7 Ibid, p. 1382.
8 The meaning of unitary formulary apportionment is discussed below.
Formulary apportionment allocates the worldwide profits of an international enterprise to the jurisdictions in which it operates on the basis of a formula. By allocating an enterprise's global profits, formulary apportionment overcomes the transfer pricing problems of the current international tax system.\textsuperscript{11} Musgrave asserts that international formulary apportionment is superior to the present international tax system:

\begin{quote}
The permanent establishment approach is hardly satisfactory. Implementation of a bona fide separate accounting approach is exceedingly difficult and the dividing line between what does and what does not constitute a separate establishment is arbitrary. . . . Ultimately, the only satisfactory solution . . . would be the taxation of such income on an international basis with subsequent allocation of proceeds on an apportionment basis among the participating countries, making allowance for the distributional considerations. This is especially called for in view of the rapid growth of the multinational corporation.\textsuperscript{12}
\end{quote}

The rationale for formulary apportionment is that it reflects economic reality. Bird illustrates the flaw in the current system of treating branches or subsidiaries as separate entities for allocation purposes under the arm's length principle:

\begin{quote}
The underlying rationale of this approach is that the affiliated entities constitute a "unitary" business, the profits of which arise from the operations of the business as a whole. It is therefore misleading to characterise the income of such as a business as being derived from a set of geographically distinct sources . . . As already noted, the unitary approach has in its favour the fact that it recognizes that income is the fungible product of a set of integrated income-producing factors under common control, regardless of location. The apportionment of the tax base, once it has been determined, is founded in some fashion on the geographical distribution of property and activities that are presumed to contribute to the integrated income-producing process.\textsuperscript{13}
\end{quote}

The development of international banks operating around the world through branches illustrates the strain that globalisation has placed on the existing tax treaty system. The central feature of international banks is that they can achieve a higher net return by operating abroad through branches or subsidiaries, than they would by operating in other countries using independent enterprises.\textsuperscript{14} International enterprises are able to internalise and reduce the costs of operating around the world; otherwise it would be cheaper for an

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international enterprise to use independent entities when operating in other countries. The allocation of profits within an international enterprise is arbitrary because they operate on a unitary basis. The profits of an international enterprise are the result of the operation of integrated income producing factors that are under common control, irrespective of differing geographic locations.

Formulary apportionment methods of allocating the profits of international banks, correspond more closely with economic reality than profit allocation using the arm's length principle. A multilateral tax treaty using formulary apportionment for the allocation of profits to bank branches would be a transparent and effective method for allocating the profits of an integrated international bank. As there is no single economic formula which can be used to allocate the profits of an integrated international bank, a formula would have to be developed through negotiations between countries. Economic modelling would be able to provide results on the use of a particular formula in an industry such as international banking. But the relative weight placed on each factor in a formula alters the allocation of profits and the formula would have to be settled by negotiation between participating countries.

C. Multilateral tax treaty

A key element of a move to unitary formulary apportionment is a multilateral tax treaty in which participating countries agree to divide the profits of an international enterprise on the basis of an agreed formula. A multilateral tax treaty would complement the multilateral trade treaties that have been progressively introduced throughout the world, but the critical issue is obtaining the commitment of countries to join a multilateral tax treaty. A multilateral tax treaty would have significant advantages over the existing bilateral tax treaty system. In the 1920s, the League of Nations recognised the advantages of a multilateral tax treaty, but did not recommend this system because it was unlikely to be accepted by member countries at that time. Nevertheless, the preferred League of Nations approach was for a multilateral tax treaty to be developed. The OEEC and the OECD also

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preferred a multilateral tax treaty as a long term solution. In 1980, the UN noted the benefits of a multilateral tax treaty:

The creation of a network of bilateral tax treaties based on a common model will be an important step on the way leading to the eventual conclusion of a world-wide multilateral tax convention for the avoidance of double taxation. In the meantime, as an intermediate step, groups of countries might consider the possibility of negotiating regional or subregional multilateral tax conventions based on the United Nations Model Convention but adjusted to their requirements and the characteristics of their region or subregion.

The conclusion of regional or subregional conventions for the avoidance of double taxation would not only increase the number of countries which are parties to a double taxation convention but would also promote the co-ordination of tax policies and practices at the international level. The conclusion of such conventions would accelerate the harmonization of tax rules and practices concerning basic definitions, procedures for identifying the source of taxable items, methods for the elimination of double taxation and so on.\textsuperscript{17}

This statement was modified in the 2001 version of the UN Model to maintain the emphasis on regional conventions, although without an express reference to a multilateral tax convention:

It is hoped that the United Nations Model Convention will contribute to the conclusion of an increasing number of bilateral tax treaties, not only between developed and developing countries but also between developing countries. It is also hoped that the Model Convention will contribute to the standardization of the provisions of such treaties. The creation of a network of bilateral tax treaties based on a common model will be an important step on the way leading to the eventual conclusion of regional or subregional conventions for the avoidance of double taxation.\textsuperscript{18}

This modification may be interpreted as a change in emphasis, with the development of regional tax treaties being viewed pragmatically as a precondition to the creation of a worldwide multilateral tax treaty. Nevertheless, the UN has noted that the international tax system needs to progress from a network of tax treaties to regional multilateral tax treaties.

In 2001, the European Commission noted the flaws of the bilateral tax system within the EU and that major reforms were required to overcome these flaws.\textsuperscript{19}

Article 293 of the


European Community Treaty requires member countries to enter negotiations with other member countries to prevent double taxation. The aim of the provision is to ensure that interstate activities within the EU, are not disadvantaged as compared with national intrastate activities. Moreover, the European Commission contends that tax discrimination or double taxation arising from activities within the EU cannot be tolerated. The European Commission concluded that the existing network of tax treaties in the EU goes some way towards removing distortions, but does not meet the requirements of the internal market. The European Commission noted that:

Finally, bilateral tax treaties based on the OECD Model Double Taxation Convention often do not resolve many of the instances of double taxation which have been described in other sections of this part of the study. They do not normally provide a solution to the problem of cross-border loss compensation or a definitive solution to the costs and risks of double taxation due to transfer pricing disputes. . . . This analysis has shown that there are a significant number of issues of double taxation which are not being properly addressed by the bilateral tax treaties in place between Member States or by domestic tax provisions. This is because they do not cover all bilateral relations between Member States, they do not achieve complete abolition of either discrimination or double taxation and, in particular, they never provide any uniform solution for triangular and multilateral relations between Member States. The number and extent of the complexities and difficulties in this area will increase when the European Union expands.

1. The advantages of a multilateral tax treaty

The main advantage of a multilateral tax treaty is that it could be holistically reformed in response to international developments and problems as they arise. In particular, a multilateral tax treaty could be readily amended to reflect developments in international trade and to counter tax avoidance arrangements implemented by international enterprises. Amendments would need to be made only to the multilateral tax treaty, and would apply to member countries prospectively. It is generally accepted that it is difficult to amend the OECD Model and that the OECD consequently attempts to implement changes by amending the Commentary or issuing reports. For example, the OECD's 2003 Discussion Draft on the sweeping proposals for the taxation of permanent establishments did not canvas amendments to Article 7 of the OECD Model or the Commentary. The prospect

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20 Ibid.
21 Ibid, p. 289.
22 OECD, *Discussion Draft on the Attribution of Profits to Permanent Establishments: Part II (Banks)* (2003). The OECD did note that amendments to Article 7 may be necessary to implement the proposals, but a draft Article 7 to support the proposals was not issued.
of reforming the extensive bilateral tax treaty network within a short period of time is remote because each treaty would need to be renegotiated and the changes implemented. Reforms may be implemented quickly in some countries through changes to the Commentary if it is used by those countries on an ambulatory basis. In addition, in some countries the Commentary is used by courts, on an ambulatory basis, in the interpretation of articles of the country’s tax treaties.

A multilateral tax treaty would be easier to interpret because it would be one single instrument bringing uniformity to all jurisdictions. Interpretation of tax treaties under the current international tax system is complex because each treaty is negotiated independently and is a separate legal instrument. A flaw with the current tax treaty system is that there is significant uncertainty about the meaning of certain provisions. Under the current international tax system it is difficult for taxpayers to know if provisions of tax treaties will be uniformly interpreted in the countries in which they operate. This results in taxpayers and tax agencies spending considerable resources on interpreting tax treaty provisions. If the main articles of tax treaties were included in a multilateral tax treaty, interpretation is likely to be more certain because the member countries would need to develop consensus interpretations of the model treaty. The organisation administering the treaty would be responsible for amending the multilateral tax treaty and maintaining a commentary on its interpretation. The commentary would be binding and this would provide considerable certainty for tax agencies, taxpayers and tax advisers. If an ambiguity arose as to the meaning of a provision, amendments to the multilateral tax treaty could be developed to remedy the ambiguity.

Under a multilateral tax treaty the allocation of profits to countries in which an international enterprise operates is considered at an holistic level. The current bilateral tax treaty system would operate effectively to allocate all of an international enterprise's profits, if it only operated in two countries party to a particular tax treaty. But in a globalised economy, international enterprises operate in several countries. Under the current bilateral tax treaty network, international enterprises have to cope with a large number of tax treaties and this increases the risks, for the enterprises of double taxation or

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for tax agencies of under-taxation. For example, under the current international tax system a triangular tax case may result in double taxation even if there are bilateral tax treaties between the countries. Under a multilateral tax treaty the potential for tax distortions within treaty countries is minimised. An ideal multilateral tax treaty would allocate all of an international enterprise's income, to the countries in which it operates, equitably and efficiently.

2. The process for establishing a multilateral tax treaty

A multilateral tax treaty cannot be established without widespread acceptance of the multilateral approach by countries, and this negotiating process will take considerable time. Countries will have to be persuaded that the benefits to them of a multilateral tax treaty system will exceed those of the existing international tax system. The best potential area for a multilateral tax treaty to be implemented is within existing groupings such as the OECD, EU, NAFTA or the Asia-Pacific region. At the moment, the best qualified body to oversee the negotiation and implementation of a worldwide multilateral tax treaty is the OECD, because it represents both member countries and an extensive group of non-member countries. The OECD Model has set the platform for a multilateral tax treaty because OECD member and non-member countries negotiate treaties which conform with the OECD Model. The process of implementing a multilateral tax treaty should be measured because of the need for widespread support and acceptance by countries. As the main political problem for jurisdictions joining a multilateral tax treaty is the perceived loss of sovereignty, a gradual approach would extract certain parts of bilateral tax treaties and place them in a multilateral tax treaty. Such a process is used in international legal diplomacy. The non-controversial provisions could be placed in the multilateral tax treaty as a starting point for the development of a more comprehensive treaty. Importantly, member countries to a multilateral tax treaty will nevertheless retain some tax autonomy,

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as each individual country will choose the tax rate that will apply to the profits allocated to them under the treaty.\footnote{30}

Thuronyi has suggested a two step process for implementing a worldwide multilateral tax treaty.\footnote{31} Under the first step, countries should agree to negotiate treaties on the basis of a multilateral model tax treaty and to amend their existing tax treaties to conform with the model over a period of time. Amendments to the proposed model and commentary would apply to countries participating in the system on an ambulatory basis. A multilateral model tax treaty would operate in much the same way as the OECD Model, but with more certainty in interpretation because amendments to the treaty and commentary would apply on an ambulatory basis to all tax treaties with common provisions.\footnote{32} The aim of this process would be to establish a tax treaty network conforming with a multilateral model tax treaty and thus pave the way for a multilateral international tax system.

Under the second step, a multilateral tax treaty would replace the existing bilateral tax treaty system.\footnote{33} Thuronyi suggests that this process should be one of evolution, in the same manner as the development of the GATT. The features incorporated in the multilateral tax treaty would have to be negotiated by the participating countries. The features of a multilateral tax treaty would not be significantly different from those of a bilateral tax treaty. Both types of treaty need to define a range of terms and allocate taxing rights among the participating countries. An essential goal for each treaty type is the elimination of double taxation, consequently, most of the material contained in a bilateral tax treaty would be incorporated in a multilateral tax treaty. There are additional features a multilateral tax treaty must include. Special provisions are required for dispute resolution because the precedents set through a dispute with one country will affect the application of the tax treaty to other member countries.

In summary, the ideal international tax system in a globalised economy would be a worldwide multilateral tax treaty. Such a measure would complement multilateral trade treaties and enhance international trade. Under a multilateral tax treaty, international enterprises would be taxed on a consolidated basis with their profits being allocated

\begin{itemize}
\item \footnote{32} Ibid.
\item \footnote{33} Ibid, p. 1646.
\end{itemize}
amongst the participating countries on the basis of unitary formulary apportionment. But realistically, such a proposal is idealistic and support for this approach is unlikely to be readily achieved. Nevertheless, the creation of regional multilateral tax treaties is an important forerunner to the establishment of a worldwide multilateral tax treaty in the future.

D. Unitary formulary apportionment

A multilateral tax treaty using formulary apportionment to allocate business profits to permanent establishments is the most effective allocation method in a globalised world economy. There are two types of formulary apportionment. Simple formulary apportionment involves using a formula to attribute the profits of a company to different jurisdictions, which may be countries or states in a federation. Alternatively, unitary formulary apportionment involves treating international companies operating abroad through branches as one entity for tax purposes; in the case of a company group the group is treated as one entity. Under unitary formulary apportionment an integrated international bank would be treated as one entity for tax purposes.

Formulary apportionment is more consistent with economic theory because an integrated international enterprise, such as an international bank, operates as a unitary business. Formulary apportionment starts with an international enterprise's net profits and then seeks to allocate the profits on a fair and agreed basis. It eliminates most of the problems caused by the arm's length principle in taxing integrated international enterprises. The main advantages this method has over the arm's length principle, is that it does not require an examination of the numerous transactions of an international enterprise, it simplifies the profit allocation between countries, and provides greater certainty for taxpayers.

34 In 1981 the United States General Accounting Office found that the arm's length principle had considerable shortcomings and recommended that the US Treasury study the alternative apportionment methods such as formulary apportionment: United States General Accounting Office, IRS Could Better Protect U.S. Tax Interests in Determining the Income of Multinational Corporations, Report No. GGD-81-81 (1981), p. 27.
36 Ibid.
Board\textsuperscript{39} recognised that the arm’s length principle does not deal with the integration benefits that are available in unitary businesses:

\ldots the profit figures relied on by appellant are based on precisely the sort of formal geographical accounting whose basic theoretical weaknesses justify resort to formula apportionment in the first place. Indeed, we considered and rejected a very similar argument in \textit{Mobil}, pointing out that whenever a unitary business exists, "separate [geographical] accounting, while it purports to isolate portions of income received in various States, may fail to account for contributions to income resulting from functional integration, centralization of management, and economies of scale. Because these factors of profitability arise from the operation of the business as a whole, it becomes misleading to characterize the income of the business as having a single identifiable 'source.' Although separate geographical accounting may be useful for internal auditing, for purposes of state taxation it is not constitutionally required." 445 U.S., at 438 (citation omitted).\textsuperscript{40}

Formulary apportionment would also reduce compliance costs for international enterprises and reduce administrative costs for tax agencies,\textsuperscript{41} as it precludes the costly review of notional and real transactions to determine if they were done at arm's length prices.\textsuperscript{42}

The allocation of profits under formulary apportionment will usually differ from the result under the arm's length principle.\textsuperscript{43} Under the formulary apportionment method, if an international bank has a net profit, then the profit will be distributed, on the agreed basis, between the branches and head office. No part of the bank would suffer a loss, because formulary apportionment treats profitability as being uniform within an enterprise.\textsuperscript{44} Should an international bank have a net loss for an income year, all parts of the bank would be treated as operating at a loss. The loss would be allocated to the branches in the participating countries on the basis of the formula. On the other hand, if an international bank has a net profit under the arm's length principle, some parts of the bank may be treated as operating at a loss, provided the transactions comply with the arm's length principle.

\begin{thebibliography}{99}
\bibitem{39} 463 U.S. 159, 103 S. Ct. 2933, 77 L. Ed. 2d 545, 1983 U.S. LEXIS 89. Justice Brennan delivered the opinion of the Court.
\bibitem{40} Ibid, p. 181.
\end{thebibliography}
Under formulary apportionment, each jurisdiction taxes the revenue that is allocated to it under a formula at the appropriate tax rate. A formulary apportionment system does not require an allowance to be made for foreign tax credits because the system is territorial.\(^{45}\) Moreover, this system does not require each jurisdiction to have complicated rules, including transfer pricing rules for determining the taxable income of a branch of an international bank. Formulary apportionment has the potential to achieve neutrality; tax planning issues will not be significant because international enterprises will be taxed on a unitary basis.\(^{46}\)

In the literature there is extensive debate on the relative merits of the arm's length principle and formulary apportionment. Some commentators have argued that while the arm's length principle has serious defects, the use of formulary apportionment would not be an improvement over the current system.\(^{47}\) It has been argued also, that the arm's length principle is conceptually superior to a formulary apportionment method, although practical aspects make the arm's length principle problematic.\(^{48}\) The OECD Transfer Pricing Guidelines after considering the nature of formulary apportionment and comparing it with the arm’s length principle expressly rejects the use of formulary apportionment.\(^{49}\) Rosenbloom has stated that formulary apportionment ‘must have something compelling in its favour’, given the lengths that the OECD goes to in criticising it.\(^{50}\) Other commentators contend that formulary apportionment is superior to the arm's length principle in both theory and practice.\(^{51}\) It has been contended further that formulary apportionment reflects each jurisdiction's economic interest in the profits of an international enterprise, and that this system is consistent with the analysis by the League of Nations Committee of Experts.\(^{52}\)

\(^{46}\) Ibid, p. 850.
1. Formulary apportionment in the US and Canada

Formulary apportionment is not currently used as a method of allocating business profits of international enterprises between countries, however it is not an untested apportionment method; it is used at the state level in the US and at the provincial level in Canada for the allocation of corporate profits between states.\(^{53}\) These state based systems provide models for the implementation of formulary apportionment at the regional and international levels. It has been observed that the tax agencies in most OECD countries use formulary apportionment methods in practice, but maintain support for the arm's length principle.\(^ {54}\)

In the US, 45 states and the District of Columbia impose corporate income tax using formulary apportionment to allocate a corporation's income between the participating jurisdictions. The apportionment is made under a formula applying objective factors, such as a company's payroll, assets and sales in each jurisdiction. The aim is to allocate corporate income on the basis of its share of economic activity in each state.\(^ {55}\) The states each administer their own company income taxes, and a company's income for the purpose of state taxation is derived from its income for the purpose of federal company tax. A number of states use unitary taxation, in which the activities of a group of associated companies are treated as belonging to a unitary business. The determination of whether a company group is a unitary business turns on the degree of integration between the companies. Company groups that are treated as unitary businesses under state law lodge a consolidated tax return for the group, and a formula is used to apportion the group's total income to the involved states.\(^ {56}\)

The US system has been criticised as having both theoretical and practical flaws.\(^ {57}\) The main problem with the US system is that a common formula is not used to allocate corporate income between states. The formulas that were first used by states were not uniform. To achieve uniformity in 1933 the National Tax Association recommended that states use the ‘Massachusetts formula’ which placed equal weight on payroll, property and

\(^{53}\) It is also used in Switzerland at the canton level.


sales. The Massachusetts formula advocated by the National Tax Association was not regarded as being conceptually superior but justified on the basis that ‘uniformity is preferable to scientific accuracy.’ By 1978 most states had moved to this formula. Since the 1980s states have increased the weighting on the gross receipts factor and decreased the weight on the payroll and property factors. In 2004, 23 states used a formula that placed a weighting on gross receipts of 50 per cent and a weighting of 25 per cent each on payroll and property. The change in weighting is viewed as designed to improve the position of the taxing state by shifting from apportionment factors that are origin factors (payroll and property) to sales which is a destination factor. The US also uses industry specific formulas for sectors such as financial institutions.

Canada also provides an important model for formulary apportionment because a single formula is used, that is simple and uniform, at both the federal and state levels. In Canada, provinces impose corporate income tax which is administered at the federal level for most provinces. The Canadian company tax system is uniform because the provincial definition of company income is based on the federal definition of company income. A uniform system was established during World War II when the provinces suspended their company and personal income taxes, allowing the federal government to take over income taxation in exchange for federal transfers, called tax rentals. After the war, the tax rental system continued until 1962.

In 1962, the federal and provincial governments negotiated a system of abatement and a series of tax collection agreements. The abatement was an agreement by the federal government to reduce the federal company tax to allow the provinces to again impose company taxes. Under the tax collection agreements, the federal government agreed to collect provincial company tax on condition that a province's company tax law meets

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59 Ibid.
certain requirements in the definition of the tax base and allocation rules. Canada has one of the most decentralised company tax systems in the world that is also a uniform system.

Under the tax collection agreements, the provinces agreed to use a two factor formula that gives equal weight to payroll and sales in apportioning company income between the provinces. Under the formula, each participating province taxes a portion of the national income of a company equal to the average of the sales and payroll arising in the province, as a percentage of the totals for the whole country. The provinces of Ontario, Alberta and Quebec are not currently part of the federal collection agreements, but they use the same allocation formula as the provinces that are in the tax collection agreements. The common formula for apportionment and the common tax base results in the elimination of double taxation or under-taxation of company income, and removes the incentive for tax arbitrage at the provincial level in Canada. The Canadian system does not use unitary taxation; company tax is imposed on each company. The Canadian system is also supplemented by equalisation payments to provinces that are part of the Federal Collection Agreement. This measure is used to discourage tax competition between provinces. If a province's corporate tax base increases as a result of a corporate tax rate decrease, the province's payments under the equalisation system will be reduced.

2. The European Commission proposal

There have been numerous proposals for the development of formulary apportionment at the international level. Suggestions have been made for formulary apportionment to be used in regional trading blocs. The European Commission's proposals provide the best potential for the implementation of a regional multilateral tax treaty using formulary apportionment. The economic integration of the EU has led to the European Commission considering sweeping reforms to replace the arm's length system, for allocating business profits of subsidiaries and branches, with a formulary apportionment system. The proposal for European companies to use one set of corporate tax rules for their EU operations is

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63 Quebec has always remained outside the federal collection agreements.
supported by industry. This economic integration has placed strains on
the existing tax treaty system for allocating business profits in the EU. This consequence
was not unexpected as some pressure was predicted by a 1992 study of the company tax
system in the EU by the Report of the Committee of Independent Experts on Company
Taxation — the Ruding Committee:

While transfer-pricing is a necessary business practice in integrated groups of firms,
it can sometimes be very difficult to ascertain the correct range of 'arm's length'
prices, because there are no comparable market prices for the transactions in
question. Hence, in some cases, the determination of such prices may be extremely
subjective, and, therefore controversial. A similar problem arises with respect to the
correct allocation of common overhead costs among the related parts of a
multinational firm. Consequently, the use of separate accounting methods of
determining taxable profits may present firms with the opportunity to shift profits
from high- to relatively low-tax countries by adjusting transfer prices, and by
allocating overhead costs and interest payments to subsidiaries or branches in
relatively high-tax countries, thus reducing the firm's overall tax burden. The
problem of profits being shifted to comparatively low-tax jurisdictions through what
is sometimes euphemistically referred to as 'creative' accounting practices will be
compounded by the increased cross-border integration of business activities within
the Community. In the longer term, this trend will tend to make it increasingly
difficult to determine taxable profits separately for each part of a multinational
enterprise in every Member State on the basis of separate accounting methods.

In 2000 the Lisbon European Council announced the following mandate: ‘The Union has
today set itself a new strategic goal for the next decade, to become the most competitive
and dynamic knowledge-based economy in the world, capable of sustainable economic
growth with more and better jobs and greater social cohesion’. Under this mandate EU
company taxation should contribute to more economic welfare in the EU. The elimination
of high compliance costs for intra-EU transactions and transfer pricing problems can
contribute to this aim for company taxation. In 2001, the European Commission proposed
for public discussion on its comprehensive company tax reform measures including

67 Commission of the European Communities, Company Taxation in the Internal Market, Report No.
68 Commission of the European Communities, Report of the Committee of Independent Experts on
69 Presidency Conclusions, Lisbon European Council, 23-24 March 2000 (DOC/00/8 of 24/03/2000)
70 Commission of the European Communities, Communication from the Commission to the Council, the
European Parliament and the European Economic and Social Committee, Implementing the Community
Lisbon Programme, Progress to date and next steps towards a Common Consolidated Corporate Tax
The reasons for the European Commission's proposal include: the complexity for EU enterprises in dealing with the different company tax systems operating in the EU; the allocation of profits and losses within international enterprises or company groups on the basis of transfer pricing; the unsatisfactory treatment of cross-border losses; and the tax consequences of group restructuring. The European Commission made the following case for consolidated EU company tax in a 2001 supplementary report titled *Towards an Internal Market without tax obstacles*:

> Only providing multinational companies with a consolidated corporate tax base for their EU-wide activities will really, through a single framework of company taxation, systematically tackle the majority of tax obstacles to cross-border economic activity in the Single Market. Companies with cross-border and international activities within the EU should in the future be allowed to

- compute the income of the entire group according to one set of rules and
- establish consolidated accounts for tax purposes (thus eliminating the potential tax effects of purely internal transactions within the group.) . . .

A consolidated corporate tax base for the EU-wide activities of companies would contribute to greater efficiency, effectiveness, and simplicity and transparency in company tax systems and remove the hiatuses between national systems which provide fertile ground for avoidance and abuse. It would reduce compliance costs, allow the EU to reap the full benefits of the Internal Market, thus increase the competitiveness of EU business . . .

The Commission therefore believes it is only logical to steer its company taxation policy towards achieving a comprehensive solution to the existing cross border tax obstacles in the Internal Market. Future work should be directed towards how to achieve the objective of a consolidated corporate tax base with cross-border relief, and how to design and agree on the necessary allocation mechanism.

This report considers two main reform proposals. The first proposal is for a common tax base and the second proposal is for home state taxation. Both systems determine company income tax on an EU-wide basis and allocate the income to the EU member states on the basis of a formula. In April 2002 at the EU Company Tax Conference, the European Commission, following public consultation on the common tax base and home state

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taxation proposals, committed to a consolidated tax base for EU business profits of EU companies.\textsuperscript{74}

2.1 Common consolidated corporate tax base

Under common consolidated corporate base tax base (CCCTB), international enterprises would consolidate their accounts for their EU operations, and their taxable profits would be calculated under one common EU-wide tax law.\textsuperscript{75} This measure involves all member states agreeing on a common set of rules for creating the tax base of certain enterprises operating within the EU. Corporate enterprises resident in a member state would be able to opt to use a common EU tax base for all their operations within the EU carried out either through permanent establishments or subsidiaries. The common EU company tax rules would use as a starting point the agreed European Accounting Standards. The new EU company tax rules would be administered by the member state in which a company has its headquarters for all its EU-wide operations. In the case of a group of companies, they would have only one tax base to calculate and would deal only with the tax administration in the member state in which they have their headquarters. Under this proposal the location of a company's headquarters or a company group's headquarters is not regarded as being a significant issue as it only affects the member state in which the EU company tax rules are administered. Under CCCTB, the tax rules applying to a company or a company group will be the same, irrespective of where the company's headquarters or group's headquarters are located.

Under CCCTB the taxable profits of an EU company would be allocated to the member states in which the international enterprise operates using a formula; the formula has not yet been developed. The taxable profits would then be taxed in the jurisdiction to which they have been allocated, at that jurisdiction's tax rate. International enterprises who opt not to be part of the CCCTB would continue to be taxed under the tax laws of the various EU countries. For those enterprises using the CCCTB, their profits would be taxed under a single set of tax rules. The major advantage of CCCTB is that member states opting to participate in the new system could do so without amending their domestic company tax law. The European Commission expects that over time the domestic company tax laws in member states would evolve towards a common code to simplify domestic administration.

of company tax law. The CCCTB measures would have to be implemented through an EU multilateral tax treaty. The CCCTB would provide significant simplification and compliance benefits to EU companies operating in several EU countries, compared to the current EU tax treaty system: ‘Most importantly because it is a single common base rather than a series of separate bases difficulties stemming from transfer pricing within the EU would be eliminated and enterprises would automatically benefit from consolidation.’

2.2 Home state taxation

An alternative tax reform for the EU is Home State Taxation (HST). Under HST, member states accept that certain EU enterprises operating in the EU will calculate their income under the domestic law of a single member state, the enterprise's home state. Companies operating within the EU with their headquarters in an EU country would have the option of using the domestic company tax law of their base country for all their activities in EU countries. The aggregate taxable income, as determined by the home state jurisdiction, would be apportioned between member states in which a company group operates under a formula. Each member state would then apply its own tax rate to the taxable income allocated to it.

Under this proposal the profits of a company group or a company operating through branches should be determined under the tax laws of the home state. The measure would be implemented by voluntary bilateral or multilateral cooperation between EU countries. The participating countries would share the tax base through a formula with tax being paid at the tax rate of each country. Thus, the profits of an international enterprise would be allocated on the basis of the formula. An alternative approach is for participating countries to share tax; under this

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76 Ibid, p. 376.
80 Ibid, p. 10.
83 Ibid, pp. 18 and 47.
proposal the home state's tax would be applied to an enterprise's profits and the tax revenue allocated among member states.\textsuperscript{84}

The HST would be a significant improvement over the current EU company tax system. HST ensures that enterprises only have to comply with the company tax law in their home state and only have to deal with one tax administration. One contentious issue with HST is how to define an enterprise's home state. In the majority of cases the home state of a corporate entity would be indisputable, but in some cases it may be more difficult to determine an enterprise's home state.

2.3 \textit{A comparison of the Common Consolidated Corporate Base Tax and Home State Taxation}

While both CCCTB and HST proposals raise similar problems that will need to be resolved before implementation, there are some significant differences between them. Under CCCTB, a single corporate tax would apply in the EU, irrespective of the location of an international enterprise's residence jurisdiction.\textsuperscript{85} Further, all participating EU companies would be taxed under a common company tax law, irrespective of where they operate within the EU. But under HST, the tax base depends on an international enterprise's residence jurisdiction.\textsuperscript{86} The HST option has the advantage of immediate implementation because it does not seek to implement a common EU company tax code: 'It is essentially a pragmatic response to the question of how to introduce a common "EU" approach to the taxation of an EU enterprise, without creating a new "EU" tax code.'\textsuperscript{87} The HST option is regarded as a compromise measure which can be quickly implemented. It also avoids the problem of member states perceiving that they have given up their tax jurisdiction.\textsuperscript{88}

The disadvantage of HST is that each EU country will continue to operate its own company tax system which is unlikely to lead to harmonisation of company tax systems in the EU. If the HST option is used, the EU has up to 25 different tax bases subject to apportionment. On the other hand, if the CTB option is implemented there will only be a maximum of two tax bases, the common base and the domestic base, which would provide

\textsuperscript{84} Ibid, pp. 50-51.
\textsuperscript{87} Ibid, pp. 378-379.
\textsuperscript{88} Ibid, p. 379.
significant savings in compliance costs for taxpayers.\textsuperscript{89} The disadvantage of CTB is that it will take much longer to implement because of the negotiations required to implement this measure. The European Commission regards CTB as the preferable measure because it can be amended to address particular difficulties that arise.\textsuperscript{90}

The key issue for implementing either the CTB or HST proposals is establishing an agreement on an allocation formula. There are also administrative issues that need to be resolved if the EU moves away from the arm's length principle for allocating profits between jurisdictions in which international enterprises operate. The business representatives consulted by the European Commission emphasised that the critical issue for them was the creation of a single company tax code for EU companies operating within the EU.\textsuperscript{91} They noted that the method of achieving this goal was less important, making both the CCCTB and HST options acceptable to the business sector.

The European Commission noted that both the CCCTB and HST options would overcome the current transfer pricing problems in the EU resulting from the application of the arm's length principle to integrated enterprises. The European Commission contended that:

Transfer pricing issues arising from separate accounting should be eliminated or practically disappear for transactions between connected parties participating in any of the comprehensive approaches where tax consolidation is available since they assume the use of a formula for apportioning income between Member States. The current complexities of interpretation and application of the OECD Guidelines on Transfer Pricing as explained above would therefore cease to exist for activities within the EU. However for transactions with third countries they would remain and Member States, and therefore EU enterprises would continue to apply the Guidelines for any transactions with enterprises outside the EU. Given the increased level of co-operation between Member States required for implementation of any comprehensive approach it would be reasonable to assume that this would improve the establishment of common interpretations and application.\textsuperscript{92}

2.4 European accounting standards

In 2002 the EU adopted a regulation requiring listed companies, including banks, to prepare their accounts on a consolidated basis under International Accounting Standards

\textsuperscript{92} Ibid, p. 388.
(IAS) and International Financial Reporting Standards (IFRS). The aim of the regulation for consolidated accounts was to eliminate barriers to cross-border trading in securities by ensuring that company accounts throughout the EU are reliable, transparent, and comparable. The regulation for consolidated accounts has the force of law and does not require adoption into domestic legislation. At the April 2002 EU Company Tax Conference, the European Commission, considered the need for common accounting rules if common tax base proposals are to be implemented. The coincidence of the agreement on the regulation requiring the introduction of the IAS/IFRS in 2005 and the European Commission's conclusion that EU companies should have a consolidated tax base for their EU operations, led to the study of an IAS/IFRS common tax base. In 2005 the European Commission concluded that: 'Therefore, although the common tax base rules may make use of IAS/IFRS terminology and principles the common tax base will not be directly linked to the constantly changing accounting standards (IAS/IFRS).

From 2005, some 7,000 listed companies in the EU were required to prepare annual consolidated financial statements complying with the IFRS. In February 2003 the European Commission asserted that:

In this context it is worth recalling the three key elements essential to the concept of a consolidated tax base:

- It is ‘consolidated’, which means that the traditional concept of separate accounting by subsidiary or by branch, or by different Member State is no longer necessarily relevant for tax purposes; and cross border mergers or asset transfers may no longer necessarily involve ‘exit’ or capital gain charges.
- As some activities may have losses and some profits there will inevitably be an offset of profits and losses between activities in different Member States, i.e. cross border loss consolidation.
- Since tax rates are determined by, and revenues accrue to, individual Member States a consolidated tax base will have to be divided between Member States according to an agreed mechanism.

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93 The IAS and IFRS are accounting standards issued by the International Accounting Standards Board.
95 Ibid.
At the EU Company Tax Conference in 2002, the conference supported CCCTB. The business sector maintained its support for the European Commission's comprehensive reforms, based on either CCCTB or HST. The significance of the European Commission's proposals is that EU member states and businesses strongly support a move away from the current system of bilateral tax treaties which rely on the arm's length principle to allocate profits. The sustained economic integration in the EU has highlighted the flaws in the current international tax system and advanced the imperative need for comprehensive reforms. Formulary apportionment with group taxation in the EU has been advocated as the best tax system to reflect the increasing economic integration in the EU.

In 2004 a Common Consolidated Corporate Tax Base Working Group was established. In October 2005 the European Commission committed itself to the political aim of developing legislative measures in 2008. In December 2005 the European Parliament adopted a resolution on: ‘The taxation of undertakings in the European Union: a common consolidated corporate tax base’. The CCCTB measures will have to deal with the issue of foreign income earned by EU resident entities and with income earned within the EU by non-EU entities. In 2005 the European Commission issued a working paper on the international tax issues that need to be covered by the CCCTB. Some of the topics identified by the Working Paper were: liability to taxation of tax resident companies (worldwide/territoriality); definition of tax resident companies; double taxation relief; the taxation of non-resident companies; and coordination and possible extension of existing common practices. The current transfer pricing and double tax issues will remain for international transactions between EU entities subject to CCCTB and their non-EU branches or associated non-EU entities.

In February 2006 the European Economic and Social Committee issued an opinion on the ‘Creation of a common consolidated corporate tax base’. The resolution and the opinion supported the work of the European Commission on a consolidated corporate tax

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102 Ibid, pp. 3-4.
103 Opinion of the European Economic and Social Committee ECO/165 14 February 2006.
In conclusion, the European Commission has taken a significant step by considering sweeping international tax reforms. It is suggested that the European Commission test CCCTB on international banks operating in the EU through branches. The regulatory requirements in the EU make it relatively easy to identify EU banks operating in other EU countries through branches.

3. Issues in the application of formulary apportionment

A multilateral shift from the arm's length principle to formulary apportionment first requires jurisdictions to agree on several issues for which uniformity is a mandatory characteristic:

- one rule on jurisdiction to tax, such as the existence of a permanent establishment,
- the formula,
- the method of measuring the factors in the formula, and
- the definition of a unitary business.\(^{104}\)

Participating countries must agree on a range of issues because uniform application of the system is a central precondition to unitary formulary apportionment. If there is a lack of uniformity, the potential for double taxation or under-taxation arises.

3.1 Unitary taxation

It is necessary to determine which taxpayers should be taxed under a formulary apportionment system. In theory, formulary apportionment should only apply to integrated businesses that operate on a unitary basis because their profits cannot be allocated with economic precision to the individual parts of the businesses.\(^{105}\) There are problems in defining a unitary business in situations where operations are conducted through subsidiaries. But the problem of defining a unitary business does not arise when applied to international banks which operate abroad through branches because the unitary business corresponds with the legal structure of international banks. It is argued that formulary apportionment should be applied to international banks operating through branches.

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because they operate as highly integrated businesses whose profits cannot be allocated appropriately under the traditional transfer pricing methods. Commentators have suggested that highly integrated international enterprises may prefer to be taxed on a unitary basis because a highly integrated enterprise will be unable to identify the geographic source of its profits. Consequently, taxing integrated enterprises on a unitary basis would reflect the manner in which the enterprises operate; thus if an international bank makes its profits on a unitary basis, from a policy perspective it should be taxed on a unitary basis.

3.2 The formula

The pivotal element of formulary apportionment is settling the formula. In negotiating a formula for a formulary apportionment system, countries will seek to establish a formula that suits their own interests, and consequently setting the formula will be a major hurdle to be resolved before such a system can be implemented. It is vital that all participating jurisdictions use a uniform formula and this involves jurisdictions in making compromises. The implementation of formulary apportionment by the US or the EU would encourage other jurisdictions to use the same system. If certain formulas are negotiated within the EU, there is a significant prospect that other countries would consider entering a new international tax system.

Economics cannot provide a single scientific economic formula for allocating the income of international enterprises between jurisdictions because of the integrated operations of most international enterprises. Economics can identify a range of factors that generate income within an international bank, but economists do not advocate a single formula. It is impossible within an integrated international bank to determine with economic precision which factors generate profits and determine the relative weight to be given to each factor. Any formula is going to be arbitrary to some extent and relative political forces will shape an international formula. One difficulty with the formulary apportionment method is that using a formula in which all factors of production are

assigned the same rate of return to all participating countries may distort the allocation of income between countries. In addition, if the same formula is used for all industries, distortions may arise in turn creating tension within participating jurisdictions if they form the view that the formula does not reflect the economic activity in participating jurisdictions. In settling a formula, there is the usual trade-off between simplicity and accuracy; the use of a sophisticated formula to achieve better accuracy will lead to complexity and increased compliance costs for taxpayers and administrative costs for tax agencies.

The better approach is to use a simple formula rather than seek to implement a complex formula on the basis of purported precision. The only correct formula is the one which the participating jurisdictions agree to use provided it is uniformly applied by them. The main formulary apportionment factors are payroll, property and sales and the history of formulary apportionment in the US and Canada reveals that there are difficulties in defining these factors. Another issue that needs to be considered is the mobility of the factors used in a formula. In relation to the above factors, payroll and sales are regarded as immobile factors and property is characterised as being mobile.

It is generally suggested that different factors be used for different businesses, consequently, a separate formula should be used for the banking business. In Canada there are 9 separate allocation formulas, banking is one of the specialised categories. As international banks have to meet prudential standards in their home countries, there is a high degree of uniformity in the business practices of the international banking industry. The prudential standards may provide the basis for developing a simple formula for

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111 Ibid.
114 Ibid, p. 47. For a discussion of the advantages and disadvantages that these factors in designing an apportionment formula see pp. 47-59.
allocating the profits of international banks to their branches. Any formula that is proposed for international banks will have to be negotiated between the participating countries, subject to the limitation that any formula is arbitrary.

3.3 Accounting and compliance requirements

If a common accounting standard is established, jurisdictions would be able to develop a broadly accepted definition of income and the factors for use in a formulary apportionment system.\textsuperscript{117} A vital aspect of the EU proposals is the common corporate reporting requirement for public companies. In the absence of common accounting standards, international enterprises would have to report their profits using a range of standards. The International Accounting Standards Board provides uniform accounting standards for international enterprises.\textsuperscript{118} In 1998, G7 Finance Ministers and Central Bank Governors decided that private sector institutions in their countries should comply with internationally agreed principles, standards and codes of best practice.\textsuperscript{119} The G7 countries suggested that all countries which participate in global capital markets should also comply with these internationally agreed codes and standards.

Some commentators contend that formulary apportionment would impose significant compliance costs on international enterprises.\textsuperscript{120} They argue that an international enterprise that prepares consolidated accounts would encounter significant difficulties.\textsuperscript{121} Hellerstein contends that the critics of formulary apportionment have no evidence that formulary apportionment will increase the cost of compliance and administrative costs of the tax agencies administering the system.\textsuperscript{122} However, the experience with transfer pricing between associated enterprises in the US is that it involves significant costs for both


\textsuperscript{118} <http://www.iasc.org.uk>.


taxpayers and tax agencies. A functional analysis of a taxpayer for US transfer pricing purposes requires the use of economic specialists and industry experts to analyse the taxpayer's industry. The high cost for taxpayers of complying with US transfer pricing rules is illustrated by the fact that large US accounting firms have transfer pricing groups which include accountants, lawyers and economists to provide advice on the application of the rules.

One of the purported requirements for formulary apportionment is that an international enterprise's international financial accounts would have to be used for tax purposes. But this criticism is illusory because under the current international tax system, international enterprises are required to use financial accounts for tax purposes. Moreover, consolidation mechanisms for company groups are being implemented in most countries. The other purported difficulties arising from the use of formulary apportionment are: the reconciliation of inventories; reconciling depreciation methods; foreign currency conversions; and reconciling elections that are available in the various jurisdictions. These purported difficulties arise from the lack of uniformity in the company tax laws of tax treaty countries. The threshold requirements for implementing formulary apportionment are not unique to unitary formulary apportionment, they are also requirements under the current international tax system. But the failure to achieve uniformity is an accepted compromise. McLure argues that the current international tax system requires a high degree of uniformity if it were to operate effectively:

In a logically consistent system of taxation based on SA [separate accounting]/ALP [the arm's length principle], all key elements of the system would be uniform across countries. That is, there would be uniform distinctions between the types of income (e.g. royalties and business profits), uniform rules for determining the geographic source of various types of income, a single standard for determining jurisdiction to tax, a single measure of business profits . . .

The problems stem from the lack of uniformity in domestic company tax systems of tax treaty countries. In fact, the present lack of uniformity provides significant scope for tax arbitrage within the network of tax treaty countries. Thus, the threshold accounting
requirements for the formulary apportionment system should not be overstated nor the associated compliance and administrative costs exaggerated. The current international tax system involves compromise and any move to formulary apportionment will also involve compromises. Nevertheless, the compliance and administration costs of formulary apportionment are likely to be significantly lower than the costs of complying with the current international tax system. A persuasive factor is that the EU business sector has argued that a significant reason for supporting the move to formulary apportionment is the high cost of complying with the current international tax system.

34 Problems with water’s edge formulary apportionment

While the use of formulary apportionment overcomes the problems of the arm's length principle, other problems arise from the use of formulary apportionment. Firstly, formulary apportionment does not attempt to determine the economic source of income, it treats an enterprise's profits as being uniform across all parts of the enterprise and across all jurisdictions in which the enterprise operates. Consequently, threshold rules are required to specify whether a taxpayer has a sufficient connection with a country to fall within its tax jurisdiction. The existing concept of permanent establishment could be used to identify a country's jurisdiction to tax the business profits of an international enterprise under a tax treaty. This is a requirement under the existing international tax system. Secondly, if the same formula is applied to all industries, distortions may occur under formulary apportionment. For example, in the banking industry payrolls are not likely to be as significant a factor as they would be in international car retailing. Consequently, separate formulas should be used for different industries.

Thirdly, if formulary apportionment is used in an economic grouping such as the EU, relations with other countries not using the system are likely to be strained. In the case of the EU, this situation is likely to cause problems in the OECD because the EU countries

129 Ibid.
have not dissented from the OECD's rejection of formulary apportionment in the Transfer Pricing Guidelines.\footnote{OECD, Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations, Discussion Draft of Part I (1994).} For example, if the EU uses formulary apportionment and other countries continue to use the arm's length principle, international enterprises will have to use formulary apportionment for EU countries and the arm's length system for allocating profits to the other countries in which they operate. This will impose compliance burdens on international enterprises, but it may also create an incentive for other countries to move towards formulary apportionment.

Finally, there is a need for uniformity between participating countries for formulary apportionment to operate effectively. In Canada and the US formulary apportionment systems operate within their respective economic bases that are nationally uniform.\footnote{The operation of formulary apportionment in the US and Canada is briefly considered below.} Different jurisdictions are likely to have dissimilar domestic systems making the application of a formulary apportionment system across national boundaries more difficult. A precondition for the operation of formulary apportionment and a multilateral tax treaty is a uniform accounting system. The implementation of uniform accounting is assisted by: globalisation of industries, such as the banking industry; the international character of accounting firms that provide services for international enterprises; and computerised nature of financial management used by international enterprises.\footnote{J. R. Hellerstein, ‘Federal Income Taxation of Multinationals: Replacement of Separate Accounting with Formulary Apportionment’ (1993) 60 Tax Notes 1131, p. 1142.}

3.5 Tax avoidance

Regretfully, tax avoidance would not be eliminated if there was a worldwide multilateral tax treaty using formulary apportionment to allocate income to the various jurisdictions in which international enterprises operate. But one of the advantages of formulary apportionment is that it will eliminate opportunities for some forms of avoidance such as transfer pricing manipulation. Under such a multilateral tax treaty, international banks would still be able to shift profits to low tax jurisdictions, but they would need to undertake active business in tax havens. Under formulary apportionment a company is taxed on its combined income and this prevents a company from shifting profits between locations through transfer pricing. Transfer pricing manipulation to shift profits to tax havens would be pointless under a formulary apportionment system because the profits would still be the
profits of a unitary business and subject to taxation. But with the formulary apportionment method, profits might be allocated to low tax countries by manipulating the formula; this would be achieved by locating the factors in the formula in low tax countries. In the case of international banks, it would require active business to be undertaken in tax havens if they sought to have loans booked through tax havens. The payroll element of a formula requires business activities to be conducted by individuals. While an international bank may be willing to book loans through a tax haven they are unlikely to set up significant operations in tax havens. The United States General Accounting Office concluded that the empirical evidence was insufficient to determine if formulary apportionment would distort business decisions on the international location of operations.  

3.6 Income from intangible property

The difficulty of allocating income from intangibles has been described as the Achilles heel of formulary apportionment. But the arm's length principle also fails to adequately deal with the apportionment of income from intangible property. Under the arm's length principle, there are no comparable prices for intangible property, particularly unique intangible assets. The allocation of income from intangible property between jurisdictions is a significant international tax problem as most the capital of an international enterprise is intangible property and it is property which has no geographical location.

The difficulties the formulary apportionment method encounters are firstly, valuing intangibles and income from intangibles, and secondly, allocating a location to intangible assets. Adapting a simple formula based on sales, payroll and assets, such as the formula used in the US, would be inappropriate at the international level because of the difficulties

of allocating income from intangible property. Thus, formulary apportionment encounters problems in dealing with intangible property which are different from the problems encountered under the current international tax system.

Ideally the method for valuing intangible assets should be the same as those for valuing tangible assets: the present value of the income stream the property creates. The problem with valuing intangible property is that, at times, intangible property does generate royalties that may be used to determine their present value. There is also the potential for intra-entity or intra-group royalties to be manipulated for tax avoidance purposes by shifting royalties to low tax jurisdictions. The European Commission noted that dealing with intangible property in the design of an apportionment formula is a significant challenge:

Intangibles are a clear tool for strategic corporate tax planning when used for apportionment. Thus, if intangibles were included in the property factor, intra-group royalty payments should be subject to arm’s length valuation, with the corresponding search for comparables, etc. That implies that the FA [formulary apportionment] system would still face some of the transfer pricing complexities currently existing under the SA [separate accounting] methodology.

Two alternative methods of dealing with intangible property under formulary apportionment are to either exclude it or base it on the cost of creating an intangible asset. Excluding intangible property from the property formula only results in ignoring the issue of allocating income from intangible property. Excluding intangibles also has the advantages of simplicity and minimising compliance and administration costs. But ignoring this income is inappropriate because of the high value of many intangible assets and the overwhelming importance of intangibles. Canada avoids the problem of intangible property by excluding property from its formula. In the US, which applies a property factor in the formulas used by its states, intangible property is omitted from the formula. An alternative potential method of valuation is to base the value of an intangible asset on the cost of creating the asset. But this method of valuation is inappropriate because there is no direct correlation between the cost of an intangible asset and its value. Moreover, in most cases the market value of intangible assets will exceed, by a significant

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140 Ibid.
142 Ibid, p. 865.
143 Ibid, p. 866.
Neither of these approaches is acceptable and thus a major unsolved problem with formulary apportionment is the valuation of intangible property. Allocating location to intangible property is likewise a complex problem. It is difficult to develop an objective method of allocating intangible property to a geographic location. The European Commission has suggested that research should be undertaken to develop practical solutions for valuing and locating intangible assets. In summary, formulary apportionment is unable to deal effectively with income from intangible property, but this failure does not provide sufficient grounds for rejecting formulary apportionment, as the current international tax system does not effectively allocate income from intangible property either.

**E. Conclusion**

The European Commission has recognised that comprehensive international tax reforms are required within the EU. The European Commission's sweeping CCCTB proposals have the support of EU member countries and EU businesses alike. Significantly, the parties are willing to incur the costs of shifting to unitary formulary apportionment. If the EU formulary apportionment measures are implemented, other regions may consider implementing similar measures. The proposed EU formulary apportionment measures are a valid alternative to the current international tax system. This alternative system will not be a solution for all the problems of the current system, but it will result in a more effective method of allocating the profits of EU enterprises to the EU jurisdictions in which they operate. Taxing highly integrated international enterprises, such as EU based banks operating within the EU through branches, on a unitary basis is appropriate because these businesses operate in the EU on a unitary basis. Moreover, formulary apportionment overcomes the need for the revenue agencies in the EU to scrutinise transactions of international banks to determine if the transfer prices used comply with the arm's length principle. But it will be difficult to implement formulary apportionment because of the need for uniformity on several issues.

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