A MODEL OF FORMULARY APPORTIONMENT: THE IMPACTS OF A GLOBAL STRATEGY

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ABSTRACT

As the world comes to a critical juncture and the interdependence of the world economy becomes more apparent with the current debt crises around the world, the authors propose a theoretical model to re-examine the existing U. S. taxation structure and strategy on multinationals and global firms. The current taxation policies are described and flaws are summarized. The concepts of formulary apportionment are examined as a potential solution to the existing problems of the current taxation system. The advantages and disadvantages of the formulary apportionment strategy or flat tax are also shown. The factors which impact an integrated holistic global strategy are presented in the FA Model as a theoretical basis to the discussion.

INTRODUCTION

There are political, economic, technological and competitive factors which are in tremendous turmoil throughout the world in this economic downturn and debt crisis both in the US and throughout the world. Currently the United States has a complicated and somewhat counterproductive taxation system called "separate accounting" or SA. Many critics believe that it is time for a change in the tax system away from the "arm's length" type. The "arm's length" method focuses on the prices of individual transactions between a corporation and related corporations. Transfer prices are representative of true income so long as those prices are "comparable to the prices that would have been paid by unrelated corporations" dealing with one another at "arm's length" [Lepard, 1999: 49) The issues surrounding taxing foreign profit are becoming central and it is time for a reconsideration of other systems. What has happened to stimulate a change at this time? Several events have occurred. Many U. S. firms have become integrated and totally global in nature. Take General Electric, for example, more than half of the company's assets are abroad and nearly half of GE"s profits are outside of the U.S. Foreign operations are growing rapidly and sometimes are more profitable than domestic operations.

There's also a "growing awareness that not all countries tax their corporations in the same way, and that American firms have to compete with firms that face very different tax regimes, many of which also feature a much lower tax rate" [Desai, 2008, 2). Another reason this topic is gaining in popularity has to do with corporate scandals and CEOs utilizing tax havens to decrease their tax liabilities [McKinnon & Drucker, 2009: A1). With the events of the implementation of the Sarbanes Oxley Act, the increased scrutiny of corporate executive behavior due to corporate fraud and in light of economic bailouts and economic stimulus packages under a newly elected President Obama, reconsideration of other tax systems is natural and compelling.

BACKGROUND - HISTORICAL CORPORATE TAXATION SYSTEM

The U.S. government taxes U.S. multinational firms on a residence basis and thus U. S. resident firms incur taxation on income earned abroad as well as income earned in the United States. This system is sometimes referred to as a credit system, as U.S. Firms receive a tax credit for taxes paid to foreign governments. The tax credit is limited to the U. S. tax liability although firms may generally use excess credits from income earned in high-tax countries to offset U.S. tax due on income earned in low-tax countries, a process known as „cross-crediting" [Gordon & Wilson, 1986: 1357). Taxation only occurs when income is repatriated or brought back into the U.S. Thus, income can grow free of U.S. taxes prior to repatriation, a process known as deferral. Deferral and cross-crediting provide strong incentives to earn income in low-tax counties [Fuest et al, 2006: 1). There is also typically an incentive to avoid income in high tax countries due to the limited tax credit [Avi-Yonah, 2005).

Under the current U.S. system of international taxation, U.S. resident multinational firms must determine their profits separately in each tax jurisdiction in which they operate. The current tax rate in the U.S. is 35 percent. From their research, Gordon & Wilson [2006: 1359) found that U.S. Multinationals book a "disproportionate amount" of profit in "low-tax locations. Another study showed that corporate income tax revenues in the U.S. were 35% lower due to this type of income shifting [Radulescu, 2002, 1).

DISADVANTAGES TO SA SYSTEM

The current system of corporate taxation has both practical and conceptual flaws. First, the system is not suited to the global nature of business. The separate accounting (SA) approach of assigning profit to specific geographic locations is extremely arbitrary. In addition, global companies generate increased profit above what would naturally occur with a strictly "arms-length" or SA taxation rule. Flaws to the SA system include the following: 1) Provides artificial tax incentive to relocate real economic activity and report profits in low-tax countries; 2) undue complexity; 3) raises little revenue, despite the U.S. corporate tax rate exceeding most other industrialized countries rate and 4) there is a delay in getting the taxes due to the deferment rules surrounding repatriation.

According to McIntyre & McIntyre [1993: 851), the "complex and unworkable" "arm's length" method of allocating profits among countries (which hopelessly asks the IRS to scrutinize hundreds of millions of intercompany pricing transactions)" should be abandoned in "favor of a formula approach to that used by American states (and by Canadian provinces)".

Multinationals arise due to organizational and internationalization competitive advantages as compared to solely domestic firms. The theorists believe that the competitive advantages of going global are the ability of the firm to internalize transactions within a larger domain and find economies of scale. That is, with companies that have truly integrated beyond national borders, holding related entities to an "arms-length" standard for the pricing of intercompany transactions does not make sense, nor does country-by-country allocation of income and expenses.

It was the same logic that was originally used with formula apportionment (FA) for U.S. state governments [Lightner, 1999; Wilson, 2005). With an integrated U.S. economy, it does not seem feasible or sensible to attribute expenses and profits to individual states, nor to regulate transfer prices between entities of different states [Buck & Mazerov, 2006: 386). Please see Table 1 for the summary of flaws in the Separate Accounting [SA) system.

RECOMMENDATIONS - FORMULARY APPORTIONMENT MODEL

The Formulary Apportionment Model shows how the environment impacts the recommended behavior of apportioning income or calculating a global fair tax system for businesses engaged in the world marketplace. As mentioned in the background examination of the current taxation system used with multinationals, there are environmental factors that are catalysts to a formulary apportionment system. For example, in the political realm, Congress is presently debating closing of tax loopholes and making the tax system more transparent and more fair. The US does seem to have a high tax structure particularly for U.S. multinational firms which are extremely complex and implemented unequally. With a global structure of apportioning taxes globally, the US can simplify the existing tax code and make collecting taxes easier and more fair for US multinationals. For the economic environment, the world recession and global debt crises actually create a situation of global cooperation and awareness of our interdependence. This global interdependence economically is evident in the recent event where S& P downgraded the rating of the US from a triple A to double A plus rating. Not only did the stock markets for the US plunge but there were similar plunges in the EU and the Asian stock exchanges which consequently followed. In addition, market factors encouraging global business include globalization, technological advances to communicate worldwide, and competitiveness.

Cooperation has also increased through strategies of mergers and acquisitions, strategic alliances, and joint ventures. Global conferences on such topics as green environment, global health, and economic development are also pushing the envelope towards greater cooperation and risk sharing. In addition to the determinant factors of the political, economic and market areas, the model illustrates the positive performance factors of the formulary apportioning behavior. These performance outcomes fall into three general categories of Effectiveness, Efficiency and Financial. In the effectiveness area, firms can experience greater integration of global business, more standardization of accounting and ethical procedures, less paperwork, elimination of double taxation, more equal distribution of tax revenues, and simplification of processes. In the efficiency aspect, tax collection in a more timely manner (as IRS agents will not need to examine each transfer pricing agreement), increased cooperation across national borders and eliminate/minimize tax deferments, tax credits and transfer pricing calculations. Lastly, the financial arena is shown with more transparent tax revenues, decreases in overall tax costs to the firm and increases in tax revenue collection for the country. Please see Table 2 for the overall Model of Formulary Apportionment.

In the formula apportionment system (FA) system of taxation proposed, the U.S. is searching for a simpler, more effective and fairer system for taxing the income of global firms [Bradford, 1981; Christensen, 1997; Conrad, 2006; Eggert & Schjelderup, 2003; Franze, 2005; Gordon & Wilson, 1986). The U.S. tax base for global companies would be calculated on a portion of their total income (worldwide sales) that flow from the U.S. As recommended by Avi-Yonah & Clausing [2007: 7) propose a “unitary business” formula which treats the company as a single taxpayer and its income is calculated by “subtracting worldwide expenses from worldwide income, based on a global accounting system. The resulting net income is apportioned among taxing jurisdictions based on a formula that takes into account various factors.

Each jurisdiction then applies its tax rate to the income apportioned to it by the formula and collects the amount of tax resulting from this calculation [Hellerstein, 1993; Hines, 1999; McIntyre & McIntyre, 1993; Radulescu, 2007. Due to the current system inequities, often firms real share of economic activity typically exceed the shares of income they report which originate in these countries. That being said, the U.S. and other high-tax countries would benefit in increased revenues under formulary apportionment [Sorensen, 2004; Weiner, 2007; Wetzler, 2006; Wolfgang & Guttorm, 2003). However, the move to formulary apportionment could be made revenue neutral if each country wanted it, by simply reducing the overall corporate rate of taxes [Fuest et al., 2006: 67).

In order to avoid the double taxation problem, it would be imperative that other countries use the new formulary apportionment system as well. This actually might not be as much of a problem as it seems on the surface. For one thing, the European Union is already considering a move to formulary apportionment [Weiner, 2002) and with joint leadership by the U.S. and European Union, more countries will be encouraged to build on the cooperative spirit [Russo, 2005; Wetzler, 2006). Also, for multinationals operating in countries with and without formulation apportionment, there is an incentive to shift reported income to the country with formula apportionment due to the tax liability no longer being dependent on the income reported there. For governments, Gerard and Weiner, [2003: 3) describe the impact of formulary apportionment as a "risk-sharing or partial equalization mechanism". The "consequent loss of tax revenue in the no adopting countries would give them a strong incentive" to adopt formulary apportionment [Eggert & Schjelderup, 2003: 439).

ADVANTAGES TO FA SYSTEM

Moving to formulary apportionment addresses many of the problems in the current American taxation system of multinationals. These plusses include: 1) reduction of incentives to shift income or economic activity to low-tax countries; 2) eliminate administrative difficulties; 3) treat similar firms equally despite of where they are located; 4) it could contribute to global cooperation. It is recommended that this new system of Formulary Apportionment possess several characteristics: 1) establish a committee that sets up the formula guidelines and methodologies (should be representatives from many of the U.S. trading partners); 2) common basic assumptions set out; 3) detailed ethical standards agreed upon; 4) agree upon a definition of unitary business (i.e. a simple ownership test or use the FTC‟s SIC codes) and 4) create common accounting practices to implement the working system as well as to reconcile differences between countries‟ standards [Anand & Sansing, 2000; Christensen, 1997; Desai, 2008; Hall & Rabushka, 2003; Eggert & Schjelderup, 2003; Wolfgang & Guttorm, 2003).

The "flat tax" formula would reflect the distribution of the firm's worldwide economic activity, as measured by some combination of sales, payroll and capital stock or it could simply be the fraction of worldwide sales destined for U.S. customers. Under this new system, U.S. multinational companies would then pay U.S. taxes only on the share of world income that is allocated to the United States [Hayek, 2004; Hellerstein, 1993; Lepard, 2000; Meyers, 2009; Nielsen et al., 2003).

Just as mentioned before, based on the state system of formulary apportionment, it is increasingly more difficult to assign profits to individual countries in our global economy [Lightner, 1999; McLure, 1980; Sandmo, 1977; In fact any attempts to assign profits to individual countries are fraught with opportunities for tax avoidance. Basing tax liability on real economic activity in a particular country makes it more difficult to manipulate income than the previous method of looking at the location of income and creates a disincentive to move to low-tax countries.

Because FA would make an operation's tax liability independent of its legal form (i.e. subsidiary or branch) and residence, it would dissolve the incentive for corporate inversion. The administrative complexities of showing how income or expenses were allocated across countries, filing subpart F and foreign tax credits and using cumbersome transfer pricing schemes would be eliminated.

One potential problem of FA could be double taxation (or exemption of some income in both the U.S. and overseas) if other countries do not adopt FA type systems. But as mentioned previously with the EU being very interested in the FA system and wanting to create common systems throughout Europe, there is strong reason to be encouraged and incentives to "not be left behind" [Vincent, 2005; Russo, 2005). Please see Table 3 for the positive and negative aspects of Formulary Apportionment (FA) adoption.

CONCLUSIONS

Changes are afoot. Although Formulary Apportionment has been around for a number of years, perhaps the world was not yet ready for such cooperation and for such standardization of processes as needed in the FA system. Given the global cooperation that has been occurring around the economic crisis and the vision of the Obama administration to completely overhaul the entire corporate tax system [McKinnon & Drucker, 2009: A1), the debate of changing from the SA to FA system could propel government leaders to an implementation of a more global system in taxation that fits a truly interdependent world.

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TABLE 1.

Summary of Issues and Flaws in the Separate Accounting (SA) Taxation System of the U.S.

Issues	Flaws
Separate accounting by country	Not consistent with integrated, global companies
Different tax rates	Incentive to relocate to low-tax countries
Complexity	Deferments, tax credits, and transfer pricing are administration intensive
Revenues	Raises little revenue for U.S
Delay in Tax Revenue	Deferment until repatriation causes delays in tax collection
Global system	Arbitrary to regulate transfer prices between countries and profits to individual countries (similar to states in the U.S.). Not truly integrating transactions and advantages of multinational

TABLE 2.

Model of Formulary Apportionment

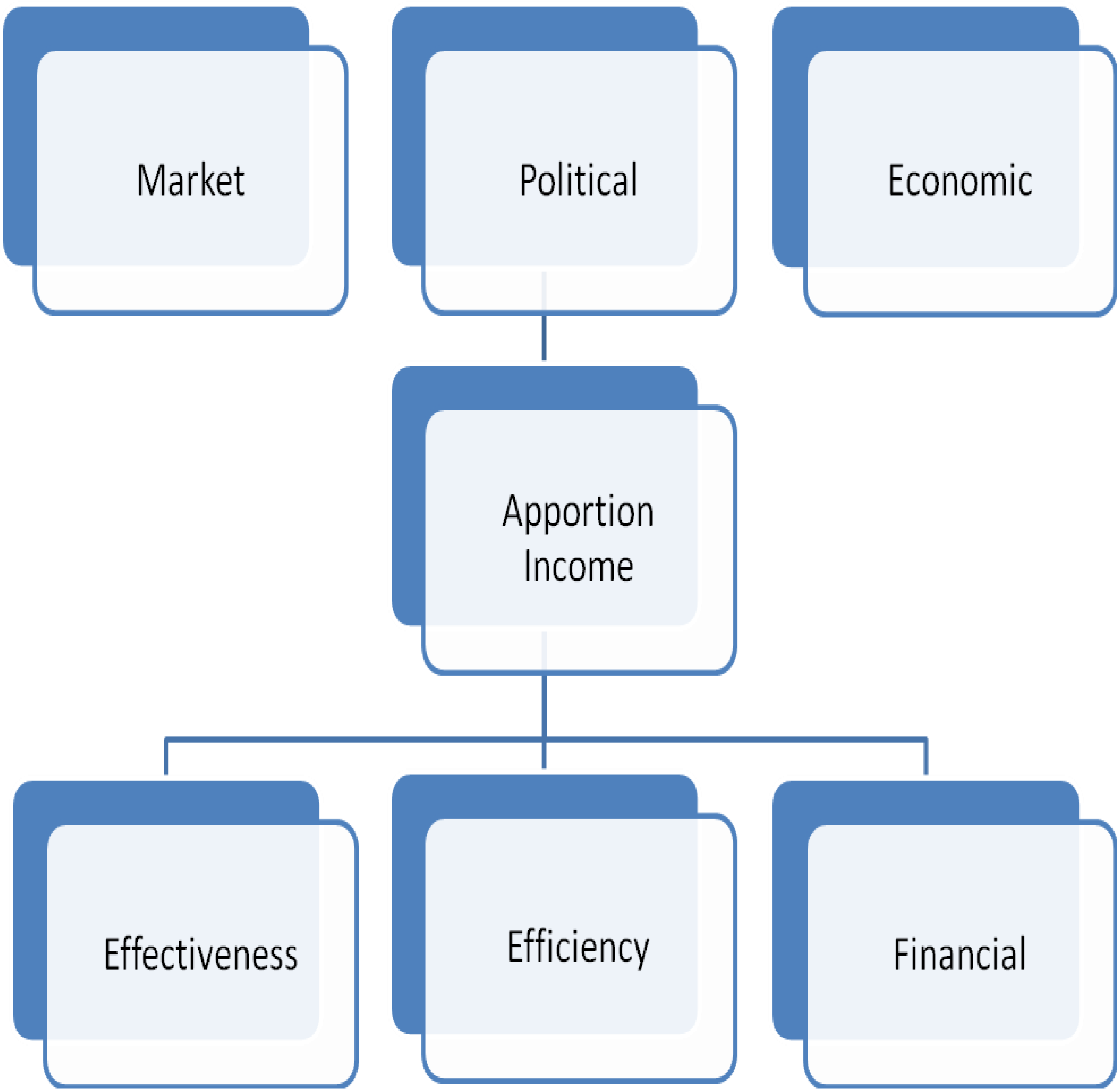

TABLE 3.

Advantages and Disadvantages of Formulary Apportionment (FA) Adoption

Advantages	**Disadvantages**
Simplify administrative red tape	Double taxation
Treat firms the same no matter their location	Difficult to agree on formulas (needs skillful negotiation)
Eliminate low-tax country incentives	
Create global cooperation	
Creation of common accounting standards, definition of business, ethical guidelines	