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10-16-2010

### Formulary Apportionment – Myths and Prospects

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#### Working Paper Citation

Avi-Yonah, Reuven S. and Benshalom, Ilan, "Formulary Apportionment – Myths and Prospects" (2010).

*Law & Economics Working Papers*. 28.

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**FORMULARY APPORTIONMENT—MYTHS AND PROSPECTS  
PROMOTING BETTER INTERNATIONAL TAX POLICY BY UTILIZING THE  
MISUNDERSTOOD AND UNDER-THEORIZED FORMULARY ALTERNATIVE**

**Reuven S. Avi-Yonah<sup>1</sup>  
Ilan Benschalom<sup>2</sup>**

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## INTRODUCTION

In a previous article in this journal, one of the authors surveyed the long history of the debate between proponents of the Arm's Length Standard (“ALS”) and formulary apportionment and suggested that perhaps this debate is more about semantics than substance.<sup>3</sup> Specifically, the author suggested that in situations where comparables could not be found, it may be advisable under the profit split method to use formulas to allocate the residual profit left over after a standard rate of return is assigned to

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The authors wish to thank Yariv Brauner, Yaron Lahav, Debra Lefler, and Suzan Morse for all their helpful comments.

<sup>3</sup> Reuven S. Avi-Yonah, *Between Formulary Apportionment and the OECD Guidelines: A Proposal for Reconciliation*, 2 WTJ 3 (2010).

routine functions, and that this is an acceptable use of formulary methods in an ALS context.

This article tries to persuade tax policymakers that the formulary “demon” offers an overall improvement to the current transfer pricing regime. It seeks to re-examine the formulary alternative by inquiring whether partial integration of formulary concepts into current practices would offer a reasonable alternative to transfer pricing rules.

It is not our intention to come up with a panacea of how to solve all the problems, or even to come with a new proposal. Instead this article wishes to open a free-of-prejudice debate on how to best promote international tax policy, without sticking to labels. It advances an outcomes based result to answer the key question of what is the best way to achieve equitable and efficient allocation of MNE income.

As in the previous paper, we believe that the key to answering this question is to resolve the problem of the residual, i.e., how to allocate income generated from mobile assets and activities whose risks are born collectively by the entire MNE group. This reflects our belief that these assets and activities generate most of current transfer pricing compliance and administrative costs, as well as tax avoidance opportunities. A limited formulary tax regime that allocates only the residual portion of MNE income, may therefore offer significant advantages. Furthermore, such a regime would not require significant deviation from current practices, or substantial modifications in the international tax regime.

Part of the solution is to stop viewing the ALS and formulary arrangements as binary alternatives. Instead of sticking to acronyms, policymakers need to embark on a long journey of finding the middle path through small incremental trials and errors. Ultimately, this journey will lead to a hybrid tax regime which incorporates elements from both ALS (preferably, a tougher version of the CPM) for situations in which good comparables exist and formulary arrangements for the hard-to-source residual where there are no comparables.

This is not a utopian but rather a real world solution—a one that does not require full cooperation among countries or reformulation of the entire international tax regime. We believe that the OECD should take a leading role in this direction, as it has started doing by accepting the profit-based methods as equal to the traditional ones under the ALS.

## I. WHY THE TRANSFER PRICING REGIME IS NOT WORKING AND CANNOT WORK

### A. *The Basics of Current Transfer Pricing Conventions*<sup>4</sup>

Under the current tax system, multinational firms (both resident and non-resident) pay tax to the U.S. government based on the income that they report earning in the United States. As is typical, the United States employs a separate accounting system, under which firms account for income and expenses in each country separately. The U.S.

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<sup>4</sup> This part and the next one are based on Avi-Yonah, Clausing and Durst, *Allocating Business Profits for Tax Purposes: A Proposal to Adopt a Formulary Profit Split*, 9 Fla. Tax Rev. 497 (2009).

statutory corporate tax rate of 35% has been increasing relative to other OECD countries over the previous 15 years.

As an example, consider a U.S. based multinational firm that operates a subsidiary in Ireland. Assume that the U.S. corporate income tax rate is 35% while the Irish corporate income tax rate is 12.5%. The Irish subsidiary earns €800 and decides to repatriate €70 of the profits to the United States. (Assume, for ease of computation only, a 1:1 exchange rate.) First, the Irish affiliate pays €100 to the Irish government on profits of €800. It then repatriates \$70 to the United States, using the remaining profit (€30) to reinvest in its Irish operations. The firm must pay U.S. tax on the repatriated income, but it is generally eligible for a tax credit of \$100 (taxes paid) times 70/700 (the ratio of dividends to after-tax profits), or \$10.<sup>5</sup> Owing to deferral, the remaining profits (€30) can grow abroad tax-free prior to repatriation.

This system creates a clear incentive to earn profits in low-tax countries. Firms may respond by locating real activities (jobs, assets, production) in low-tax countries. In addition, firms respond with various legal and accounting techniques to shift profits to low-tax locations, disproportionately to the scale of business activities in such locations. There are multiple such ways to shift income to subsidiaries in low-tax countries. For example, it may be advantageous for multinational firms to alter the debt/equity ratios of affiliated firms in high and low-tax countries in order to maximize interest deductions in high-tax countries and taxable profits in low-tax countries. Further, multinational firms have an incentive to distort the prices on intra-firm transactions in order to shift income to low-tax locations. For example, firms can follow a strategy of under- (over-) pricing intra-firm exports (imports) to (from) low-tax countries, following the opposite strategy with respect to high-tax countries. The most powerful of such techniques typically involve the transfer of interests in intangible property, such as patents, copyrights and trademarks as well as unpatented know-how, to subsidiaries in low-tax countries.

### *B. Why It Is Broken—the Income Leakage and Compliance Cost of the Transfer Pricing Regime*

In theory, firms should be limited in their ability to engage in tax-motivated transfer pricing by government enforcement of existing transfer pricing laws. Governments generally require MNEs to price intrafirm transactions according to the ALS—as if they were occurring with an unrelated party. At the heart of the ALS, is the assumption that each affiliated company within the group transacts with the other members of the group in the same way that it would transact if the members were unrelated. That central assumption defies reality, and it is not surprising such a system cannot yield sensible results.

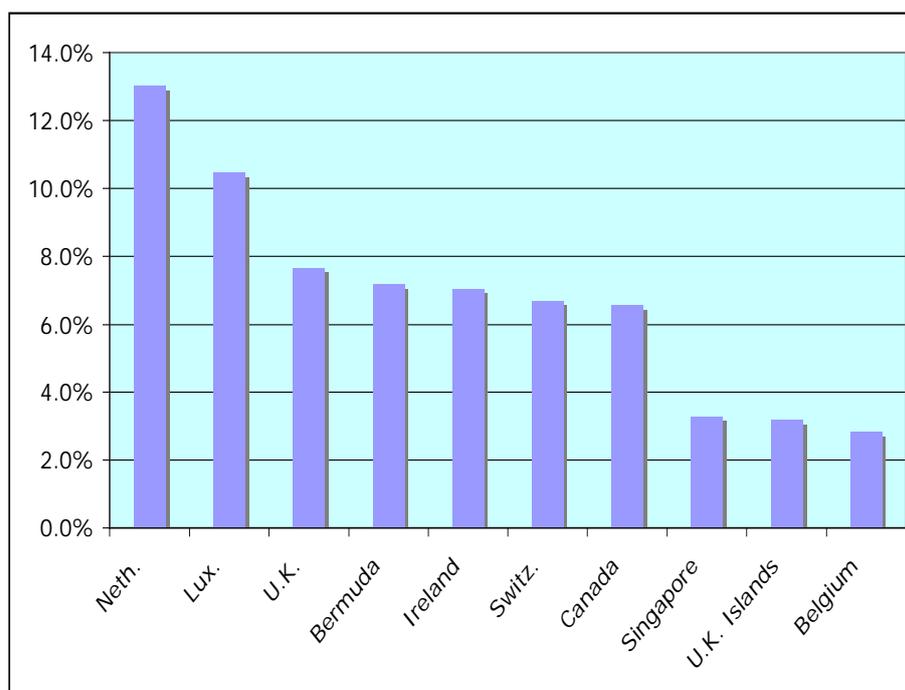
The porosity of current transfer pricing rules creates an artificial tax incentive to locate profits in low-tax countries, both by locating real economic activities in such countries and by shifting profits for tax purposes toward more lightly taxed locations. It is apparent that U.S. multinational firms book disproportionate amounts of profit in low-tax locations. For example, Figure 1 shows the ten highest-profit locations for U.S. multinational firms in 2005, based on the share of worldwide (non-U.S.) profits

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<sup>5</sup> In general, under the U.S. tax system, when a non-U.S. subsidiary distributes income to a U.S. parent through a dividend, the U.S. parent is entitled to a credit, against U.S. taxes for taxes paid out of the distributed income to a foreign government.

earned in each location. While some of the countries are places with a large U.S. presence in terms of economic activity (the United Kingdom, Canada, Germany, Japan), seven of the top-ten profit countries are locations with very low effective tax rates.

**Figure 1: Where Were the Profits in 2005?**  
(profits as a percentage of the worldwide total)



Country	Effective Tax Rate
Netherlands	5.1%
Luxembourg	0.9%
United Kingdom	28.9%
Bermuda	0.9%
Ireland	5.9%
Switzerland	3.5%
Canada	21.4%
Singapore	3.2%
U.K. Islands	1.9%
Belgium	8.7%

Notes: In 2005, majority-owned affiliates of U.S. multinational firms earned \$336 billion of net income. This figure shows percentages of the worldwide (non-U.S.) total net income occurring in each of the top-10 income countries. Thus, each percentage point translates into approximately \$3.4 billion of net income. Effective tax rates are calculated as foreign income taxes paid relative to net (pre-tax) income. Data are from the Bureau of Economic Analysis (BEA) web page; 2005 is the most recent year with revised data available. The Bureau of Economic Analysis conducts annual surveys of *Operations of U.S. Parent Companies and Their Foreign Affiliates*.

The literature has consistently found that multinational firms are sensitive to corporate tax rate differences across countries in their financial decisions. Estimates from the literature suggest that the tax base responds to changes in the corporate tax rate with an average semi-elasticity of about -2; thus, countries with high corporate tax rates are likely to gain revenue by lowering their tax rate.<sup>6</sup> One recent study suggests that corporate income tax revenues in the United States were approximately 35% lower due to income shifting in 2004.<sup>7</sup> Also, the literature suggests a substantial responsiveness of real economic activities to tax rate differences among countries.<sup>8</sup> These findings imply both less activity in United States and less tax revenue for the U.S. government. However, the tax responsiveness of real activity is less immediately apparent in the data. For example, Figure 2 shows the top ten employment locations for U.S. multinational firms in 2005, based on the share of worldwide (non-U.S.) employment in each location. The high employment countries are the usual suspects – large economies with close economic ties to the United States. As the accompanying table indicates, tax rates are not particularly low for this set of countries.

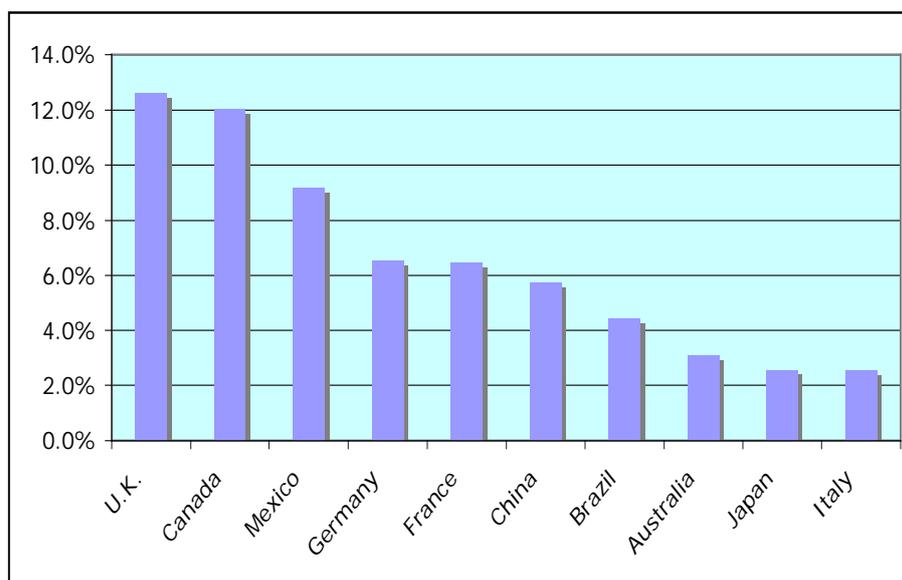
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<sup>6</sup>. See Ruud **de Mooij** and Sjef Ederveen, "Taxation and Foreign Direct Investment: A Synthesis of Empirical Research," *International Tax and Public Finance* 10, no. 6, Nov. 2003, at 673-693, and de Mooij, Ruud A. Will corporate income taxation survive? *De Economist* 153: 277-301 (2005) for an overview of this literature.

<sup>7</sup>. This estimate is from **Kimberly A. Clausing**, *Multinational Firm Tax Avoidance and Tax Policy*, 62 *NAT'L TAX J.* 703, 721 (2009). The calculation is based on a regression of U.S. multinational firm affiliate profit rates on tax rate differences across countries.

<sup>8</sup>. See de Mooij and Ederveen, *supra*.

**Figure 2: Where Were the Jobs in 2005?**  
(employment as a percentage of the worldwide total)



Country	Effective Tax Rate
United Kingdom	28.9%
Canada	21.4%
Mexico	21.8%
Germany	26.2%
France	21.3%
China	14.8%
Brazil	18.1%
Australia	12.1%
Japan	34.7%
Italy	24.9%

Notes: In 2005, majority-owned affiliates of U.S. multinational firms employed 9.1 million employees. This figure shows percentages of the worldwide (non-U.S.) total employment occurring in each of the top-10 countries. Thus, each percentage point translates into approximately 91,000 jobs. Effective tax rates are calculated as foreign income taxes paid relative to net (pre-tax) income. Data are from the Bureau of Economic Analysis (BEA) web page; 2005 is the most recent year with revised data available. The Bureau of Economic Analysis conducts annual surveys of *Operations of U.S. Parent Companies and Their Foreign Affiliates*.

Third, the current system is absurdly complex. As Taylor notes, observers have described the system as “a cumbersome creation of stupefying complexity” with “rules that lack coherence and often work at cross purposes.”<sup>9</sup> Altshuler notes that observers testifying before the President’s Advisory Panel on Federal Tax Reform

Taylor, Willard. 2005. Testimony before the President's Advisory Panel on Federal Tax Reform (March 31). In Tax Notes (April 4; Doc 2005-6654).  
<http://www.taxreformpanel.gov/meetings/docs/willard.ppt#257,1>, Presentation.<sup>9</sup>

found the system “deeply, deeply flawed,” noting that “it is difficult to overstate the crisis in the administration of the international tax system of the United States.”<sup>10</sup> Current transfer pricing rules have spawned a huge industry of lawyers, accountants and economists whose professional role is to assist multinational companies in their transfer pricing planning and compliance.

Finally, it is important to note that the problems with the current system derive not from rules at its periphery, but instead from a fallacy that lies at the system’s central core: namely, the belief that transactions among unrelated parties can be found and that they can be used as meaningful benchmarks for tax compliance and enforcement.<sup>11</sup>

Such an approach might well have made sense eighty years ago, when the legislative language underlying today’s arm’s length standard for income tax purposes was first developed.<sup>12</sup> At that time, although multinational groups existed, available transportation and communications technology did not permit close centralized management of geographically dispersed groups. Therefore, members of multinational groups functioned largely as independent entities, and benchmarking their incomes or transactions based on uncontrolled comparables probably made good sense.

That situation changed, however, with the technological changes precipitated by the Second World War. Today, it is possible to exercise close managerial control over multinational groups, and these groups develop in all industries and geographic market segments in which the efficiencies of common control pose significant economic advantages. Moreover, in those industries and markets where common control poses advantages, it is typically economically infeasible to remain in the market using a non-commonly controlled structure (for example, by maintaining distributors that are economically independent of manufacturers). Therefore, in those markets in which multinational groups operate – that is, in those markets in which transfer pricing issues arise – it is unlikely that reasonably close “uncontrolled comparables” can easily be found.

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Altshuler, Rosanne. 2005. International aspects of recommendations from the President's Advisory Panel on Federal Tax Reform. Paper presented at Tax Reform in an Open Economy, Brookings Institution, Washington, DC (December 2). <http://www.brookings.edu/comm/events/20051202tax.pdf>, p. 12.<sup>10</sup>

<sup>11</sup>. This argument is presented in detail in e.g., Reuven Avi-Yonah "The Rise and Fall of Arm's Length: A Study in the Evolution of U.S. International Taxation." *Finance and Tax Law Review* 9:310 (updated version of article from 1995 *Virginia Tax Rev.* 15:80) (2006). See also, e.g., Stanley I. Langbein "The Unitary Method and the Myth of Arm's Length." *Tax Notes* 30:625 (1986), and Michael C. Durst & Robert E. Culbertson *Clearing Away the Sand: Retrospective Methods and Prospective Documentation in Transfer Pricing Today.* *Tax Law Rev.* 57. 37-84 (2003).

. For example, if one wants to determine the “arm’s length” level of profitability of a U.S. distribution subsidiary of a foreign manufacturer of automobiles, one identifies one or more independent U.S. distributors of automobiles operating in economically, similar circumstances and uses the income of the independent distributor or distributors to benchmark the income of the U.S. subsidiary.

<sup>12</sup>. For historical summaries see, e.g., Avi-Yonah, *Rise and Fall*, supra; Langbein "The Unitary Method and the Myth of Arm's Length", supra; Durst & Culbertson *Clearing Away the Sand*", supra).

This is true of virtually every other industry that is conducted on a large global scale. In sum, no matter how assiduously one performs “functional analyses” designed to identify “uncontrolled comparables” that are reasonably similar to members of multinational groups, one is rarely going to find them. Certainly, such comparables will not be – and have not been – found with sufficient regularity to serve as the basis for a workable transfer pricing system. If the transfer pricing rules are going to be made tolerably administrable, policymakers around the world will need to restate them on a basis other than that of reliance on uncontrolled comparables.

The results of the current system, which assumes the availability of useful comparables in an economic environment where they are very unlikely to be found, are predictable:

(i) Companies and the government spend extraordinary sums each year on efforts at compliance and enforcement, largely through the preparation of “contemporaneous documentation”<sup>13</sup> by taxpayers and attempts at comprehensive examinations by the IRS involving some of the Service’s most experienced and skilled personnel.

(ii) Despite the expense of compliance and enforcement, companies and the IRS typically are dramatically far apart in their determinations of arm’s length pricing. Controversies routinely involve hundreds of millions of dollars and are resolved at amounts that resemble neither the government’s nor the taxpayer’s positions, thereby casting grave doubt on the conceptual soundness of the underlying rules.<sup>14</sup>

(iii) The inability to predict whether their positions will be sustained leaves companies and their investors with large areas of uncertainty in their financial statements.

(iv) The absence of clear standards for compliance, coupled with the ability under the arm’s length standard to apportion income to low-tax countries through legal arrangements governing the siting of intangibles and (more recently) the bearing of risk, make it impossible for governments to predict with reasonable accuracy their actual amount of corporate tax revenue.<sup>15</sup>

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<sup>13</sup>. See Treas. Reg. § 1.6662-6.

<sup>14</sup>. A 1992 study by the General Accounting Office concluded that less than 30% of transfer pricing adjustments proposed by IRS examiners ultimately were upheld in subsequent proceedings. Similarly, in a recent multibillion dollar case settled out of court, the parties agreed on payment of 3.4 billion in settlement of pending transfer pricing claims; this represents concession of about 50% of the deficiency before the Tax Court, although since the settlement covered years in addition to those then pending before the court, the extent of IRS concession appears to have been larger. Overall, while results vary from case to case, the IRS typically recovers at trial only a small proportion of transfer pricing deficiencies that it has asserted. The lament by Judge Gerber in one case gives a good idea of the atmosphere to be found in this field of law, despite attempts to project an image of statistical science: “Once again, we are left stranded in a ‘sea of expertise’ and must navigate our own way through a complex record to decide what constitutes an appropriate arm’s-length consideration.” *H Group Holding, Inc. v. Comm’r, T.C. Memo 1999-334*. The supply of very large, disputed transfer pricing adjustments does not seem likely to be exhausted soon.

<sup>15</sup>. In connection with the potential revenue implications of the proposed transfer pricing reform, it is useful to consider the implications for transfer pricing reform proposals of the recently increased accounting scrutiny of companies’ uncertain tax positions following the reforms of the Sarbanes-Oxley Act and, especially, the Financial Accounting Standards Board’s Interpretation 48 (FIN 48). The new accounting rules probably reduce companies’ expectations of financial statement benefit from taking what might be perceived as “aggressive” tax positions. Therefore, some of the revenue gains that might otherwise be expected from the reform of transfer pricing rules (and from some other possible tax reforms) might occur even in the absence of the reform. The recent accounting

(v) The fact that neither taxpayers nor enforcement authorities typically have clear standards for judging compliance means that issues involving very large amounts – billions of dollars – of federal revenue are resolved in examination, settled in Appeals, resolved in negotiations under tax treaties with foreign governments, negotiated through advance pricing agreements, or settled by attorneys out-of-court after examination. In most cases, federal privacy laws require that this decision-making occur outside the public eye. In the authors' experience, those involved in this process have served their roles with both integrity and skill. Nevertheless, the resolution of issues involving such large amounts of money, without the benefit of clearly discernable decision-making standards and public scrutiny, is not healthy for the tax system.

(vi) A related problem is that the uncertain results under current transfer pricing law degrade the quality of tax practice on the parts of both taxpayer and government representatives, regardless of the high standards of practice that both sides seek to maintain. Both sides are tempted to state, as "starting points" for what is expected to be extended negotiation, positions that strain the edges of what most would consider reasonable. The resulting atmosphere contributes to a lessening of the publicly perceived credibility of both corporations and the government – a development that is seriously damaging to what will always remain a largely mixed economic system.

### *C. Why it cannot be Fixed—The Theoretical Deficiency of the Arm's Length Standard*

This subpart explains why the current transfer pricing regime's under-performance is an inherent and inevitable byproduct of the ALS. Put differently, after explaining why the current transfer pricing regime is not working, we turn to explain why it cannot work.

To understand why the ALS imposes a structural limitation on the sourcing of MNE income, it is important to examine how MNEs operate and why their business model has become so prevalent and successful in the last two decades.

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changes therefore complicate the task of estimate revenue effects from reforms such as that proposed in this article.

The recent financial accounting changes, however, mitigate the problems of current transfer pricing rules only to a limited extent. Although the accounting reforms might prevent some transactions in which difficult issues may have arisen, or have altered the pricing that companies have chosen to adopt in some circumstances, the reforms generally do not eliminate the uncertainty of current transfer pricing rules but shift some of the burden of dealing with it to financial auditors. Moreover, much of the portability of income to low- or zero-tax jurisdictions under the current rules does not depend on positions that most would view as "aggressive," but instead involve straightforward application of today's transfer pricing principles. Further, even if some arguably aggressive transactions or reporting positions are eliminated, current transfer pricing rules will continue to impose administrative burdens and uncertainties even with respect to entirely routine transactions with no hint of tax avoidance intent. Thus, while the new accounting rules pose many benefits, including imposing some restraints on transactions arguably involving "aggressive" transfer pricing planning, they leave substantial need for reform of the transfer pricing tax rules themselves.

MNEs flourish in those industries where the ability to integrate functions in different jurisdictions enables them to reduce certain costs through synergy that takes advantage of economics of scope and scale. These costs include research and development costs, transaction costs, information-obtaining costs, managerial costs, and finance costs.<sup>16</sup> The ability to efficiently internalize these costs is the essence of the MNE structure—and an important source of profitability. All MNE entities which are somehow involved with the activity that produces the benefits participate in some ways in this cost reduction process. It is the MNE's multi-jurisdictional nature that enables the reduction of these costs—rather than its activity in any specific jurisdiction. Hence the ALS cannot break down the cost of what unrelated parties would have done—because the MNE setting is designed precisely to save the costs of doing business through unrelated transactions.

As the above subpart describes, this theoretical deficiency translates to a real enforcement deficit. Tax authorities require MNEs to report their income in a way that breaks down the cost saving associated with being a MNE on an ALS basis. This requirement cannot be met, verified, or consistently enforced.<sup>17</sup> This inherent vagueness motivates MNEs to structure their affairs in a way that reduces their tax costs. To the extent that intra-group transactions are relatively inexpensive, MNEs try to shift their income to low-tax jurisdictions and their deductions to high-tax jurisdictions.

Tax authorities have responded to this deficiency with burdensome and rigorous transfer pricing rules—which, among other things, impose high documentation standards that require MNEs to reveal their intra-group pricing methods. While these requirements limit MNEs' abilities to shift income, this Pyrrhic victory has come only at the tremendous costs associated with compliance, administration, and litigation. These requirements cannot change tax authorities' inherent disadvantaged position in transfer pricing controversies that involve sophisticated MNE taxpayers. MNEs enjoy superior information about their own activities and can devote more resources to tax planning. Furthermore, in a world characterized by an accelerating growth in international commerce and MNEs, it is highly questionable whether tax authorities can effectively scrutinize the volume of affiliated contractual transactions.

This gave rise to a dynamic in which tax authorities add layers of complexity to ALS transfer pricing enforcement to prevent avoidance. Perhaps paradoxically, tax authorities have found themselves dependent on ALS rules, but at the same time unable to consistently and effectively apply them. However, as the layers of transfer

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<sup>16</sup> For example, while it may be very costly to develop informational assets (such as the design of a production line), once they are developed, this information could be costlessly distributed and utilized in various locations. Hence, a high-tech company like Motorola can develop a production line in Britain, which would later be used by a subsidiary in Indonesia. The ability to transfer this knowledge in a cheap and reliable way, allows Motorola to pursue the comparative advantages of both the British and Indonesian labor markets. This source of Motorola's profit is a result of its multi-jurisdictional nature and cannot be exclusively attributed to Britain, Indonesia, or any other jurisdiction. Another example involves a company like Coca-Cola, who needs to invest many resources in building its brand name. This requires investing in high profile commercials (e.g., those involving famous movie stars) and promotion activities (e.g., sponsoring the Olympic games). The benefit of these activities obviously involves an economy of scale since while their fixed costs of production are huge, the same commercial can be used in many jurisdictions, and the benefits of sponsoring an international sporting event such as the Olympics is not limited to one jurisdiction.

<sup>17</sup> Testimony of Hon. Stephen E. Shay, Deputy Assistant Secretary for Tax Policy (International), US Department of the Treasury, US House Ways and Means Committee, July 22, 2010.

pricing regulations continue to accumulate, tax authorities' commitment to the ALS seems as entrenched as ever.

## II. DISTINGUISHING THE FORMULARY ALTERNATIVE FROM A UNITARY REGIME

Over the years, tax specialists have referred to the unitary system as the major alternative to the ALS-based transfer pricing regime. Unitary systems are typically used as a way to allocate the corporate tax base between states in federations (e.g., Canada and the United States).

Under a unitary regime, MNEs file a consolidated report with respect to their entire earnings—effectively disregarding intra-group transactions. The consolidated net (positive or negative) income figure is then allocated among the various jurisdictions in which MNEs operate via an apportionment formula. The formula is typically comprised of easy-to-observe factors that indicate the economic activity in the jurisdiction (e.g., sales, payroll expenses, and assets). The formula allocates the income to each jurisdiction according to the relative weight of its indicators.

This allocation formula represents a policy choice to allocate income by approximation—rather than an attempt to precisely determine how MNE income is generated. Since there is no one metric that explains the opaque process through which MNEs generate profits, the choice of formula factors, their measurement, and the relative weight—are not precise indicators of MNE economic activity. Instead, they operate as a crude averaging mechanism that allocates MNE income while disregarding the distinctive circumstances of MNE investments in different jurisdictions.

Although the unitary system requires an allocation formula, the two terms are not equivalent and should be analytically distinguished. Formulary allocation refers solely to allocating income through an allocation formula—instead of trying to determine the market price of the relevant affiliated transactions that produced the income. The unitary concept also tries to consolidate all MNE income sources, which is advantageous for corporations because it allows them to consolidate their losses from different jurisdictions.

Unlike the unitary regime, formulary sourcing could be applied to some sources of MNE income. It therefore requires distinguishing these sources of income from other sources, but does not depend on the ability to consolidate the income of the entire MNE group. Put differently, even though a consolidated unitary setting requires an allocation formula—allocation formulas could be used also in other settings. The formulary tool does not require an ambitious (unitary) MNE income consolidation process and does not offer corporations the benefits of comprehensive loss consolidation. Instead, formulary allocation could be applied toward specific sources of MNE income.

## III. INTEGRATING FORMULARY SOLUTIONS TO IMPROVE CURRENT TAX ARRANGEMENTS

This paper argues that formulary, rather than unitary, arrangements can be utilized to advance the objectives of the international tax regime. This middle path approach has been overlooked, even though it adopting it would not require a reformulation of the international tax regime. In previous papers, we have explained

how specific formulary and unitary solutions should be implemented. Instead of advocating for a specific solution, this paper outlines general considerations for why policymakers should consider integrating formulary arrangements into current tax practices. It explains why, despite its many difficulties, this integration is realistic and would be superior to the current ALS-base transfer pricing regime.

Critics of the unitary alternative assume that imposing it in a worldwide setting would be unrealistic due to insufficient global economic and political integration. However, even if we assume that the unitary alternative is indeed utopian, this does not mean that formulary allocation should not be used. While the unitary option may indeed be too difficult to implement, it may still be wise to examine whether formulary arrangements could better allocate certain sources of MNE income—especially in those areas where ALS transfer-pricing rules seem to be inadequate.

This analysis emphasizes two main themes: First, ALS and formulary methods are not mutually exclusive. Instead, each of these two methods has its own set of strengths and weaknesses—which could be combined and reconciled into an integrated regime. This system we suggest would continue to employ ALS allocation to transactions where there is an easily observable and consistent market price/rate-of-return to a certain commodity/commercial-activity. At the same time, this system would use formulary arrangements for those hard-to-allocate MNE sources of income. A binary distinction between the formulary alternatives is unjustified and counterproductive as it helps perpetuate the status quo, which benefits MNEs, tax planners, and low-tax haven jurisdictions.

Second, although not free of problems, a hybrid formulary-ALS regime does not have to be perfect. Perfect solutions are hard to come by, which makes contemplating and waiting for them an extremely unattractive policy trajectory. Instead, the costs of any future regime should be measured against those of the current regime. Wise policymaking should aim to realistically reduce rather than completely eliminate the problems and social costs associated with current MNE allocation arrangements.

This Part identifies six arguments that are prevalent in the international tax policy discourse with respect to formulary apportionment of MNEs' income. Each of these arguments stresses why policymakers should not use formulary arrangements to allocate MNE income. This paper labels these arguments "myths" and explains that, even taken together, the costs suggested by these arguments do not outweigh the potential benefits of a hybrid formulary-ALS MNE allocation regime. We conclude that it would be beneficial for tax authorities and the OECD to examine how to (cautiously and gradually) shift to such a hybrid regime.

*Myth #1: The Formulary Apportionment cannot Replace the Arm's Length Standard because it is Arbitrary*

### **The Myth:**

Any formulary allocation is, at the end of the day, merely a crude approximation of where MNE economic activity is taking place. The underlying assumption behind the formulary regime is that the location of formulary factors—such as sales, payroll and assets—mimics the way MNEs generate profits. Hence it assumes that MNEs yield the same average rate of return on their assets, employees,

and sale activities. This assumption is evidently wrong, and the arbitrariness of relying upon it prohibits tax authorities from shifting from an ALS to a formulary regime because source taxes should be levied in the jurisdictions where they are actually generated.

**The Prospect:**

Formulary allocation is indeed merely an approximation which cannot penetrate the MNE profit-generating process. However, from a theoretical perspective, formulary alternatives are as arbitrary as the ALS. From a revenue-generating perspective, formulary arrangements are probably less arbitrary—because they are less susceptible to manipulation by intra-MNE contractual arrangements.

Theoretically, the ALS relies on fiction because it dictates a sourcing method that is insensitive to any specific intra-group pricing method MNEs actually have. The ALS uses market comparables to source income according to the most prevalent market transactions and not according to how the MNE really operates. For example, assume three different oil companies whose costs of extracting refining and shipping oil products differ. The companies are each able to derive excessive profits: one by attaining lucrative licenses from various governments, another by developing special deep-ocean-drilling technologies, and the third by successfully foreseeing trends in oil and shipping prices. Even though their sources of profit differ, under a transfer-pricing regime the intra-group transactions of the three MNEs would be priced similarly because market-price benchmarks are available for all oil products. Hence, where it is easy to observe the price of various products, the ALS provides a reasonable sourcing method because it is fixed and therefore efficient—and *not because it is correct*. As in the case of any presumptive tax, the fixed nature of the ALS provides an incentive to all three oil companies to conduct their operation in the most efficient manner because they cannot avoid the tax.

While the theoretical arbitrariness of the ALS is not by itself a problem, it is important to stress that two conditions have to be fulfilled for it to operate as a *good proxy*. First, tax authorities should have a comprehensive taxonomy and pricing schedule of the relevant market transactions. Second, geographical and legal partitions within the MNE should reflect some type of economic and operational distinction. Today, these two conditions are far from being fulfilled because MNEs derive much of their profits from functional integration, which allows them to increase the benefits precisely in those fields where there are no good markets. This means that a great deal of MNE profitability is derived from unique intra-MNE transactions (e.g., the use of intangibles, the rendering of managerial services). With respect to these transactions, MNEs have to come up with significant amount of paperwork to justify their pricing even though many of these transactions could not have taken place between unrelated parties. Therefore, from a tax administration perspective, the ALS is a futile and inadequate proxy to allocate the income of these transactions.

Obviously, in those cases where the tax savings are substantial, and the costs of intra-group transactions are (relatively) cheap, MNEs have the incentive to use ALS arbitrariness to shift income to low-tax jurisdictions. Hence, from a revenue raising perspective, it is very arbitrary to allow MNEs to determine their tax allocation through intra-group contracts. An allocation formula that is based on relatively immobile, difficult-to-manipulate, and easy-to-observe indicators of economic activity would provide a much less arbitrary stream of revenues.

This inaptness of the ALS is also (de facto) recognized by tax authorities, who increasingly rely on profit-split methods to price affiliated transactions with no good market comparables. Instead of trying to hypothesize how unrelated parties would price the transaction, profit split methods aggregate the income generated from them and divide it according to each subsidiary's contribution. This vague notion of contribution is essentially a quasi-formulary approach. Rather than trying to determine price elasticities of various functions that each subsidiary performed, it determines the allocation of income by the relative volume of activity taken in each jurisdiction. Hence, although profit-split methods are considered part of the ALS-based transfer pricing rules, tax authorities' increasing reliance on them signals that they recognize the limitedness of ALS-based rules.

*Myth #2: Formulary Apportionment would Require a Comprehensive International Corporate Tax Base*

### **The Myth:**

Of all the various fields of economic regulation, direct taxation of businesses is probably the field in which nations are least able to coordinate and harmonize their rules. While all tax regimes are devastatingly complex, each country seems to attach a lot of value to its own form of complexity. In this state of affairs, trying to implement any formulary regime would be a Sisyphean task. Every formulary arrangement requires some measurement of the income that would be allocated by the formula. Given the low record of international tax harmonization, there is little reason to believe that corporate income would be measured similarly by different countries.

### **The Prospect:**

This paper's main claim is that formulary arrangement should not allocate all MNE income but only those sources of income where the ALS is inadequate. The proposed regime would therefore be comprised of both ALS and formulary sourcing—with the latter applied only to a subset of MNE income. This subset would be comprised of those sources of MNE income that could not be sourced according to the ALS.

We agree that any attempt to form a comprehensive corporate tax base in the near future suffers from high failure probabilities.<sup>18</sup> We further agree that it would be unfeasible to establish any international sourcing unitary regime that requires the measurement of the MNE's entire income. However, unlike unitary arrangements, formulary arrangements offer a different (much more limited) alternative. Formulary sourcing regimes could be applied only to a subset of MNE income and not to a consolidated income figure of the entire group of MNE subsidiaries.

This paper refers to the sources of income that should be taxed by formulary arrangements as the residual. This residual should be comprised of those income-

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<sup>18</sup> Most indicative is the ongoing (and one could say everlasting) EU attempt to form such a tax base as part of the CCCTB initiative. Member States, which have an impressive record of harmonizing their trade and monetary policies, find it difficult to agree upon the features of such a tax base. This difficulty is striking because the CCCTB is planned to be optional, so that European Member States and MNEs can subscribe to it but would not have to. *See on this issue* Ilan Benshalom, *A Comprehensive Solution for a Targeted Problem: A Critique of the Eu's Home State Taxation and Ccctb Initiatives*, 48 Eur. Tax'n 630 (2009)

generating activities that could not be easily sourced by the ALS because there is no adequate benchmark to which they could be compared. This residual category would be primarily comprised of income derived from mobile intangible and financial assets. The key problem is that the intra-group ownership of these assets is tax elastic because MNEs' direct costs of moving them to different subsidiaries are low. Moreover, the indirect costs of holding these assets in low-tax jurisdictions may also be low because the economic benefit of owning them is not limited to the subsidiary that owns them. For example, financial assets stored in a foreign subsidiary could be re-invested by it either in intra-group enterprises or in other interest-bearing financial assets. Furthermore, a parent company can borrow against the financial assets of its subsidiary and thus lower its interest rate. For a low-tax jurisdiction to be attractive, it should also have stable business-friendly political and economic-regulatory environments. However, there are many low-tax jurisdictions that have these features, and MNEs achieve low costs and low risks by owning assets through subsidiaries located in them.

Intangible assets present one example of income-generating activity that cannot be easily sourced by the ALS. They are characterized by high fixed and low marginal costs of production and could be owned anywhere because they have no fiscal presence. As part of the shift of developed countries to a post-industrial economy, intangible assets comprise an ever-growing share of MNEs' assets and are becoming more complex, diversified, and unique. Hence, it could be difficult to price these assets and the services rendered to create them. For example, if a MNE subsidiary located in a low-tax jurisdiction owns an intangible asset, all the entities in the MNE group could use it (in return for royalties). Intangibles can be anything—rights for exclusivity, patents, trade names—and they could be transferred to a corporate entity in a low-tax jurisdiction before they are operational so that it bears the risk of their failure. A MNE can capitalize a low-tax subsidiary and make sure that it contracts with other subsidiaries to undertake most of the process of developing the intangible. While those subsidiaries would be compensated for their services—under an ALS transfer pricing regime, the low-tax subsidiary would be compensated for the risk it undertakes. Since much of intangibles' value is not known at the time of their development, this compensation for risk may be substantial. In a non-ALS, more-common-sense world, one might wonder what component of the risk would be actually borne by the subsidiary in the low-tax jurisdiction. The ownership of the intangible, its finance, and the risk associated with it are all conducted by the same MNE—which makes the process of assigning ownership to one subsidiary rather obscure. Assigning the ownership of the intangible to the low-tax subsidiary looks more like a shift of assets from one pocket to another, and there seems to be no real meaning to the intra-group contractual allocation of risk. What unrelated parties would have done seems irrelevant—because unrelated parties would have to really bear the risk themselves if the development of the intangible fails.

Furthermore, to best utilize intangible assets MNEs adopt a horizontally integrated business model in which intangibles are simultaneously created and utilized by different MNE entities. This functional integration often means that the risks and interests borne by the different MNE collides so that breaking up their value between MNE subsidiaries in accordance with the ALS is simply meaningless.

In the case of financial transactions, the problem of pricing is not as acute as in the case of intangibles—pricing the "proper" related-party interest rate is a feasible task for most tax authorities. However, tax authorities do not have the analytical or enforcement tools to determine whether a debt form of the intra-group investment

transaction is itself proper. This inability introduces a huge tax enforcement problem given the many alternative ways that MNEs can mobilize and repackage their commonly controlled pool of fungible capital assets and liabilities. Because money is a fungible commodity, the internal capital structure of a MNE is tax elastic, which means that taxpayers can use economically equivalent but legally different transactions to finance their activities. By categorizing the intra-group financial transaction in a tax-efficient way, MNEs can skew the risks associated with related-party financing to low-tax jurisdictions. Under the ALS, these risks would have to be compensated for. Hence, even though it could widely be assumed that affiliated lending and borrowing involves much less credit risk than unrelated transactions, the ALS requires tax authorities to price their interest rate as if made between unrelated parties.

MNEs enjoy the ability to assign the ownership and leasing rights over their mobile assets to the various entities in the different jurisdictions in which they operate. The inaptness of the ALS basis means therefore that MNEs are able to use their contractual freedom to shift income and thereby avoid taxes on income arising from those mobile assets. Furthermore, it means that MNEs are able to use the internal dealing of financial and intangible resources to strip the income from tangible activities that are conducted in entities located in high-tax jurisdictions.<sup>19</sup>

Instead of this convoluted system, this paper suggests a hybrid regime—where the residual income is taxed on a formulary basis while other (perhaps the majority) of MNE activities are taxed by the ALS. MNEs will find it considerably more difficult to shift income in those cases where there is a clear, easily observable, and consistently priced market benchmark. Hence, tax authorities should continue to apply ALS-based rules—because they offer a fixed (and therefore efficient), easily monitored and enforced proxy to the location where profits are generated. While comparable price mechanisms could still be used, we have a strong preference for (fixed and inflexible) comparative profit methods (CPMs)—which assume a certain rate of return for a given activity. The main benefit of such CPMs is that they limit MNEs' ability to shift income via intra-group contractual risk allocations.<sup>20</sup> The residual income—where there is no adequate market comparable—should be taxed by formulary arrangements.

There is no one correct formula—and, indeed, different portions of the residual may be sourced by different formulary arrangements. Each formulary arrangement should try to provide a crude yet sensible proxy to the location of the income-generating activities associated with the relevant source of income it seeks to allocate. For example, a plausible formulary arrangement in the case of intangibles would try to allocate the income attributed to intangibles to those locations where they have been generated and/or where they are utilized.<sup>21</sup> A formulary arrangement of the

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<sup>19</sup> For example, since MNEs are able to manage their own internal financial structures, they aim to do so in the way that allows them the most favorable (after tax) result. This prescribes that they would take advantage of interest payments' deductibility and the low source-withholding taxes on interest, to finance their activities in high-tax jurisdictions through related-party debt. *See detailed explanation in Ilan Benshalom, The Quest to Tax Interest Income: Stages in the Development of International Taxation*, 27 Va. Tax Rev. 631 (2008)

<sup>20</sup> For example, distribution and manufacturing services would be allocated a certain percentage of the overall sales. *See Ilan Benshalom, Sourcing The "Unsourceable": The Cost Sharing Regulations and the Sourcing of Affiliated-Intangible Related Transactions*, 26 Va. Tax Rev. 631 (2007)

<sup>21</sup> *See Id.* at . This article provides a distinction between production based (R&D) intangibles that should be allocated to the places where they have been generated, and passive intangibles—where there is no economic significance to the place where they have been created but only to where they are utilized. The article also provides some sourcing solutions for complex intangibles

income derived from financial assets would recognize that financial assets and obligations are owned by the MNE group as a whole. This prescribes that financial income should be allocated among jurisdictions based on the relative amount of MNE assets and activities located in them.<sup>22</sup> This paper focuses on advancing the notion that once MNE residual income would not be allocated on an ALS basis, many of the problems of the current transfer pricing regime would be significantly reduced. This would allow the ALS to become the effective enforcement tool it was originally intended to be—a credible, efficient, and easily administered benchmark for allocating MNE income.

The hybrid regime would not be free of problems as it would still involve distinguishing the residual income from the income generated through other activities and measuring it. However, tax authorities face the same difficulties under the current regime. Hence, although many aspects of MNE sourcing are bound to be determined by fact-specific valuation inquiries, a hybrid regime could deal more adequately with the problem of shifting. At the very minimum, MNE sourcing arrangements should seek to detach issues concerned with the economic ownership of mobile assets from questions of valuing how much income the MNEs generate from them. As they do now, tax authorities and MNEs would have to resolve the questions of whether a certain source of income is part of the residual and to value the net income derived from a certain asset or activity. However, once these questions are resolved, a hybrid regime would relieve tax authorities (and MNEs) from the burden of hypothesizing what unrelated parties would do to allocate the benefits of complicated and MNE-unique transactions.

*Myth #3: Formulary Apportionment is Impossible because it would be Insensitive and therefore Disruptive) to actual Business Practices*

### **The Myth:**

The common denominator of all formulary arrangements is the contention that intra-group related transactions should be disregarded. This notion is inconsistent with how MNE subsidiaries do business with each other. In a business reality where legal ownership and classification have important economic consequences—arguing that intra-MNE transactions should be disregarded will result in inaccurate measurement of MNE income. For example, debt investment is different from equity investment (in terms of insolvency priority), the legal ownership of intellectual property would determine the regulatory regime it is subject to, and certain subsidiaries may have regulatory restrictions on the risks that they can undertake. Disregarding all these attributes would be intellectually wrong but would also disrupt the manner in which MNEs do business. Furthermore, consider a MNE engaged in a massive (and overall profitable) international R&D project that involves subsidiaries in many jurisdictions.

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<sup>22</sup> Therefore, a possible formulary arrangement of financial assets and risks would disregard the tax consequences of affiliated MNE transactions altogether. This prescribes that the net taxable financial income of MNEs should be determined through financial transaction with unrelated parties. This net taxable financial income figure would be allocated via a formula that would take into account tangible asset payroll and the total amount of sales in different jurisdictions. See Ilan Benshalom, *The Quest to Tax Financial Income in a Global Economy: Emerging to an Allocation Phase – Taxing Global Financial Institutions*, 28 Va. Tax Rev. 165 (2008); Ilan Benshalom, *Taxing the Financial Income of Multinational Enterprises by Employing a Formulary Arm's Length Allocation Mechanism*, 28 Va. Tax Rev. 631 (2009).

One of these subsidiaries, which is in charge of one potential application of the intangible, has an inadequate business model and labor force. As a result, this subsidiary inflicts massive costs on the entire project. Under a formulary arrangement, the actual performance of the subsidiary would be disregarded and it would receive a (positive) share of the net income generated by the intangible. This result is counterintuitive and incorrect because it would allocate tax revenues to a tax jurisdiction which did not have any real contribution to the MNE income generating process.

### **The Prospect:**

The argument that formulary arrangements are insensitive to business practices should be analytically distinguished from the argument that these arrangements would disrupt such practices. There are three different arguments for why the alleged insensitivity of formulary arrangements would not result in major disruptions to current business practices. First, formulary apportionment only disregards intra-MNE transactions for tax purposes. This disregard would not spill over to other legal regimes, so many of the non-tax motivated business practices will continue to take place. Second, business practices are not engraved in stone but are responsive to the tax-regulatory environments in which they operate. Some contemporary business practices have been negatively impacted by the ALS over the years—so a shift to a hybrid regime may actually reduce the disruption of MNEs' efficient allocation of resources. Finally, formulary arrangements are averaging mechanisms that rely upon fixed indicators that cannot be nuanced to every aspect of MNEs' operation. However, fixed and crude sourcing arrangements are likely to be more efficient and (may be) more equitable if their overall result proxies the economic reality of where MNEs operate. Furthermore, formulary arrangements can be subject to certain (limited) exceptions, which would provide the hybrid regime with flexibility.

This subpart elaborates upon the above arguments in the order presented. First, the tax treatment of intra-MNE related transactions does not undermine MNEs freedom of contract or deny them the flexibility to arrange their intra-group contractual affairs as they see fit. While MNEs enjoy the right to arrange their financial and assets-ownership structures, they do not have a right to freely determine their tax liability through those transactions. More specifically, while MNEs should have the right to move their financial and intangible assets to subsidiaries located in offshore financial tax havens like Bermuda, they have no enshrined right that this transfer would be taxed on an ALS basis. Hence, if MNEs have certain legitimate business advantages for moving assets to low-tax jurisdictions, the formulary tax arrangement disregards the tax consequences of the transfer but does not deny the MNEs any of the non-tax advantages. It does aim to limit the tax advantages associated with such asset shifting, which essentially do not reflect any real tangible business activity or risk taking by the MNE.

Second, ALS indeed tries to mimic certain business practices, but the situation is more dynamic because current business practices are also, partly, shaped by ALS sourcing arrangements. The ALS was adopted between the two World Wars because it was consistent with the business reality of that era. In the brick and mortar industrial economy of the first half of the twentieth century, there was often a functional

distinction between subsidiaries which aligned with corporate and national borders.<sup>23</sup> Today, MNEs integrate many of their cross-border functions. For example, many high-tech MNEs such as Microsoft have the same intangible assets being developed in multiple R&D centers around the world. These centers share sensitive information and communicate daily through thousands of e-mails, telephone calls, and video conferences. This integrated and interdependent production model would not be possible with unrelated parties, so that arguing that the revenues generated from it should be allocated on an ALS-basis seems obsolete. Hence, to the extent that ALS aligns with cross-border, functionally integrated business practices, it is because the latter have adjusted so that MNEs can "translate" their practice to fit ALS tax-accounting conventions.

This point could be taken a bit further—suggesting that MNEs have some interest in shifting to a hybrid regime. While they obviously wish to maintain their income-shifting privileges under the existing regime, the current transfer-pricing system is costly for them as well. Having to come up with a case-by-case pricing methodology supported by documentation and the need to prepare for lengthy tax audits and tax-controversy proceedings consumes a considerable amount of financial and managerial time-resources. Additionally, there may be some non-tax cost to income shifting. This means that income-shifting of mobile assets may result in inefficient allocation of resources—despite the fact that it reduces the overall (tax and non-tax) costs of the MNE. Hence, when contemplating the political price necessary to get MNEs on board, policymakers should bear in mind that a hybrid regime would benefit them in certain respects as well.

Third, formulary arrangements are indeed a one-size-fits-all alternative to the ALS transfer pricing rule.<sup>24</sup> The main strength of the formulary mechanism is that it relies on (relatively) simple income-averaging and allocation rules. Simplicity, however, is not a free good, and in the world of tax administration simplicity typically comes as a tradeoff to flexibility and accuracy. Formulary arrangements should therefore be designed so that they allocate income in a way that (roughly) reflects the level of MNE economic activity in a specific jurisdiction. They cannot (and should not) be designed to accommodate any specific MNE business model or situation. The formulary arrangement should be structured to cover the vast majority of cases. This would greatly reduce compliance and administrative costs, and would result in a more transparent and equally applied MNE tax allocation regime.<sup>25</sup> Since tax authorities already rely on these ad hoc formulary arrangements,<sup>26</sup> they have much to gain and little to lose by making this explicit and shifting to more structured formulary arrangements.

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<sup>23</sup> Hence, when the income tax was first imposed, it made a lot of sense to employ the ALS—which mimicked how cross border transactions really occurred. However, the economy has radically changed over the last eighty years as communication and transportation technologies have developed and as political and regulatory constraints have been gradually removed. This, inevitably, has also changed how MNEs operate. Ilan Benschalom, *The Quest to Tax Interest Income: Stages in the Development of International Taxation*, 27 Va. Tax Rev. 631 (2008)

<sup>24</sup> There may be different formulary arrangements for different type of activities or income sources (see *supra* note 21-22 for references to such formulary arrangements). The one-size-fits-all means that these formulary arrangement are fixed so that taxpayers have no ability to elect which one they would be subject to.

<sup>25</sup> Avi-Yonah, Clausing and Durst, *supra*.

<sup>26</sup> As mentioned, tax authorities have, in many cases, already abandoned traditional ALS in favor of profit-split income allocation methods. Even though these methods use quasi-formulary principles, they still have to be implemented on a case-by-case basis. This means that they still extract considerable compliance and audit resources. Furthermore, MNEs still control when and how to use those methods.

Admittedly, there may be cases where the formulary arrangement reaches counterintuitive results or is just too costly to implement. However, there are ways to deal with these cases without losing the overall advantages associated with the hybrid regime. First, the formulary component in the hybrid regime should be designed as a default rule. Like the Advance Pricing Agreement (APA) process today,<sup>27</sup> MNEs with unique business models and/or unique circumstances, would be able to enter into special tax-sourcing agreements with tax authorities. Today the baseline for those negotiations is the ALS transfer-pricing regime, in which MNEs have an advantage over tax authorities when there are no clear market benchmarks.<sup>28</sup> In contrast, under a hybrid formulary-ALS regime, tax authorities would have a much better opening bargaining position. Whenever there is no clear market benchmark, MNEs would have to allocate the taxes by a formula that is based on easy-to-observe and difficult-to-manipulate factors. Second, while most large MNEs probably have a significant residual component, small-to-medium MNEs' residual income may be relatively small. Other (perhaps even relatively large) MNEs may have a small residual income component. Since those MNEs would still be required to use the ALS standard, imposing a formulary arrangement on them would increase their compliance costs significantly without providing any significant revenue advantages to tax authorities. Therefore, a certain *de minimis* rule should be applied so that formulary arrangements would not be imposed when the costs of introducing it seem very high in comparison to its benefits.

*Myth #4: It would be Easy to Tax-Plan Against Formulary Arrangements\**

#### **The Myth:**

Formulary arrangements assume that there are easy-to-observe and hard-to-manipulate indicators of economic activity. However, once the formulary factors are spelled out, MNEs would change their behavior so that as much as possible of their taxable income would be allocated to low-tax jurisdictions. MNEs can manipulate the form of their transactions—e.g., if payroll is a factor, then MNEs would engage in direct hiring in low-tax jurisdictions and outsource functions in high-tax jurisdictions. If the location of sales is taken into account by the formula, then MNEs would finalize their sales in tax havens.

#### **The Prospect:**

The identification of formulary factors obviously provides taxpayers with the incentive to manipulate the indicators to minimize their tax liabilities. The question is not whether MNEs would have these incentives under a hybrid allocation regime, but the extent to which they are likely to respond to these incentives. This subpart outlines why MNEs' incentives to manipulate formulary factors would not be detrimental to the functioning of the hybrid regime.

The question of the tax elasticity of MNEs' behavior with respect to formulary factors is empirical and therefore difficult to answer given our limited experience with

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<sup>27</sup> Diane M. Ring, *On the Frontier of Procedural Innovation: Advanced Pricing Agreements and the Struggle to Allocate Income for Cross-Border Taxation*, 21 Mich. J. of Int. Law 143 (2000)

<sup>28</sup> Namely their ability to drag tax authorities into long fact intensive audit controversies where they the MNEs have superior information.

\*This myth relates only to the problem of tax induced manipulation and not to with the shifting of real economic activity offshore—an issue dealt with in Myth #6.

formulary and unitary arrangements in the international arena.<sup>29</sup> Our first observation is that MNEs are not likely to engage in manipulation if it is costly and the tax rewards to it are low. One attribute that minimizes the rewards for manipulation under a hybrid regime is that the formulary arrangement would apply only to the residual income. This means that, unlike the unitary regime, the rewards for manipulating the allocation formula in a hybrid regime would be considerably lower—because only a subset of the MNE income could be diverted. A second attribute relates to the number of factors. If the formula has many factors, MNEs would find it difficult to gain big tax advantages by manipulating any one of them. A third attribute relates to the non-tax costs which manipulating a certain factor would entail. If there are real non-tax costs associated with moving the factor, the likelihood that MNEs would engage in aggressive manipulation is low.

The key is therefore to come up with enough difficult-to-manipulate and easy-to-observe factors that would provide an indication to the level of MNE economic activity in a specific jurisdiction. For example, the following factors seem to satisfy this requirement: retail sales and services (by the country of the purchaser), overall sales in a given jurisdiction (including sales made by agents), movable assets, real estate assets, value of leases, payroll of direct employees, payroll of outside contractors that work more than twenty hours per week in the MNE premises, etc.<sup>30</sup>

There is no magic set of factors—and their choice should be a complicated process of trial and error. For example, if tax authorities find that MNEs can easily manipulate the location of business-to-business sales, then they should avoid using this factor and replace it with a more difficult-to-manipulate factor such as retail sales.<sup>31</sup> Additionally, assets should be attributed to the location where they are employed and not where they are used because MNEs can easily shift the legal ownership of assets. The location of inventories and intangible assets is mobile and tax sensitive in many cases so that their value of these assets should be significantly discounted (inventories), or omitted altogether for formulary purposes (intangibles).<sup>32</sup> The payroll factor reflects the human capital MNEs employ in a given jurisdiction, which is (relatively) easy to observe and difficult to shift (because employees are difficult to move).<sup>33</sup>

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<sup>29</sup> Most unitary arrangements are applied in federative nations to allocate the state corporate tax base. It is difficult to conclude from the intra-nation example because the effective corporate tax rate on the state level tends to be low. In the United States, for example, rates are typically below 10% and state tax liabilities are deductible from the federal tax liability of corporations. Consequently, in federative nations the unitary system does not seem to have any prohibitive costs associated with corporate manipulation of the formulary factors. Hence, this type of limited response may not be indicative of what may happen if a unitary regime was to be implemented in the international arena where some countries have significantly higher effective tax rates than those imposed by states.

<sup>30</sup> Jack Mintz & Joann M. Weiner, *One Open Negotiation Issues Involving a Common Consolidated Corporate Tax Base in the European Union*, 62 Tax L. Rev. 81 (2008)

<sup>31</sup> It is relatively easy to observe the location of most retail transactions because the vast majority of these transactions take place where individuals live. It is, however, important to remember that not all retail transactions may be easy to observe. The sale of software products, for example, could be conducted via the web anywhere. Hence it may be reasonable to say that the sale factor should not be part of the default rule formula but only something that MNEs would be able to take into account by undertaking an APA negotiation process.

<sup>32</sup> Alternatively, inventories and intangibles may not be in the default rule formula but only something that MNEs would be able to take into account by undertaking an APA negotiation process.

<sup>33</sup> The payroll factor should be defined very broadly to guarantee that the relative costs of employment in each jurisdiction are adequately reflected in the formula. Additionally, the cost of outsourcing certain functions that resemble direct employment should also be taken into account, so that MNEs

MNEs' motivation and ability to manipulate formulary factors under a hybrid regime are indeed a source of concern. However, a carefully delineated formulary arrangement could reduce these concerns significantly. While the above outlined structural features of a hybrid regime are not likely to eliminate MNEs' manipulation, they may help constrain it so that such shifting takes place only on the margins.

The relevant point of reference to which any hybrid regime should be compared is the current ALS-based transfer pricing regime. Hence, the hybrid system does not have to be planning-proof, but only to perform better. As established, there seems to be robust evidence that ALS conventions result in a lot of tax planning and avoidance. Additionally, under a hybrid regime, tax authorities would still be able to deploy the anti-avoidance strategies they currently use to counter aggressive tax planning (e.g., general anti-avoidance rules and anti-avoidance judicial doctrines).

The hybrid regime would allocate income according to economic indicators and would replace a system where tax planning is to a large extent a byproduct of intra-MNE paper shifting. This, at least to our minds, makes it very unlikely that a hybrid regime would underperform with respect to current international tax arrangements.

*Myth #5: Formulary Apportionment would Revoke Current International Tax Arrangements and Require Unattainable Tax Coordination*

**The Myth:**

While the current ALS-base transfer pricing regime is far from perfect, formulary apportionment offers no alternative. Even if academics could come up with the "correct" formulary mechanism to allocate MNE income, policymakers would have to take into account practical considerations. First, they would have to take into account that the ALS is already the rule of the road and is enshrined in tax treaties and other documents such as the OECD model tax treaty and commentary. Second, formulary arrangements require intensive cooperation to work smoothly because they involve a lot of open questions—such as how to define the residual, how to define the MNE group itself, and how to measure and weight the different factors.

Formulary and unitary arrangements offer a good solution for federal nations because all states have roughly the same tax base, the same tax accounting conventions, and mandatory dispute resolution procedures (in the form of federal courts). These features of federative nations prevent states from using formulary arrangements to expropriate taxes from other states. However, none of these features exist at the international level, which means that a hybrid regime would impose a substantial risk of tax expropriation. While most countries may be better off if they all implement a certain hybrid formulary arrangement, it seems naïve to think that they would be able to reach and sustain an agreement that requires intensive ongoing coordination. Absent cooperation, countries will have the incentive to structure expansive formulary arrangements that would lead to double taxation and impose a heavy burden on cross-border trade and investments.

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would not have the ability to reduce their tax liability by reducing the number of their direct employees in a high-tax jurisdiction and inflating it in low-tax ones.

### **The Prospect:**

This subpart argues that policymakers can apply a hybrid formulary-ALS arrangement without first revoking the current treaty-based international tax regime, entering any multinational tax convention, or establishing an international tax organization to administer it. While reforming many of the current international tax conventions as well as increasing tax coordination among countries may entail many advantages, an implementation of a hybrid regime does not require either. This paper contends that a hybrid allocation regime would offer a feasible alternative to the current transfer-pricing regime even if it is only loosely coordinated and adopted only by some countries. To become the new rule of the road, such a regime would only require bilateral agreements that reduce potential double taxation from conflicting formulary systems. To establish a better MNE allocation regime, tax authorities do not have to reach the same income-allocation figures, or to use the same methods. All they need is to reconcile their differences by entering bilateral treaties—which is very similar to what countries do today.

The adoption of the hybrid regime does not necessarily require revoking the current treaty-based international tax regime. True, most treaties do require the use of the ALS to allocate the income of related parties—subsidiaries and branches. However, countries have recognized that ALS mechanisms are insufficient and in many instances have moved towards mechanisms that are closer to formulary allocation. While tax authorities that apply profit rules adhere to ALS rhetoric, they are not confined to market alternatives and are not required to act consistently with other tax authorities. Hence, while most countries claim they apply ALS conventions, with respect to hard-to-tax MNE income, many of them use different (uncoordinated) quasi-formulary methods. This gives the impression that the main objection to formulary arrangements is title-based. Despite the contractual language of their tax treaties, countries seem to be willing to accept arrangements that deviate from the ALS as long as the deviation is not explicitly pronounced, is followed by other countries, and is done under the umbrella of OECD model convention and commentary. If these conditions would be met, it would also be possible to shift away from ALS-rules to a hybrid regime.

An example for such a shift, which also demonstrates the OECD's role in fostering gradual departure from ALS norms, can be seen in its recent proposal to revise branch allocation rules. This proposal advocates allocating the income of branches of financial institutions by the location of their significant people.<sup>34</sup> While refraining from publicly denouncing its support for the ALS, this move towards allocation seems like a major deviation towards a payroll formulary arrangement. The OECD was correct to identify financial institutions as MNEs that require special allocation rules<sup>35</sup> and has taken long-awaited necessary steps towards facilitating a change. Although still in formulation, the OECD's branch allocation proposal demonstrates the tremendous institutional power it has in the international tax arena, and its ability to lead quiet revolutions in existing tax conventions and treaties through the commentary. Like in the case of the profit-split methods, which were introduced by the U.S. Treasury and the OECD during the 1990s,<sup>36</sup> the branch allocation rules demonstrate that tax conventions have changed, are changing, and will change. If the

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<sup>34</sup> See OECD, Report on the Transfer Pricing Aspects of Business Restructurings (July 22, 2010).

<sup>35</sup> Ilan Benschalom, *The Quest to Tax Financial Income in a Global Economy: Emerging to an Allocation Phase – Taxing Global Financial Institutions*, 28 Va. Tax Rev. 165 (2008)

<sup>36</sup> Avi-Yonah, Rise and Fall, *supra*.

problems are well identified and institutional leadership exists, important changes can be made. Whether these changes are titled as a shift to a formulary regime is a question of diplomacy rather than of tax policy. Hence, we conclude that a shift towards a hybrid regime would not have to revoke current tax arrangements.

While enhanced multinational tax cooperation may be desirable, it is not a necessary precondition for a well-functioning hybrid allocation regime. Critics of formulary arrangement tend to exaggerate the level of tax cooperation that would be necessary to make it effective. Obviously, the hybrid regime would operate more smoothly and be more effective if all tax regimes apply the same (or very similar) formulary mechanisms. If tax authorities follow the same principle arrangements, they are likely to reach similar allocation results, which would make it easier to reconcile their differences through bilateral negotiations. However, stating that intensive cooperation could help improve the operation of a hybrid regime differs from the claim that it is a prerequisite for such a regime to operate better than the one in place.

Under a hybrid regime the situation would not be very different from what it is today. As is currently the case, most (non-haven) countries have a clear objective to prevent the income-shifting benefits associated with the ALS-based transfer pricing regime. However, they also have a clear objective to prevent a situation where the international tax regime imposes significant incidents of double taxation that burdens international trade and investment. Adding these factors together, non-haven sovereigns have a clear incentive to embark on a two-step strategy. Step one would involve imposing an effective (hybrid) MNE allocation regime that would prevent income shifting. Step two would involve engaging in some type of bilateral or multilateral treaty contractual arrangement to reduce incidents of double taxation among them. Hence, the second step would require tax authorities to modify their sourcing results according to the sourcing consequences of other countries' formulas. This two-step strategy resembles how the international tax regime operates today—through bilateral treaties with some soft-law guidance from the OECD.<sup>37</sup> Soft-law mechanisms are not ideal, but they are often sufficient to allow significant changes in international arrangements.

Reading the debate about formulary arrangements, one often gets the impression that many commentators think that formulary arrangements require (an almost) unanimous international agreement. However, as in the case of any international policy, this assumption has serious negative effects—rather than seeking unanimity, policymakers should pursue the support of a critical mass of non-haven countries. Not all countries would be better off with a hybrid regime, and expecting all countries to approve it is like giving veto power to those countries that benefit from income-shifting. Put differently, it is extremely unlikely that a shift to the hybrid regime (or any other reform in international tax conventions) could achieve Pareto optimality. First, achieving Pareto optimality may require expensive buyouts—which would reduce the reform's benefits. Second, it is also not clear whether Pareto optimality is the right standard that international tax policymakers should adopt. Some low-tax jurisdictions benefit from the current ALS-based regime by offering MNE a convenient location to perform conduit transactions. It is not clear why the governments of developed and developing countries should subsidize this behavior by recognizing the tax validity of these transactions. This paper does not argue against buyouts or against special treaty provisions that are intended to encourage countries to

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<sup>37</sup> For a detailed example of a possible mutual recognition bilateral arrangement *see*: Ilan Benshalom, *Taxing the Financial Income of Multinational Enterprises by Employing a Formulary Arm's Length Allocation Mechanism*, 28 Va. Tax Rev. 631 (2009).

adopt a hybrid regime. However, these tools should be used carefully only to accommodate the concerns of major economies—whose agreement is necessary for the function of the hybrid regime.<sup>38</sup> Policymakers need to ask how much the cooperation of a specific low-tax country is necessary for a hybrid regime to work well, and how to best incentivize that country to align its tax policy with it.

For example, small tax havens are unlikely to join any hybrid regime initiative, while other low-tax countries—e.g., Singapore and Ireland—are much more likely to comply with such a regime if it is adopted by their major trading partners. Assume a Canadian MNE that shifts its intangible assets to a Bermudian subsidiary, so that under ALS accounting its income is reported there. However, under the hybrid formulary-ALS regime, since most of the R&D and expenses associated with these intangibles were recognized in Canada, the income is sourced to Canada.

Since Canada and Bermuda are unlikely to agree about how to allocate the MNE's residual, would this result in double taxation? Perhaps, but this type of double taxation would not disrupt international trade and therefore should not concern (Canadian) policymakers. That the same MNE income is recognized simultaneously in two different jurisdictions is not problematic—because the MNE income is not effectively taxed in Bermuda. High- and medium-tax countries have incentives to prevent double taxation only when there is real economic activity taking place. Bermuda is a financial offshore tax haven, and Bermudian firms are typically conduits to investments elsewhere. As a small group of islands, Bermuda has a limited ability to attract high volumes of real economic activity, which means that its agreement to the hybrid regime is unlikely and unnecessary.

Low-tax jurisdictions, like Ireland and Singapore, benefit from income shifting under the current regime, but their decision about how to respond to a hybrid regime is much more complicated. The operating principle behind the formulary regime is that Ireland should be able to offer MNEs a low-tax rate on their activities in Ireland, but not a tax reduction on their activities elsewhere. Ireland may try to disrupt the establishment of a hybrid regime because it benefits from income shifting. However, Ireland also has a clear interest to be able to use its low corporate income tax rates to attract real investments. Hence, if Ireland's major trading partners (e.g., Britain, France, Germany, and the United States) adopt a (lightly coordinated) hybrid regime, the Irish government would likely face competing incentives: to try and keep its tax advantage as a location for income shifting, or its advantages as a location where real businesses could be conducted with low risk of double taxation. Since prophecy is the dominion of fools, predicting what the Irish government would decide is not advisable. However, one could predict that it would face significant pressures to adopt a tax regime that is compatible with the conventions of its major trading partners.

For a hybrid regime to be operative, it is enough if a critical mass of countries that includes some of the major developed and emerging economies accepts the need for such a regime. A lot could be done with a far less than perfectly coordinated

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<sup>38</sup> In theory, all tax policies could be implemented unilaterally. However, some of the benefits associated with shifting to formulary apportionment (e.g., lower administrative costs and more coherent allocation of MNEs' residual income) may require some coordination among states. These "network" benefits of coordination should be weighted against the costs of buyouts. Our point is that while the costs of buying the cooperation of big industrialized countries such as China may be big, so would the benefits. On the other hand, the benefits of buying the agreement of small haven countries would be small while the costs of buying their agreements are expected to be high.

international tax regime so that waiting for such a perfect regime, while enduring the problems of the current regime, is both futile and costly.

*Myth #6: Formulary Apportionment would Increase the Tax Rate on MNEs and Result in a Shift of Productive Assets to Low-Tax Jurisdictions*

### **The Myth:**

The proposed hybrid regime would increase the effective tax rate on MNEs' residual sources of income to which the formulary apportionment would be applied. In an open economy, higher tax rates on mobile income are inefficient. Admittedly, there are many limitations on MNEs' ability to shift productive assets and jobs to tax havens such as the Cayman Islands. However, allocation by formula would likely result in a shift of productive assets to low-tax jurisdictions such as Ireland, Singapore, and Estonia. A hybrid regime would make it difficult for high-tax jurisdictions to maintain mobile activities such as R&D activity and investment in intangibles—which are key to economic growth, jobs and development. Such a regime would therefore increase tax distortions over the efficient allocation of capital, induce sovereigns to engage in tax competition, or raise significant opposition so that it is politically unsustainable.

### **The Prospect**

The proposal for a hybrid regime refers to the proper allocation of MNE income. It does not have anything to do with the general effective tax rate on MNEs or with the effective tax rate on their mobile activities. This paper concerns itself neither with the proper tax rate that should be laid by source jurisdictions, nor with the wisdom of imposing a source income tax on mobile activities. These questions are political, so that they should be determined by countries in a way that satisfies their preferences.

For example, consider a MNE like Intel that conducts manufacturing and R&D in Israel and Germany. Israel is a country that has a very high-quality labor force for R&D projects. Its treasury officials may therefore assign high priority to diversifying its labor market and develop some mid-tech manufacturing facilities. On the other hand, officials in Germany may think the country has enough mid-tech manufacturing facilities and needs to further enhance its R&D labor market. Hence, once Intel's income is allocated, Israel may tax the income generated by the mid-tech manufacturing activity at low (or even negative) rates, while taxing the income generated by the R&D activity at a different (higher) rate. Germany, of course, would probably do exactly the opposite. The hybrid formulary-ALS allocation system does not dictate a change in the effective tax laid on MNEs—it only changes the integrity of the income allocation system.

This paper is concerned with the difficulty of assigning MNE income—which is analytically separate from the question of the rate in which should it be taxed. Governments should subsidize MNE activities which they think have positive externalities. Subsidies can take many tax and non-tax forms—and this paper does not address the question of how to tailor a tax subsidy to best encourage otherwise socially underprovided commercial activities. The paper does contend, however, that

granting a subsidy in the form of the ALS-based transfer pricing rules is wrong and misleading.

A hybrid allocation regime would require governments to be transparent with respect to their distributive and revenue preferences. For example, an ALS regime allows manipulation with respect to intangibles and therefore could be seen as a subsidy for their production. However, if a certain government believes that R&D activity should be encouraged through tax subsidies, then there is no reason to limit this subsidy to MNEs that can manipulate the transfer pricing regime to attain lower taxes. If policymakers further believe that certain MNEs provide special benefits and know-how, which merits a special tax subsidy, they should convey this message clearly to their voters.<sup>39</sup> The ALS subsidy to MNEs is wasteful, because it requires MNEs to expend resources on unproductive tax planning activities.<sup>40</sup> In a competitive environment, even productive and honest MNEs would need to engage in tax shifting manipulation.

Before concluding, a number of issues should be made clear. The question of formulary allocation touches upon a number of unsettled issues in tax policy. There are big question marks about whether source income taxes should be laid at all, whether a corporate income tax is a proper fiscal instrument, and whether countries should be concerned with the equity implications of taxing returns to capital at all instead of directing their fiscal policy to promote higher rates of growth and employment.

This paper's framework cannot address all these issues. Instead, it assumes that countries' tax preferences roughly align with their tax legislation—so that a corporate income tax is imposed as a source business-profit tax. This source tax is not inefficient, but, like other regulatory requirements, reflects the cost of doing business in a specific jurisdiction. MNEs should take these tax costs into account before investing in a country—exactly in the same way that they take other costs (e.g., labor regulation) into account. Put differently, this paper's framework does not question the wisdom of the system currently in place and the proper composition of the tax mix. It assumes this system reflects the preferences of voters and is concerned with how to best manage it by providing some thoughts about how an alternative (fairer, more transparent, and easier to comply with) MNE allocation regime could be established.

## CONCLUSIONS

The Paper's analysis strongly suggests that adopting a hybrid formulary-ALS regime could be a viable, practical and political option. Pursuing this option does not require policymakers to reformulate the basic structure of the current international tax regime. Instead, it suggests that policymakers continue the already existing trends with respect to the hard-to-tax sources of MNE income, which involve shifting from

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<sup>39</sup> Some may find our position to be naïve in light of the real world political economy of tax policy. We believe, however, that in a democratic regime, where the policies generated by elected representatives should, at least in some crude way, reflect voter preferences. Hence arguing that the ALS tax-subsidy is good because (like many other tax subsidies) it allows policymakers to hide what they are actually doing, is not really a challenge to our position. In essence, such a view amounts to a fundamental criticism of the democratic decision making—an issue which is (well) beyond the scope of this paper.

<sup>40</sup> It also provides MNEs with an awkward set of incentives. Intel, for example, specializes in the production of computer chips and it should be rewarded for its expertise by the market, and perhaps also by governments if its functions generate positive externalities. This reward should not be conditioned on Intel's willingness to engage in aggressive tax-shifting planning.

the ALS towards more a formulary arrangements. It claims, however, that to better reduce the costs of the current regime this approach should have a more concrete sense of direction, be explicit and structured.

The table below summarizes the comparative advantages of the hybrid regime over the current regime.

A COMPARED ANALYSIS OF THE ARTICLE'S HYBRID REGIME WITH CURRENT TRANSFER PRICING TECHNIQUES

	ALS Transfer Pricing	Hybrid Formulary – ALS Regime
Precisely penetrates how MNEs derive income.	X	X
Can benefit from, but does not require, a harmonized international corporate tax base.	√	√
Can benefit from, but does not require, a multilateral tax agreement.	√	√
Can be promoted under an ALS title.	√	√
Involves some, but not high, risks of excessive double taxation.	√	√
Adopts ALS conventions when there are easy to observe and consistently priced market comparables.	√	√
Deviates from traditional ALS conventions with respect to the hard-to-tax sources of MNE income.	√	√
Has administrative and compliance costs associated with valuation and the need to distinguish between different sources of income.	√	√
Allows MNEs to freely exercise their intra-group ownership and financial structures.	√	√
Allows avoiding administrative and compliance costs associated with the need to draft, document and scrutinize intra MNE contractual arrangements.	X	√
Prevents/reduces income shifting.	X	√
Provides systematic, transparent, and consistent enforcement.	X	√
Does not reward (artificial paper shuffling) tax planning.	X	√
Prevents the erosion of the corporate tax base (as a source jurisdiction tax).	X	√
Increases effective corporate income tax rates on MNE activities in source jurisdictions	X	NA (irrelevant)

The above table suggests that formulary arrangements offer a real non-utopian policy alternative and that ignoring this has prevented the advancement of the international income tax regime. Persuaded that they are deadlocked, policymakers and tax authorities have encumbered the tax regime with ineffective and costly ALS-based rules. However, as the analysis of this paper demonstrates, adhering to the ALS becomes increasingly absurd as the volume and sophistication of affiliated transactions continues to increase. Furthermore, the vulnerability of the current transfer pricing system to the shifting of income based on intangibles ownership and risk-bearing makes necessary numerous additional complexities in the international tax system. For example, transfer pricing vulnerabilities probably constitute the most pressing argument against adoption of a territorial tax system in the United States. An effective transfer pricing reform could therefore tip the policy-making balance in favor of adopting a territorial system, which would allow the elimination of grossly complex foreign tax credit system for active income. The current transfer pricing system therefore can in some respects be seen as the tail that wags the dog, which prevents the development of a more simple, efficient, transparent and equitable international tax regime.

Changes in the global economy require that policymakers adopt the best method to allocate income generated by MNE activity. This paper hopefully showed that with respect to MNEs residual income certain low cost incremental shifts from the current regime towards more formulary arrangements could offer many benefits.

For years transfer pricing policy has been a battlefield with advocates of the ALS and formulary apportionment sitting on each side of the barricade. This paper contends that after decades of stagnation the barricade should be finally dismantled. The costs of the current regime are real and growing—addressing them in an open minded realistic way is therefore not an academic privilege but an acute necessity. We believe that the time has come for OECD and policymakers in other major developed and emerging economies to take the lead on exploring how new ideas can better allocate the MNE income tax base.