Taxation of Multinational Banks: Alternative Apportionment through a Unitary Taxation Regime Aligning with Economic Reality

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Introduction

The taxation of multinational banks currently is governed by the general principles of international tax. However, it is arguable that there are characteristics exclusive to multinational banks that may warrant the consideration of a separate taxing regime. This article argues that because of the unique nature of multinational banks, the traditional international tax rules governing jurisdiction to tax and allocation of income do not produce a result which is optimal, as it does not reflect economic reality. That is, the current system does not produce a result that accurately reflects the economic source of the income or the location of the economic activity. The suggested alternative is unitary taxation using global formulary apportionment. Formulary apportionment is considered as an alternative that reflects economic reality by recognising the unique nature of multinational banks and allocating the income to the location of the economic activity.

The unique nature of multinational banking is recognised in the fact that formulary apportionment does not attempt to undertake a transactional division of a highly integrated multinational entity. Rather, it allocates income to the jurisdictions based on an economically justifiable formula. Starting from this recognition, the purpose of this article is to demonstrate that formulary apportionment is a theoretically superior (or optimal) model for the taxation of multinational banks.

An optimal regime, for the purposes of this article, is considered to be one that distributes the taxing rights in an equitable manner between the relevant jurisdictions, while, simultaneously allowing decisions of the international banks to be tax neutral. In this sense, neutrality is viewed as an economic concept and equity is regarded as a legal concept. A neutral tax system is one in which tax rules do not affect economic choices about commercial activities. Neutrality will ideally be across jurisdictions as well as across traditional and non-traditional industries. The primary focus of this article is jurisdictional neutrality.

A system that distributes taxing rights in an equitable manner between the relevant jurisdictions ensures that each country receives its fair share of tax revenue. Given

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the increase in multinational banking, jurisdictions should be concerned that they are receiving their fair share. Inter-nation equity is concerned with re-determining the proper division of the tax base among countries.\(^4\) Richard and Peggy Musgrave argue that sharing of the tax base by countries of source should be seen as a matter of inter-nation equity requiring international cooperation.\(^5\) The rights of the jurisdiction of residency will also be at issue. To this extent, while it is agreed that inter-nation equity is an essential attribute to an international tax regime, there is no universal agreement as to how to achieve it. The current system attempts to achieve such equity through a combined residency and source regime, with the transfer pricing rules used to apportion income between the relevant jurisdictions. However, this article suggests, that as an alternative to the current regime, equity would be achieved through formulary apportionment.

Opposition to formulary apportionment is generally based on the argument that it is not a theoretically superior (or optimal) model because of the implementation difficulties. Yet these are two separate issues. As such, this article is divided into two core parts. The first part examines the theoretical soundness of the formulary apportionment model concluding that it is theoretically superior to the arm’s length pricing requirement of the traditional transfer pricing regime. The second part examines the practical implications of accepting formulary apportionment as an optimal model with a view to disclosing the issues that arise when a formulary apportionment regime is adopted. Prior to an analysis of the theoretical and practical application of formulary apportionment to multinational banks, the unique nature of these banks is considered.

The article concludes that, while there are significant implementation, compliance, and enforcement issues to overcome, the unitary taxation model may be theoretically superior to the current arm’s length model which applies to multinational banks. This conclusion is based on the unitary taxation model providing greater alignment with the unique features of these banks.

**The Unique Nature of Multinational Banks**

In accordance with generally accepted theory, multinational banks are considered in theoretical terms as a subset of multinational entities, rather than an extension of the functions of domestic banks.\(^6\) While being a subset of multinational entities, multinational banks have special features that may result in the appropriate tax treatment being different from that of multinational entities generally. The features that distinguish multinational banks from traditional multinational entities are twofold. The first is the unique services and consequent products. The second is the non-traditional organisational structure.

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The first unique feature of multinational banks relates to the services and consequent products supplied. That is, the innovative financial instruments, developed to meet client’s global demand. The intangibility and seamlessness of these services and products not only challenges the suitability of the traditional tax system to both the supplier and user of the service, but also the suitability to the bank itself especially when these services are provided across jurisdictions. The essential difference between a multinational bank and its more traditional counterpart is that the bank offers an intermediary service. In doing so, the service may be offered in a different location to the product supplied to the client, whether borrower or lender. It is this ability to perform services for clients anywhere in the world, while providing the product in a low tax jurisdiction that leads to the minimisation of tax for multinational banks. Where the current source rules are applied, the jurisdiction where the services are performed may fail to receive any tax revenue. The interjurisdictional allocation of service costs can also lead to distortion.

Adding to the unique nature of the services and consequent products are the synergistic gains unique to multinational banks. Rather than expanding internationally to meet the needs of a new market, multinational banks are expanding internationally to meet the needs of existing clients. Multinational banks can expand either by offering their current client base new financial ‘products’ or by acquiring new clients. In contrast to this, traditional multinationals are usually only capable of the latter. The externalities provided by being an information-based firm thus avail multinational banks of more synergies than tangibles-based multinationals. Another problem for transfer pricing arrangements is that the client database (a valuable asset in its own right) can be shared between elements of the entity.

The second unique feature of multinational banks, also a by-product of the aim to meet client global demand, is the non-traditional organisational structure which introduces issues previously not recognised in a traditional taxation regime. The theory of internalisation of the firm, specifically motivation and structure, can explain this structural difference. This theory is based on the banks following their

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11 Although it is acknowledged that, it may be argued that other modern types of multinational entities are able to do both. For example, Microsoft would do both.
customers overseas because of the knowledge advantage they possess. This knowledge advantage is borne of the client-banking relationship and becomes a public good within the firm that can be best exploited by expanding offshore. As stated by Plummer, ‘[i]nternalisation is about imperfections in intermediate product markets. Intermediate products flow between activities within the production sector. Market imperfections generate transaction costs and these costs are often minimised for the sector as a whole by bringing interdependent activities under common ownership and control.’

The unique organisational structure also involves a consideration of the types of trading models adopted by multinational banks. This allows an appreciation of the generally highly integrated nature of the multinational bank as contrasted with the traditional multinational entity. The three types of trading models, recognised by the OECD and represented along a continuum, are the ‘integrated trading model’, the ‘centralised product management model’ and the ‘separate enterprise model’.

The ‘integrated trading model’ has traders in separate international jurisdictions trading off the same portfolio of positions. This is what is known as a ‘book’, the responsibility for which is passed from one location to the next as the market closes in one jurisdiction and opens in the next. The integrated trading model is a true global trading model. The primary concern of the multinational bank operating under the integrated trading model is the time zone. Essentially, all functions can be performed in any of the multinational banks locations, and at any given time, will be performed where the market is open. At one time this type of model was regarded the exception rather than the norm, but it is now becoming the more prevalent mode of operation.

The ‘centralised product management model’ has a central location accepting and managing all risk associated with a particular product with separate branches managing separate products. Various commercial factors, such as market liquidity, ease of hedging, competition, business strategy, location of customers, and skilled staff, influence the location of the centralised trading site. This centralised trading site is essentially a head office, into which all other parts of the entity report.

The ‘separate enterprise model’ has each location operating as if it were a separate profit centre. Under this model, each location, whether a subsidiary or branch, has its own marketers and traders and its own books reflecting the activities of that

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location. Provided the branch or subsidiary does not trade outside its trading limits, the central committee will not control any transactions undertaken by the individual locations.

These trading models not only distinguish the multinational bank from its more traditional counterpart, but also raise unique tax problems. Again, both source issues and transfer pricing issues arise. While the legal source is easy to ascertain, given the three alternate trading models, it is unlikely to be the economic source of the income. Further, because of the highly integrated nature of the models and the lack of comparable independent third party transactions, transfer-pricing is problematic.

No matter which model is adopted, global trading operations within financial intermediaries perform four general functions: trading, sales, management, and support. These four elements of the structure introduce their own unique qualities. Trading is divided into product groups, rather than geographical locations, with traders being rewarded on profitability as a whole. Management, on the other hand, may have responsibilities restricted to product, clients, economic sectors, or particular markets. Sales staff will generally be responsible for a portfolio of clients and, as such, are cross-jurisdictional. Finally, the support teams are responsible for the integrated entity as a whole, primarily offering support to ensure that global transactions are accomplished.

It is because of the above distinguishing features that this article argues that multinational banks can be distinguished from traditional multinational entities for tax purposes. This conclusion is based on the fact that the services of the multinational bank are unique in nature and the organisational structures adopted by multinational banks are substantially different from those associated with traditional multinational entities. Specifically, these unique features form the basis for arguing that the current regime may not be optimal for taxing multinational banks because it fails to recognise that ‘the whole is different from (and greater than) the sum of the parts’. It is argued that in its place should be a unitary taxation model based on global formulary apportionment.

This article proposes that a new approach is the answer to the problems associated with taxing multinational banks, and not multinational entities in general. A global solution is needed in relation to multinational banking transactions if the tax regime is to keep pace with the economic reality of the multinational banks undertaking such transactions. The OECD describes global formulary apportionment:

A global formulary apportionment method would allocate the global profits of an MNE group on a consolidated basis among the associated enterprises in different countries on the basis of a predetermined and

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24 R. Bird, ‘The Interjurisdictional Allocation of Income’ (1986) 3 (3) Australian Tax Forum 333, 339. Although it should be noted that Richard Bird argues this applies to all multinational enterprises.
mechanistic formula. There would be three essential components to applying a global formulary apportionment method: determining the unit to be taxed, i.e. which of the subsidiaries and branches of an MNE group should comprise the global taxable entity; accurately determining the global profits; and establishing the formula to be used to allocate the global profits of the unit. The formula would most likely be based on some combination of costs, assets, payroll, and sales.\textsuperscript{26}

Unitary taxation is the taxation of the worldwide income of a multinational entity, and is normally based on a formulary apportionment method, which allocates income to the relevant jurisdictions based on a percentage of the worldwide profits of the multinational entity.\textsuperscript{27} Formulary apportionment and unitary taxation are regularly treated as being interchangeable terms. However, this is not accurate. As Joann Weiner explains:

Formula apportionment is often referred to as unitary taxation, but the terms are not entirely equivalent. Apportionment refers to the process of using a formula to assign a portion of the total income of a company and its branches that operate in several locations to each individual location. Unitary taxation refers to the process of combining the functionally integrated operations of a multiple-entity affiliated corporate group that operates as a single economic enterprise into a single unit for purposes of determining the taxable unit. The group’s combined income is then calculated, with internal transactions excluded, and apportioned by formula, with the income and factors of all of the unitary businesses combined into a single return. The use of the term ‘formula apportionment’ may refer to its application to a single entity or to a multiple entity, whereas the term ‘unitary taxation’ refers to the process of combining the operations of a group of corporations that are engaged in a unitary business into a single unit for tax purposes.\textsuperscript{28}

Adopting a formulary apportionment process as the method of unitary taxation means that the profits are allocated to respective jurisdictions based on a pre-determined formula. The implementation of this methodology involves a three-step approach. The first step is to determine the unit to be taxed. The second is to determine the tax base which is to be apportioned. The third step is to determine the formula to be used for distributing the tax base. These steps are investigated later in the article. Before considering the implementation difficulties, however, it is necessary to examine why unitary taxation based on global formulary apportionment is a more theoretically

\textsuperscript{28} J. Weiner, ‘Using the Experience in the US States to Evaluate Issues in Implementing Formula Apportionment at the International Level’ (1996) 13 \textit{Tax Notes International} 2113, 2118. See also J. Weiner, ‘Using the Experience in the US States to Evaluate Issues in Implementing Formula Apportionment at the International Level’ (1999) \textit{OTA Paper 83} 8, where he makes the same point.
sound model for determining the jurisdiction to tax and allocation of profits of multinational banks.

**The Theoretical Benefits of the Unitary Tax Model for Multinational Banking**

When the unitary tax model based on global formulary apportionment is applied to multinational banks, it has several interrelated theoretical advantages over the existing arm’s length model. The most significant advantage to global formulary apportionment is that because multinational banks are highly integrated, unitary taxation has greater consistency with economic reality. Unitary taxation also conforms to the aim of efficient operations within the multinational bank, providing the advantage of consistency between bank policy (to maximise group profit) and tax policy. Further, formulary apportionment has the theoretical advantage of aspiring to the aim of finding an equitable split of profits between the jurisdictions, which should ultimately be the overall aim of any taxation regime. There are also consequential practical advantages arising out of the implementation of unitary taxation based on formulary apportionment. Each is examined in turn.

**Unitary Taxation Reflecting the Economic Reality of Multinational Banking**

Underlying formulary apportionment is the assumption that each part of the multinational entity contributes to the overall profits of the entity. Rather than focusing on the individual transactions entered into, formulary apportionment focuses on the contribution made by the separate parts of the entity. This model concentrates on the practical question of how much each jurisdiction gets, rather than dealing with issues like theoretical prices. In this sense, formulary apportionment looks to the economic activity rather than the enterprise. The OECD, while not supporting global formulary apportionment, recognises the “economic reality” argument put forth by proponents of this model. It states:

> These advocates also take the position that global formulary apportionment methods are more in keeping with economic reality. They argue that an MNE group must be considered on a group-wide or consolidated basis to reflect the business realities of the relationships among the associated enterprises in the group. They assert that the separate accounting method is inappropriate for highly integrated

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Economic interdependence by multinational banks has two effects on the economic reality of the entity as a whole. The first effect is that multinational banks are so highly integrated that the entity cannot be divided into any smaller component parts with any degree of accuracy. This is particularly relevant where the multinational bank is undertaking global trading, as the integrated parts of the entity “are not susceptible to further functional division.”

The second effect of economic interdependence is that there are advantages to the multinational entity because of their very existence in a foreign direct investment form, explained by internalisation theory. The consequence of this is that the modern multinational entity as a whole is greater than the sum of its parts, because of economies of scope and scale. Even more than this, the multinational entity is “an indivisible whole rather than a mere sum of its separate parts.”

Reflecting Integration

It may be argued that multinational banks are so highly integrated that it is effectively impossible to divide the entity into smaller parts with any degree of accuracy. The advantage of formulary apportionment is that it recognises the economic reality of this, and does not attempt to do divide the entity into separate parts. The arm’s length standard does attempt such a division and consequently this is one of its fundamental flaws. While the arm’s length standard, may have, in the past, reflected economic reality, when it is applied to highly integrated multinational banks it is conceptually wrong. The arm’s length approach requires a dissection of the entity, whereas the unitary taxation model reflects economic reality by treating multinational entity groups on a consolidated basis, thereby recognising the essence of the modern multinational entity. This economic reality is reflected in the integrated nature of the group as a whole, and the underlying rationale that the modern “multinational entity is, as a rule, unitary in character.”

This economic reality is supported by an examination of a multinational entity, which will most often reveal a structure very similar to that of a single entity. As Joann Weiner explains:

The rationale for using formula apportionment is that despite separate corporate entities, related companies may have collectively many of the characteristics found in a single corporate entity. For example, affiliates may be under common ownership and have shared management and expenses, economies of scale, and functional integration. These characteristics make it difficult to draw a line between integrated parts of the corporation for purposes of computing income earned by the various pieces of the company.\(^{43}\)

By ignoring the separate parts of the multinational entity, the formulary apportionment model also ignores the legal structure of the multinational entity, making the structure adopted meaningless for tax purposes, just as it is meaningless for the purposes of management decisions. Instead, the formulary apportionment model looks to economic substance of the multinational entity, and in this sense, adopts a substance over form approach.\(^{44}\) The fundamental nature of this model is not to distinguish between a head office with affiliated branches and a parent company with multiple subsidiaries as the traditional model does, but rather it examines the location of the economic activity undertaken by the entity as a whole and allocates based on that activity.\(^{45}\) It recognises, therefore, that branches and subsidiaries are integrated and part of the one unitary business.\(^{46}\) The model then considers what factors contribute to the income of the entity as a whole and incorporates this into the allocation formula, thereby recognising that the income is generated by those factors utilized by the multinational entity.\(^{47}\)

Formulary apportionment also recognises the impossibility of using arm’s length pricing for economically interdependent multinational entities.\(^{48}\) The need for comparables is also a fundamental flaw in the application of the arm’s length standard. Economic interdependence of vertically integrated multinational entities, such as multinational banks, also often means there are no comparable transactions.\(^{49}\)

Further, even where comparable transactions do exist, the level of vertical integration may mean that the comparable prices do not reflect the contributions made by the


component parts of the entity. The continued globalisation and integration of multinational entities means that the problem of determining comparables will only worsen. Formulary apportionment recognises that related party transactions are not undertaken on arm’s length terms, and removes the need for any such comparables.

The current source and transfer price regime attempts to allocate a geographical source to income by looking at the location of the income producing activities. Because of the legal principles that have developed, however, the geographical source that is allocated to the income may not be the location of the income producing activities. For example, parts of the multinational bank will often be allocated along functional lines. Furthermore, the traditional regime fails to recognise the economic reality that the component parts are “dependent upon or contributory to” each other part. The formulary apportionment model does not attempt to apply this legal perspective of economic activity, but rather is based on the economic perspective that all of the activities of the multinational entity contribute to the profits. Where the income of a multinational has its source in the integrated operations of the entity as a whole, it is economically inaccurate to characterise the income as being from one specific geographic source.

Reflecting Internalisation

Internalisation theory also supports the use of global formulary apportionment for multinational banks as a theoretically superior model. Internalisation theory means that the arm’s length standard does not accurately represent the reason why an entity becomes multinational. This same theory may be used to demonstrate that the unitary tax model is consistent with economic reality. One proponent of this argument is Stanley Langbein, who relies on internalisation theory to posit an alternative to the arm’s length price. His suggested model does not discard the arm’s length price altogether, rather it is a more liberal approach to the current regime, combined with a formula apportionment methodology, which may accord with current economic thinking.

His model, proposed over a decade ago, attempts to dispel the myth that the arm’s length method and unitary taxation cannot work together. Instead, he postulates a pricing regime that involves a two-step process. The first step is an allocation of adequate return to components, consisting of a recoupment of cost and a profit margin, the profit margin being determined by reference to an appropriate rate of return. The second step involves the residual profit being allocated according to a formula based method using assets and sales and the factors to be taken into account. Langbein suggests that this approach is a modified fractional apportionment approach, because the first step, by allowing a market rate of return on assets, utilizes an accepted feature of the current arm’s length approach to the allocation of profits.

This model proposed by Langbein is founded on the notion that “multinational integration occurs to obviate certain hazards.” The hazards obviated are those external to the firm such as quality control, security of information, reputation debasement, and holdups. Langbein, commenting on his hazard analysis, states:

This exegesis of the origin of multinational firms, and of the ‘integration economies’ they effect, suggests the futility of constructing a transfer pricing regime based on the identification of ‘inputs’ to the productive process and the association of profit with particular inputs. It suggests, rather, that allocations seek to provide profits among the components of a multinational group according to the relative contributions of the components to the group profit. And the development of the ‘harzard’ analysis of the MNE suggest a crude, but logical method for asking what the relative contribution of a component is.

Internalisation means that there are factors which contribute to the overall profitability of the multinational entity that are not taken into account when allocating income under the arm’s length model. For example, “functional integration, centralization of management and economies of scale are simply not reflected in any ‘transactions’ between entities in a corporate group, but arguably do impact on the profitability of the various aspects of a multinational’s business.” Savings in transaction costs and economies of scale, both of which are experienced by multinational banks and are part

of the motivation for becoming multinational,\textsuperscript{67} are also important features of a vertical integrated multinational entity,\textsuperscript{68} which contribute to the efficiency of the entity as a whole.

The economic reality of multinational banks cannot be reconciled with the underlying assumptions of the arm’s length pricing model that an entity can be divided into component parts with an accurate allocation of profits attributable to those parts.\textsuperscript{69} On the other hand, formulary apportionment does accurately reflect these factors inherent in global trading,\textsuperscript{70} and avoid the problems of economic interdependence not being recognised by the current model.\textsuperscript{71}

The overall approach of global formulary apportionment is to recognise the “economic reality of the integrated, interdependent, yet expansive, business enterprise.”\textsuperscript{72} Most importantly, formulary apportionment recognises not only the highly integrated nature of multinational banks, but also the advantages gained by operating via foreign direct investment. Consequently, by recognising the economic reality of the highly integrated multinational entity and the internalisation advantages, there is consistency between the taxation model and corporate management philosophy. This is the second theoretical advantage to the formulary apportionment model.

\textit{Consistency between Unitary Taxation and the Aim of Efficient Operations within the Multinational Bank}

Unitary taxation conforms to the aim of efficient operations within multinational banks by providing the advantage of consistency between bank management policy and tax policy. The aim of any multinational bank is profit maximisation, and it is the responsibility of management to ensure that this occurs.\textsuperscript{73} As such, resources will be allocated according to the location that ensures this profit maximisation. Consequently, a tax model, which allocates income consistently with management policy, is an economically sound and theoretically superior model. Formulary apportionment allocates income to the place of the economic activity by recognising the factors that contribute to the overall profits of the entity, consistent with management policy.

Not only are the business decisions within the multinational bank reflected in the formulary apportionment model, but also reflected is the decision to become multinational. As previously discussed, internalisation theory suggests that multinational banks come into existence due to their ability to reduce costs and transact more efficiently than they would have with an independent third party. The current arm’s length model requires a recharacterisation of transactions, which does not accord with the efficient nature of the multinational bank, and those factors which initially brought it into existence. This need for examination and recharacterisation of international transactions is no longer necessary for formulary apportionment.

The OECD holds the contrary view that there is inconsistency between unitary taxation and the aim of the multinational entity. It expresses the concern “that predetermined formulae are arbitrary and disregard market conditions, the particular circumstances of the individual enterprises, and management’s own allocation of resources, thus producing an allocation of profits that may bear no sound relationship to the specific facts surrounding the transaction.” There are, however, several key problems with this statement. Foremost is the fact that it is the use of a formula through a profit split approach (a transactional method), which is arbitrary, not the use of one under a unitary tax regime. To the contrary, formulary apportionment provides a model that has the rationale of consistency between similar multinational entities, such as multinational banks, with the formula designed with market conditions factored in.

This statement by the OECD is further flawed when management’s own allocation of resources is taken into account, as this is the very essence of formulary apportionment. The resources are the factors in the formula, weighted according to relative importance and reflecting management’s decisions to allocate those resources to a particular jurisdiction. The formula used for unitary taxation purposes is one that represents the allocation of resources by the multinational entity to a particular jurisdiction, thereby again reflecting the economic decision of the firm.

There is justification for the statement made by the OECD that the allocation may bear no sound relationship to the specific facts surrounding the transaction, as formulary apportionment is not, and does not purport to be, a transactional method. It recognises that to attempt this is a fiction and, unlike the arm’s length transactional model, does not purport to achieve such a goal. Arm’s length pricing, which does purport to bear relationship to the specific facts surrounding transactions, often fails in this goal, especially for multinational banking transactions where it becomes practically impossible. The claim of formulary apportionment is that it allocates income based on an economically justifiable formula. The process will still be somewhat contrived, but because the model is founded in an economic solution, the result is not the fiction achieved by the present regime.

When corporate tax differentials are disregarded, internal transactions are meaningless to management, as it is the overall aim of the entity to minimise the expense and maximise the profits of the entity as a whole, not minimise the expense and maximise the profits of the separate parts of the entity, at the expense of another part of the entity. Yet, inconsistently with this rationale, arm’s length pricing takes into account these transactions and assumes that each part of the entity is a separate profit centre. Generally, this is not overall management strategy. Consequently, formulary apportionment, which ignores all of the internal transactions, is consistent with the aim of the efficient operations of the multinational entity.  

The OECD also expresses the concern that “a formula based on a combination of cost, assets, payroll, and sales implicitly imputes a fixed rate of profit per currency unit (e.g. dollar, franc, mark) of each component to every member of the group and in every tax jurisdiction, regardless of differences in functions, assets, risks, and efficiencies and among members of the MNE group.” This statement necessarily assumes that the functions, assets, risks, and efficiencies are significant to the overall profits of the entity, but that they are not taken into account in determining the formula. A formula does not have to be based in costs, assets, payroll, and sales. Such a formula would be unsuitable for multinational banks where the significant factors are likely to be value, risk, and activity. Consequently, a formula for multinational banks would take into account the differences in functions, assets, risks, and efficiencies by adopting a formula which is representative of these factors. Where this is done, factors considered significant to management would also be reflected in the tax model.

The OECD believes that by abandoning the separate entity approach important geographical differences would be ignored, as would separate company efficiencies and other sub group specific factors. The OECD concern specifically relates to loss centers or profit centers which it believes will not be adequately recognised under a formulary apportionment regime. Yet again, this approach is contrary to the overall aim of management to maximise the profits of the entity as a whole. Every part of the entity is integral to this profit and, as such, contributes. Unlike the arm’s length model, the formulary apportionment model recognises this contribution.

The way that formulary apportionment allocates income to a particular jurisdiction is in direct contrast with the arm’s length model. Inconsistent with management policy, the transactional approach attempts to allocate income based on the geographical

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source of income. On the other hand, formulary apportionment, which is consistent with management policy, apportions income according to economic or business activity undertaken in a particular jurisdiction. It may be argued, therefore, that formulary apportionment contains the characteristics of an optimal regime.

Distributing Taxing Rights through an Equitable Model

A system that distributes taxing rights in an equitable manner between the relevant jurisdictions ensures that each country receives its fair share of tax revenue. A jurisdiction will receive its fair share of revenue where the tax model reflects the economic activity undertaken in a jurisdiction. The economic activity undertaken in a jurisdiction is reflected under a formulary apportionment model via the specific factors in the formula, along with the relative weighting.

The fact that formulary apportionment operates in a vacuum, by only considering firm specific information, is suggested as a reason why this method fails to distribute the taxing rights in an equitable manner. Yet, the economic reality of multinational banks is that they do operate in a vacuum. It is only the income or loss of the individual multinational bank that is relevant to determine the income or loss to be attributed to each jurisdiction in which that entity operates. It is not the industry in which the multinational bank operates that determines the profit or loss of the individual bank. The formulary apportionment model accepts that the market does not dictate the profits of individual multinational banks, and seeks “a ‘fair’ or ‘proper’ division of the overall profits regardless of how the marketplace would operate.”

The formulary apportionment model also recognises the reality that modern multinational entities, such as multinational banks, are highly integrated and does not attempt a fiction by trying to separate that entity into component parts. Where this is not recognised there is a failure to acknowledge the true nature of the situation. A model, which ignores this reality, may necessarily lack the attributes of efficiency, equity, and achievability.

Neutrality, in all forms, is also an essential feature of an equitable tax regime. A unitary model based on global formulary apportionment has the potential to achieve

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both jurisdictional neutrality and taxpayer neutrality. Jurisdictional neutrality is achieved through the provision of a single formula for calculating tax liability. While differing corporate tax rates between jurisdictions may mean that there are still differences between jurisdictions, this is not a product of the unitary tax model. Further, a successful formulary apportionment model makes the use of havens pointless, as there is no longer the opportunity to have income sourced within that jurisdiction unless factors in formula are present. The use of tax havens by multinational banks is one of the reasons why there is such a distortion in the allocation of profits as compared to economic activity. This distortion would be limited under a formulary apportionment regime.

The unitary tax model, focusing on taxpayer activity rather than taxpayer location, also achieves taxpayer neutrality. As Benjamin Miller points out, “[i]t levels the playing field for all business competitors by basing taxes on what they actually earn on an overall basis, not on the basis of whether they are domiciled in the United States or another country, or the skill of their tax compliance staff in manipulating the rules.” The model would focus on the substance of the multinational bank, rather than the form of the multinational bank.

An equitable model is also one where each taxpayer pays their fair share of tax. A global formulary apportionment model may assist in this goal by reducing tax evasion and avoidance by a multinational entity. This occurs due to the extent of reorganisation a multinational entity would have to undertake to avoid tax. While the incentive would still be there, it would be reduced by the physical movement required, rather than the simple book transactions, which achieve tax avoidance under the current regime. To avoid tax under a formulary apportionment model, the taxpayer would have to shift formula factors to the low tax jurisdiction. It is unrealistic to believe that such movement would not take place. This type of avoidance, however, would be less than under the traditional regime because multinational entities would have to undertake actual movement and alter their real business operations to effect any tax changes.

The outcome of an analysis of the current regime and the economic realities of modern multinational entities, such as the multinational bank, is that “it would seem that some form of fractional apportionment regime represents the optimum way to...

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reflect the economic realities of modern multinationals in an allocation scheme.” 99 As Daniel Sandler points out “[i]f the primary purpose of international co-operation in taxation is to achieve an equitable division of the international corporate income tax base amongst the various competing nations, it is rationally more sound and more consistent with economic reality to tax highly integrated multinational as a single unit, rather than as a group of separate entities acting at arm’s length.” 100 Consequently, it may be argued that the unitary tax model based on global formulary apportionment is a theoretically superior model to the current arm’s length pricing method for the taxation of multinational banks. The most significant advantage of unitary taxation based on global formulary apportionment is the fact that it reflects the location of the economic activity undertaken by the multinational bank. As such, intermediary services are reflected. This means that it reflects the decisions of management and produces an optimal result. Because of the theoretical superiority, there are several key practical advantages to the regime. These are considered in turn.

**The Consequential Advantages to a Unitary Taxation Model**

A formulary apportionment regime may provide such practical benefits as greater certainty, improvement of tax compliance due to increased simplicity, a reduction in avoidance, and a reduction in double taxation. These benefits also contribute to the unitary tax model being an optimal model for taxing multinational banks.

Currently, unless the taxpayer enters into an advance pricing agreement, it is left with the knowledge that the relevant taxing authority, may, at any time undertake a transfer-pricing audit and substitute an arm’s length price for one which the taxpayer has used. This is despite the taxpayer’s best intentions. In addition, the taxing authority will be privy to competitor information, which a taxpayer will not have access to, thereby allowing the taxing authority to more accurately determine an arm’s length price due to a greater data base of comparables. A unitary tax regime alleviates this uncertainty and the taxpayer is left with the knowledge that so long as the formula is complied with there is little chance of the taxing authority amending an assessment. 101

Certainty is also increased where formulary apportionment is applied in a uniform manner to corporate groups and on an international scale. 102 Furthermore, the information required administer the formulary apportionment model has greater objectivity and is grounded in more reality than the information required to determine the hypothetical arm’s length price under the current transfer pricing regime. 103

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It may also be argued that formulary apportionment encourages greater compliance through a reduction in compliance costs and increased simplicity. In its most extreme form, formulary apportionment is a very straightforward model to apply. It simply takes the income from the unitary business and divides it between the relevant jurisdictions based on a predetermined formula. This is unlike the current arm’s length approach, which is inherently complex in its application. Formulary apportionment removes a large percentage of the complexity associated with the arm’s length model, as transfer prices, determined on a transactional basis, would no longer need to be ascertained.

This simplicity results in a reduction of compliance costs, and where compliance costs are reduced, tax compliance may be improved. This reduction in complexity and increased compliance will be at its greatest level where there is international implementation of a formulary apportionment model, and agreement on all relevant issues. The necessary requisite international agreement is generally the argument used to support the view that there are increased compliance costs and complexity introduced with a formulary apportionment regime. This view is based on the premise that it would be difficult to reach international agreement on the elements of the formulary appointment model, particularly the relevant tax base to be used. The OECD is one such body that opposes formulary apportionment based partially on this argument. It states:

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105 The OECD acknowledges this claim. It states: ‘Apart from these arguments, advocates contend that a global formulary apportionment approach reduces compliance costs for taxpayers since in principle only one set of accounts would be prepared for the group for domestic tax purposes.’; OECD, Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (1995) 3.62.


Contrary to the assertions of its advocates, global formulary apportionment methods may in fact present intolerable compliance costs and data requirements because information would have to be gathered about the entire MNE group and presented in each jurisdiction on the basis of the currency and the book and tax accounting rules of that particular jurisdiction. Thus, the documentation and compliance requirements for an application of a global formulary apportionment approach would generally be more burdensome than under the separate entity approach of the arm’s length principle. The costs of a global formulary apportionment approach would be further magnified if not all countries could agree on the components of the formula or on the way the components are measured.\textsuperscript{112}

There is belief that the multinational entities themselves also hold this view. It has been stated that “the view of business is that the documentation and compliance requirements under a unitary approach would be more burdensome than under the separate entity approach.”\textsuperscript{113} It is arguable that while this may still be true of traditional multinational entity businesses, it is not the case for multinational banks. The fact that multinational banks are entering into advance pricing agreements emulating a formulary apportionment model, suggests that this statement may not apply to the international banking sector, and that banks may be receptive to an allocation method that openly accepted a formulary basis for profit distribution.

While there is still an amount of complexity associated with formulary apportionment, it is a comparison between the current model and the proposed model that must be drawn. To this extent, “[a] comparison of the administrative and compliance burdens involved in preparing a combined report and computing the income derived from a particular jurisdiction by formula accounting with those involved in rigorous arm’s-length examination must inevitably lead to the conclusion that the former is superior.”\textsuperscript{114}

The theoretical advantage of formulary apportionment offering an equitable regime because taxpayers pay their fair share of tax is juxtaposed to the practical advantage of the reduction in the opportunity for income shifting.\textsuperscript{115} By reducing the need to determine transfer prices based on an arm’s length methodology, the opportunity for income shifting is also reduced. As stated earlier, while a formulary apportionment model introduces the incentive to move formula factors to lower tax jurisdictions, this is not as easy as transfer price manipulation due to the need to relocate economic activity to those locations.\textsuperscript{116}


A final advantage to formulary apportionment, which is also a consequence of this model achieving greater equity, is the elimination of double taxation.\textsuperscript{117} The possibility of double taxation is removed where a formulary apportionment model is adopted globally and uniformly implemented.\textsuperscript{118} Double taxation then becomes impossible, as the tax base to be divided between the relevant jurisdictions is never more than one hundred percent of the taxable profits.

The advantages of a consolidated corporate tax base may be real and substantial. Potentially, compliance costs are reduced, many of the transfer pricing problems largely disappear rendering the tax regime simpler, and there is less opportunity for over or under taxation. Furthermore, businesses can undertake a comprehensive consolidation of profits and losses, and a restructuring is simplified.\textsuperscript{119} Multinational banks would no longer have to rely on advance price arrangements to gain any certainty in their pricing allocation of income.

The Practical Implications of Accepting Formulary Apportionment as an “Optimal” Regime for Taxing Multinational Banks

Acceptance and international agreement of unitary taxation based on global formulary apportionment as a theoretically superior model for taxing multinational banks is essential if it is to be embraced internationally.\textsuperscript{120} Lack of international acceptance has been described as the most debilitating disadvantage to formulary apportionment.\textsuperscript{121} This article, however, is not proposing that unitary taxation based on global formulary apportionment, replace the current tax regime for all multinational entities. Rather, it proposes that it be implemented only for multinational banks. There is already evidence that the current jurisdiction and allocation rules, while adequate for traditional multinational entities, do not work for multinational banks. As such, international acceptance of this model as theoretically superior for the specific industry of banking may not be as onerous as its acceptance for multinational entities generally.

However, acceptance of formulary apportionment as a superior regime does not guarantee its implementation and it is this implementation process that may in the end lead to its demise as an alternative regime.\textsuperscript{122} The initial hurdle to reaching international agreement to implement a formulary apportionment regime is

\begin{thebibliography}{99}
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exacerbated by complex methodological questions. The implementation process requires a high degree of co-operation among nation states to agree also to the various key economic components of the formulary apportionment regime. In particular, consensus as to the tax base, the composition of the formula and the definition of the factors and the scope of the unitary business are essential. Such agreement would not be reached without conflict.

The practical implications related to the theoretic examination of the use of formulary apportionment are a consequence of its acceptance as a superior model. As such, while they do not add to the discussion of the theoretical merits, they may provide an aid to determine whether formulary apportionment is a fundamentally fair and practical model. This part of the article first considers the degree of international acceptance required before implementation stage. It then considers the three key components to the regime. The issues relating to these components are raised with a view to disclosing the pertinent questions that need to be dealt with at a practical level before implementation would be possible.

Requisite Degree of International Consensus

The strongest argument against formulary apportionment is its lack of general acceptance internationally. The OECD relies on this argument to dismiss formulary apportionment stating that reaching such an agreement would be time consuming and extremely difficult. It believes that “transition to a global formulary apportionment system … would present enormous political and administrative complexity and require a level of international cooperation that is unrealistic to expect in the field of international taxation.”

Many jurisdictions adopt a similar stance. For example, the Australian Taxation Office recognises that global formulary apportionment is a method that is an alternative to the arm’s length principle as a means of determining the proper allocation of profits across competing national tax jurisdiction. As such, it recognises the theoretical merits of the model. However, it does not consider global formulary apportionment to be an acceptable alternative to the arm’s length principle in

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One reason given for this stance is the high degree of international cooperation and coordination needed. Yet, international bodies and domestic jurisdictions have generally viewed unitary taxation as an all or nothing approach rather than an industry specific solution. The OECD has already singled out the multinational banking industry as a potentially difficult area for taxation and, consequently, there is no reason why it could not be singled out for possible use of formulary apportionment. Where, however, there is no international consensus problems arise.

The consequence of jurisdictions not agreeing to exclusive use of formulary apportionment would be the need to calculate profits attributable to the relevant jurisdictions using two different standards. Difficulty in reaching international consensus, however, is an inadequate reason for dismissing formulary apportionment outright, and should not be an obstacle to its inception. Formulary apportionment is addressing the same fundamental issue as the current tax regime in attempting to find an equitable distribution of income to the relevant jurisdictions. Reaching international agreement on this equitable distribution is ultimately difficult, whether it is achieved through the traditional regime or by agreement on a new model. It is also argued that the implementation of formulary apportionment is not feasible without international acceptance. Yet, the obstacle of reaching international agreement on an equitable distribution can be overcome; the current regime being an example of where this has occurred. To this extent, Reuven Avi-Yonah believes that the present “international tax regime, based on voluntary consensus, can be regarded as one of the major achievements of twentieth-century international law.”

The current regime, with its arm’s length pricing requirement, is an example of a model that requires a substantial amount of international cooperation to find an equitable distribution. This equitable distribution is attempted through the arm’s length requirement despite the fact that, in the case of a highly integrated entity, it does not achieve a result that reflects economic reality. Furthermore, where the traditional arm’s length standard does not result in an accurate allocation, jurisdictions, while explicitly adopting the official stance of opposing formulary

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130 Taxation Ruling TR 97/20, paragraphs 3.100 - 3.101.
131 Taxation Ruling TR 97/20, paragraph 3.104.
apportionment, implicitly accept its use. Consequently, there is already a level of international cooperation as to how to achieve this equitable allocation of profits to the relevant jurisdictions. Multinational banking is an ideal example of where this has happened.

The current regime also provides an example of circumstances where many of the rules are subject to disagreement. For instance, the current application of the arm’s length principle itself causes difficulties in practice where different methodologies are used. This means that the arm’s length rules are not applied uniformly, nor is there uniform consensus as to the assignment of income and expenses. Currently, disputes between nations are voluntarily resolved via treaty provisions. Where jurisdictions continue to disagree, there is no solution to the possibility of double taxation.

It has been stated that for unitary taxation to be successful, it would need to be accepted internationally. At the very least, it would need to be implemented multilaterally to achieve any sort of equitable distribution. Implementation of a unitary model by only one jurisdiction would not be a satisfactory approach to the issue of allocation as there would be a dual requirement to satisfy by the arm’s length model and formulary apportionment model. There may also be complications for a unitary taxation model where it is only adopted by a group of countries, as there may still be the dual requirement to satisfy both regimes.

As with the current international tax regime, international agreement would likely need to be in the form of a multilateral treaty to operate efficiently. The use of such treaties is possible as the role of the tax treaty is increasing. Further, many other regulatory issues are being dealt with at a global level. A multinational treaty enables not only the application to be consistent but also aids administration through

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cooperation of information gathering and consistent enforcement. At present, treaties allow formulary apportionment in a limited number of cases. By expanding on this limited acceptance and adopting a multilateral approach, such agreement would ensure that jurisdictions collaborate to develop a uniform application of the formulary apportionment model. Again, this would not be an easy task and the opposition from developing countries cannot be discounted as it may be argued that they have little to gain from a formulary apportionment regime. This would, however, be achieved more easily under an industry specific proposal than a broad adoption of the regime for all multinationals.

A multilateral approach may also require individual jurisdictions to relinquish a certain degree of control over the taxation of multinational banks, which is likely to be approached with a degree of reluctance by all jurisdictions concerned. A suggested, albeit extreme, approach to unitary taxation is the assessment of profits by a central administering body, which would allocate the income to the relevant jurisdictions according to the relevant formula. This would require a central body to administer all multinational banks, and the jurisdictions to agree on both the tax base and tax rate. Such an approach would obviously require jurisdictions to hand over many of the rights currently assessed domestically. Consequently, it may be argued that sovereignty over taxation would be compromised. It is unlikely, therefore, that in the near future agreement of this type would be reached. A more flexible version, however, would allow the individual jurisdictions to apply their own tax rate and make base adjustments. The current regime also deals with these issues without an international body overseeing implementation and administration. As such, this should not be a bar to unitary taxation based on global formulary apportionment.

Opposition to formulary apportionment based on the difficulty in reaching international consensus also encompasses a compliance aspect. Opponents argue that agreement will not be reached because of the underlying issue of the extra burden placed on entities to provide information on a global basis, as well as translation

requirements and the ongoing burden of complying with the accounting standards of individual jurisdictions.\textsuperscript{161} Previously, this article has argued that compliance may be less burdensome for multinational banks under the unitary tax regime than it is currently. At the very least, any additional compliance would not be excessive.\textsuperscript{162}

This article concludes that a move towards a unitary tax model based on global formulary apportionment for tax multinational banks would require vast changes in attitude by tax authorities internationally. There is no doubt that politically and administratively, the substitution of the arm’s length pricing model with a unitary tax model for the taxation of multinational banks, would introduce a range of complex issues to be overcome.\textsuperscript{163} Furthermore, the most successful way of achieving harmonization is through full international acceptance, without which compliance would be required of two systems.\textsuperscript{164} This should not be dismissed, however, as being impossible to achieve, as the current regime is one which effectively requires a similar degree of international acceptance and compliance to operate effectively.

Consequently, this first step of achieving international acceptance, while difficult, is not insurmountable. This acceptance, however, that formulary apportionment is a more theoretically sound model for taxing multinational banks sets only the foundation for implementation of such a regime. Agreement to a formulary apportionment approach does not connote agreement on the operation and administration of the regime.\textsuperscript{165}

Before formulary apportionment could be implemented for multinational banks, agreement would need to be reached on jurisdiction to tax, the tax base to be divided, the formula, the unitary business, and enforcement principals.\textsuperscript{166} Difficulties are generally associated with what are known as the key components to the regime. As such, the next part of this article considers those key components to a formulary apportionment regime for taxing multinational banks.

**Key Components of the Formula Apportionment System**

As with the current transfer pricing regime, the implementation of a unitary tax model based on global formulary apportionment requires agreement on certain issues. The effective implementation of this model requires consensus on key components to the regime, namely: the unitary business, the tax base, and the composition of the

\textsuperscript{166} C. McLure Jr, ‘U.S. Federal Use of Formula Apportionment to Tax income From Intangibles’ (1997) 14 Tax Notes 109, 111.
formula.\textsuperscript{167} There is also potentially the scope for agreement on the corporate tax rate. This, however, is an issue neither exclusive, nor integral to unitary taxation and formulary apportionment. The current regime is one with differing corporate tax rates between taxing jurisdictions and this is unlikely to diminish in the future.\textsuperscript{168} Furthermore, just as it is not necessary to have a uniform corporate tax rate under the current regime, it is not necessary to have uniform corporate tax rate for an effective formulary apportionment regime.

The current regime also provides guidance as to how to reach consensus on key issues. Consensus has generally already been reached on the key issues of the current regime, and many of these are similar to the ones arising under a unitary tax model. For example, determining what constitutes the unitary banking business can be equated to determining whether there are related parties for arm’s length pricing purposes. Determining the formula can be equated to the arm’s length standard itself, as it is simply a means of allocating profits according to a predetermined method.\textsuperscript{169} As such, many of these issues are not new, with the exception of the tax base, which may pose new questions.\textsuperscript{170} As stated earlier, the OECD broadly opposes formulary apportionment based on the high degree of international consensus required. More specifically, the OECDs most significant concern lies with the requirement of “substantial international coordination and consensus on the predetermined formulae to be used and on the composition of the group in question.”\textsuperscript{171} Without this agreement there may be double or less than single taxation.\textsuperscript{172} This agreement is, however, not impossible to achieve. The key components are examined in turn.

The Unitary Business

The first key economic component of the unitary tax system is the \textit{unitary business}. That is, which parts of the banking business are considered part of the multinational bank for taxation purposes? Defining the unitary banking business is essentially a


\textsuperscript{172} OECD, \textit{Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations} (1995) 3.64.
question of fact and needs to be considered on a case-by-case basis.\textsuperscript{173} It will usually be obvious that a branch is part of the unitary banking business, and therefore, main issue is whether separately incorporated affiliates should be included in the combined banking business.\textsuperscript{174}

The United States State model is an example of where this issue has had to be decided in a broad spectrum of cases. While unitary taxation is used in the United States only in a limited sense, the courts have had to decide the definition of a unitary business. In this setting the definition is, and continues to be, a source of controversy.\textsuperscript{175} Two tests, however, have been formulated which may provide a foundation upon which to base international tests. These tests are not statutory based, but rather a product of the court system. Furthermore, the US Supreme Court, rather than defining what is meant by the unitary business, has left it to be decided on a case-by-case basis. It states “…the application of the unitary-business principle requires in each case a careful examination both of the way in which the corporate enterprise is structured and operates, and of the relationship with the taxing State.”\textsuperscript{176}

It is the Californian courts that have formulated two tests for determining the unitary business.\textsuperscript{177} The first is the three unities test in Butler Brothers v. McColgan.\textsuperscript{178} Under this test, there is a unitary business if there is (1) unity of ownership, (2) unity of operation, and (3) unity of use. The second test was developed in Edison California Stores.\textsuperscript{179} Under this test “if the operation of the portion of the business done within the state is dependent upon or contributes to the operation of the business without the state, the operations are unitary; otherwise, if there is no such dependency, the business within the state may be considered separate.”\textsuperscript{180}

The debate as to which test applies has been ongoing.\textsuperscript{181} The tests, however, do provide guidance as to the types of issues that can be considered to determine the unitary banking business at a global level. Further, as suggested earlier, this may be no more than the debate over associated enterprises and permanent establishments, as the question is one as to which of the branches and subsidiaries should be included in the unitary banking business. The question in a unitary taxation setting does, however, have the advantage of being a determination of fact based on the individual

\begin{footnotes}
\item[176] ASARCO Inc. v. Idaho State Tax Commission 102 U S 3103 (1982).
\item[178] Butler Brothers v. McColgan 17 Cal 2d 664 (1941).
\item[179] Edison California Stores 30 Cal. 2d 472 (1947).
\item[180] Edison California Stores 30 Cal. 2d 472 (1947) 481.
\end{footnotes}
circumstances, rather than one that considers the legal structure of the business. Consequently, the subsidiary/branch recognition and distinction would not play a part in the allocation process.

Determining the unitary business for the purposes of multinational banking would generally not be a difficult task. It will usually be obvious whether a branch or a subsidiary is contributing to the overall business and, therefore, should be included as part of the unitary business for tax purposes. There may be some difficulty in deciding whether an agency is part of the unitary business, but this assessment would be no more difficult than determining whether the agent is dependent or independent for the purposes of the current permanent establishment threshold test.

The Tax Base

Once the unitary banking business is identified, the formulary apportionment system requires a definition of the tax base to determine the amount to be apportioned. This tax base has been referred to as the business taxable income, which is the amount to which the formula should be applied. Before the formula can be applied, however, there needs to be a commonly agreed method for determining the profits to be apportioned. To maintain equity and ensure that there is not under or over taxation, there must be a common definition of business income. To this extent there also needs to be consensus on the issue of timing for the purposes of income and deduction recognition.

Consensus on the multinational banking tax base may be more difficult than consensus on the unitary banking business as there is no counterpart in the current regime. The current regime, by operating on a transactional basis, ensures that the rules applicable in the country of allocation apply. There are, however, recognised methods for determining the tax base for multinational entities in general. The best example of these methods is found in the work already undertaken by the European Union Commission within its proposals to move towards formulary apportionment. The European Union Commission is currently focusing on two alternatives: home state taxation (HST); and common (consolidated) base taxation (CCBT). Under

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188 Commission of the European Communities, Commission Staff Working Paper: Company Taxation in the Internal Market (2001); Commission of the European Communities, Communication from the Commission to the Council, the European Parliament and the Economic and Social Committee – Towards an Internal Market without Tax Obstacles: A Strategy for Providing Companies with a
the home state taxation method, the home jurisdiction would determine the tax base according to their domestic rules.\textsuperscript{189} Alternatively, under the common base method, common rules would determine a standardized taxable income of all multinational entities.\textsuperscript{190}

Common (consolidated) base taxation is seen as the ultimate goal of a formulary apportionment regime.\textsuperscript{191} This method, however, would require an immense degree of cooperation between nation states. Currently, therefore, home state taxation would appear to be the more pragmatic approach to the problem of defining the tax base. If this method were adopted for the application to multinational banks there would be no change from the current system.

**Composition of the Formula and the Definition of the Factors**

Once the multinational banking tax base has been determined, it is necessary to allocate that base according to a predetermined formula. The composition of the formula is the main challenge facing the implementation of a formulary apportionment model.\textsuperscript{192} The challenge is to “develop a list of objective and easily measurable criteria that could be used to allocate, in an equitable manner, taxable income across tax jurisdictions.”\textsuperscript{193} It is essential that this objective is met, as formulary apportionment will only represent an optimal regime for taxing multinational banks, superior to arm’s length pricing, where the formulary factors reflect the location of the economic activity.\textsuperscript{194}

As with the previous key components, it is agreement that is essential, and it is the agreement upon a formula that is important, rather than choosing a particular formula.\textsuperscript{195} While the definition of the formula and factors are important to the

\textit{Consolidated Corporate Tax Base for their UE-Wide Activities} (2001). There are two further methods which are not the subject of focus.

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apportionment system, the choice of the actual formula to be applied is less important than is often recognised. If agreement is not reached, there is the potential for over or under taxation. Whereas, once the agreement is reached only 100 per cent of the tax base may be allocated.

The choice of factors to agree on, however, is influenced by competing forces. The factors should reflect how the income is produced and identify contributions made by the relevant jurisdictions. Where the contributions are recognised, the interest of accuracy is met. The interests of accuracy, however, must be weighed against the interests of simplicity. An increase in accuracy may lead to a decrease in simplicity. From an accuracy perspective, the formula should reflect the contributions that are present in the income producing process, whereas, from a simplicity perspective, the formula should be able to be easily administered. There is also the inherent incentive for individual jurisdictions to achieve a formula that places emphasis on factors which have a significant presence within the jurisdiction. Further, there is the problem that developing countries may be disadvantaged where emphasis is placed on such factors as labour and capital that have lower costs in those counties. As such, they are unlikely to agree to a formula which weighs these factors heavily.

Because of the complex array of competing interests, both conceptually and at a practical level internationally, agreement to the factors is a difficult task. The OECD explains the competing jurisdictional interests:

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. Each country would have a strong incentive to devise formulae or formula weights that would maximise that country’s own revenue. In addition, tax administrations would have to consider jointly how to

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address the potential for artificially shifting the production factors used in the formula (e.g. sales, capital) to low tax countries.\textsuperscript{205}

The choice of formula should reflect an optimal regime, or one, which allocates income to the relevant jurisdictions, based on economic activity, with the aim of achieving interjurisdictional equity.\textsuperscript{206} Economic theory does not provide a single formula for accurately allocating income. As such, international agreement is necessary on what is considered \textit{fair}.\textsuperscript{207} As to what is considered fair, there are various factors, which may be considered to contribute to the economic activity undertaken in a jurisdiction.

Examples of factors that may make up the formula include the share of physical assets or intangible assets,\textsuperscript{208} the share of employment, and the share of sales.\textsuperscript{209} Other examples, which have been used at some time in the United States state formula, include manufacturing costs, purchases, expenditures for labour, accounts receivable, net cost of sales, capital assets, and stock of other companies.\textsuperscript{210} While all of these factors have, at some time, been used for the purposes of the United States State tax regime, property, payroll and sales are now seen as the acceptable factors.\textsuperscript{211} It is believed that “the property, payroll and sales formula strikes a balance between … competing influences.”\textsuperscript{212} The rationale for the use of the three factor formula is that these factors “provide a reasonable measurement of the income generated by the business activities located in the state. It does not place a disproportionate weight on


\textsuperscript{211} The OECD believes that there are problems with the use of these factors. It states: ‘Difficulties also would arise in determining the sales of each member and in the valuation of assets (e.g. historic cost versus market value), especially in the valuation of intangible property. These difficulties would be compounded by the existence across taxing jurisdictions of different accounting standards and of multiple currencies. Accounting standards among all countries would have to be conformed in order to arrive at a meaningful measure of profit for the entire MNE group. Of course, some of these difficulties, for example the valuation of assets and intangibles, also exist under the arm’s length principle, although significant progress in respect of the latter has been made, whereas no credible solutions have been put forward under global formulaic apportionment.’ OECD, \textit{Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations} (1995) 3.70.

\textsuperscript{212} J. Weiner, ‘Using the Experience in the US States to Evaluate Issues in Implementing Formula Apportionment at the International Level’ (1996) 13 \textit{Tax Notes International} 2113, 2123.
any of the factors, and it apportions some income to the states where production occurs and some income to the states where sales occur.”  

These factors, however, may not be suitable for multinational banking. It is generally understood that inequities may be created where the same formula is applied across differing industries. In the context of global trading, Charles Plambeck suggests that “most in accordance with economic theory would be to select factors of production (inputs) as the basis for this formula, on the theory that if unrelated parties in each jurisdiction were to enter into a joint venture to conduct global trading, they might be expected to divide the profits in accordance with each one’s relative contribution of inputs.” Further, he states that the predominant factor would be one that measures trader (human resource) input.

The only example of formulary apportionment being used for global trading is found in the advance pricing arrangements entered into in the United States. These formulas are not true instances of global formulary apportionment as they have regard to the particular facts of the individual cases. They do, however, provide an example of suitable factors. The Internal Revenue Service, in arriving at an appropriate formula, considered that the factors of value, risk, and activity were the most significant to determine the source of income. The advance pricing arrangements were entered into where the Internal Revenue Service considered that the businesses were functionally integrated operating under a central management and risk model. The agreements allocated income on a profit split basis using these three factors. Consistent with an equitable interjurisdictional allocation, the use of these factors “was designed to measure the economic activity in each trading location and its contribution to the overall profitability of the worldwide business.”

The value factor, which is used in the advance pricing arrangement, represents a measure of the contribution of a trading location to the worldwide profits of the entity; the best measure of this factor being the compensation of the traders at a trading location. Both the taxpayers and taxing authorities considered that trader compensation, including bonuses, was the best measure of this factor. As such, it contained the greatest weighting.

The risk factor used in the advance pricing agreements was a measure of the potential risk to which a trading location exposes the worldwide capital of the entity.\textsuperscript{224} This factor is measured in a number of alternative ways, “such as the maturity weighted volume of swap transactions or open commodity positions at the end of the year entered into in that trading location.”\textsuperscript{225}

The activity factor used in the advance pricing agreements was a measure of the contribution of a trading location to the worldwide profits of the entity, which takes into account key support staff.\textsuperscript{226} It can also be calculated by reference to the net present value of transactions executed at a trading location.\textsuperscript{227}

While the advance pricing arrangements were firm specific, this does not need to be the case as formula’s can be based on industry or other broad economic data.\textsuperscript{228} Using these factors, a possible formula for multinational banking is exhibited in the table below.

\textsuperscript{228} J. Weiner, ‘The European Union and Formula Apportionment: Caveat Emptor’ (2001) 41 (10) \textit{European Taxation} 380, 381.
Possible Formula\textsuperscript{229}

\[
T_i = t_i \times II \times \left( \frac{\alpha_i^V V_i}{V} + \frac{\alpha_i^R R_i}{R} + \frac{\alpha_i^A A_i}{A} \right)
\]

Where:
- \(i\) = jurisdiction
- \(T_i\) = tax liability in jurisdiction
- \(t_i\) = statutory tax rate in jurisdiction
- \(II\) = tax base
- \(V_i\) = Value in jurisdiction
- \(R_i\) = Risk in jurisdiction
- \(A_i\) = Activity in jurisdiction
- \(\alpha_i^V\) = weight on value in jurisdiction
- \(\alpha_i^R\) = weight on risk in jurisdiction
- \(\alpha_i^A\) = weight on activity in jurisdiction

\[\alpha_i^V + \alpha_i^R + \alpha_i^A = 1\]

It is not possible to predict the international reaction to the issue of agreement on the key components to a formulary apportionment regime for multinational banks. As such, this article does not attempt to determine the best way of defining these components, but rather it offers suggestions and a foundation for discussion, which may ultimately lead to consensus. What is evident, however, is that agreeing to the use, and the implementation of unitary taxation based on global formulary apportionment at an industry specific level, such as multinational banking, will be easier than the implementation of this model at a broad level applying to all multinational entities.

**Conclusion**

A move to unitary taxation based on global formulary apportionment is a “big bang”\textsuperscript{230} approach to the problems associated with the application of the traditional international taxing model when applied to multinational banks. Consequently, there would need to be radical change in international tax procedures for such a model to be implemented.\textsuperscript{231} While, some commentators believe that formulary apportionment

\textsuperscript{229} Adapted from Commission of the European Communities, *Commission Staff Working Paper: Company Taxation in the Internal Market* (2001) 413.


introduces its own set of problems,\textsuperscript{232} it has greater parity with the economic reality of multinational banking, thereby achieving a result which reflects an optimal way to tax multinational banks. Global trading is one such activity undertaken by multinational banks where economic functions cannot be divided according to geographical boundaries.\textsuperscript{233} Accordingly, the traditional arm’s length model does not achieve a result which accurately reflects the economic activity undertaken in a jurisdiction.\textsuperscript{234} Formulary apportionment would achieve this result, and at the same time ensure that the intermediary activities undertaken by multinational banks are captured for taxation purposes.

Global formulary apportionment is also a pragmatic answer to the problems associated with the current regime, as it accepts that it is not possible to determine an accurate allocation of income on a transactional basis. Rather, it focuses on an approximate answer,\textsuperscript{235} which most closely reflects the economic reality and business strategy of the multinational banks.

The obvious downfall, however, of the formulary apportionment model is not related to its theoretical soundness, but to the problem of international acceptance and agreement, not only to implement the model but also to the agreement on the key components to the regime. Without international compliance, global formulary apportionment may not exhibit many of the purported advantages and may not be a viable alternative to the current model.\textsuperscript{236} It is arguable, however, that international acceptance may be achievable in an industry specific setting, particularly where that industry is multinational banking. This is because multinational banking exhibits unique characteristics that make it difficult, if not impossible, to apply the traditional jurisdiction and allocation rules to the taxation of these banks. Whereas unitary taxation based on global formulary apportionment represents an optimal way to tax multinational banks because it recognises the unique characteristics and the economic reality of the industry.

There are currently no examples of formulary apportionment being used in its pure form at an international level.\textsuperscript{237} Nor has there been any comprehensive effort to do so.\textsuperscript{238} Furthermore, traditionally formulary apportionment has not been applied at industry level. A unitary tax model based on global formulary apportionment is usually proposed, based on geographical boundaries (such as country, economic groups or globally), rather than industry boundaries (such as multinational banking). Yet, there is no reason why a unitary tax model could not be implemented to apply specifically to an industry that warranted it where there is the failure of the current


\textsuperscript{237} There are advance pricing agreements which contain elements of formulary apportionment currently in operation.

jurisdiction and allocation principles to accurately reflect the economic reality of that particular industry.

Formulary apportionment does not solve all of the issues associated with the current international tax rules governing jurisdiction and allocation of income.\textsuperscript{239} It does remain, however, a potential solution to many of the problems associated with the separate entity approach,\textsuperscript{240} and recognises the consequences of globalisation by multinational entities.\textsuperscript{241} Principally, it removes the requirement to identify and price internal transactions.\textsuperscript{242} Furthermore, it provides a complete solution to the issue of allocation of profits between relevant jurisdictions where there is international acceptance of this model.\textsuperscript{243} As such, many of the issues, which arise in the context of multinational banking, may be resolved through a unitary tax model. The model, however, will only be truly successful where global formulary apportionment is applied on the basis of the whole enterprise, which is not an easy task.\textsuperscript{244}

\textsuperscript{239} E. Coffill and W. Prentiss Jr, ‘Federal Formulary Apportionment as an Alternative to ALP: From the Frying Pan to the Fire’ (1993) 59 Tax Notes 1103, 1116.


\textsuperscript{244} OECD, Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (1995) 3.73.