

## Statement of the Financial Economists Roundtable

# Corporate Tax Reform

by Arnoud Boot, Dennis Logue, and Chester Spatt\*

**C**orporate taxes provide substantial revenues for the U.S. government. The corporate tax accounts for about 10% of total U.S. federal tax collections and 2% of U.S. GDP.

How the U.S. Treasury and other national taxation authorities should levy corporate income taxes has emerged as an issue of tremendous controversy during the last few years. This controversy reflects concerns about multinational corporations' ability to avoid U.S. taxes by shifting activities to countries with lower taxes as well as fears that taxes are distorting incentives for efficient investment and undermining economic growth. Like other taxes, the corporate income tax affects economic behavior and efficiency. A key question is how to design and implement corporate tax policy to minimize such economic distortions.

The need to address deficiencies in U.S. corporate tax practices has been widely recognized. Especially acute are several issues that have been highlighted in public debate, such as the level of marginal tax rates, the taxation of worldwide versus local ("territorial") income, the impact of the tax law on both investment and location choices, the potential repatriation of overseas profits by U.S. multinationals, and tax shifting across jurisdictions more generally. Moreover, with the excessive buildup of debt having been identified as one of the culprits underlying the financial crisis, the bias toward the use of debt created by the corporate tax system is of heightened concern.

But if the financial crisis gave renewed impetus to the debate over U.S. corporate tax reform, it has been the ongoing fundamental shifts in business activities and technologies that have made the need for reform especially pressing. Globalization, the mobility of capital and business activity, and the increasing importance of intellectual property have heightened the efficiency costs of the current corporate tax system. In this more fluid and "intangible" world, transfer pricing issues—that is, the allocation of costs and profits across countries—have become more pronounced. These issues in turn influence where businesses are domiciled and funded, and where production takes place. In addition to the location

of business activity, changes in the tax domicile of companies—known as "inversions"—also have become a major focus of public policy.

Furthermore, the impact of the corporate income tax system on the corporate debt-equity decision has gained public attention. Advances in information technologies and the proliferation of financial markets have facilitated financial innovations as corporations try to exploit the preference for debt in the corporate tax system. Financial engineering has obscured the traditional distinction between debt and equity and increased the distortionary impact of the debt bias.

These trends have made countries more concerned about protecting their tax revenues. Although businesses increasingly operate globally, tax systems remain national in character. Increases in tax arbitrage and "beggar thy neighbor" policies have undermined efforts to ensure the stability of national tax revenue. The current tax collection policies are not sustainable in the increasingly mobile world.

In a meeting held from July 16-18, 2016 members of the Financial Economists Roundtable<sup>1</sup> considered the state of corporate tax reform. The aim of the discussion was to form a set of proposals for change that are designed to support capital formation and promote economic growth. This statement summarizes some of the most important issues and provides suggestions for how the U.S. and other countries could make their corporate tax systems more efficient, especially in light of the limited opportunities to coordinate and collaborate among countries. We give particular attention to the worldwide reach of the U.S. tax system (versus a territorial focus), the level of marginal tax rates, and the repatriation of off-shore profits.

### Biases and Distortions in the U.S. Corporate Tax System

Many have argued that income-based taxes, such as personal and corporate income taxes, are less effective than value-added (consumption) taxes (VAT) in producing tax revenue without discouraging growth.<sup>2</sup> Income taxes have an immediate negative effect in that they distort the underlying supply of

\* University of Amsterdam; Ledyard National Bank and Dartmouth College; and Carnegie Mellon University.

1. The Financial Economists Roundtable is a self-appointing international organization of 50 highly accomplished financial economists over the age of 50 who meet annually to discuss issues of current public policy importance. The mission of the Roundtable

appears at [www.financialeconomistsroundtable.com](http://www.financialeconomistsroundtable.com) along with a list of the current members. Those members who are signatories to this statement are listed on the last page.

2. See OECD (2010) for a review, and IMF (2017) for further motivations on the need for pro-growth tax reform.

resources, both labor and capital. Distortions also arise when tax rates differ across borders because these differences influence the mobility of capital and, to a lesser extent, labor. Indeed, Nobel laureate James Mirrlees has suggested setting a zero tax rate on intermediate goods, with the full burden of taxation falling on final goods—for instance, not taxing rubber producers, but taxing automobiles.<sup>3</sup>

These distortions suggest that having a relatively high corporate tax rate, and no VAT, places the United States at a competitive disadvantage compared to the tax systems of other countries. They also raise the question whether the U.S. would be better off if the corporate income tax were abolished and replaced by a VAT.

However sympathetic many may be with the abolition of the corporate income tax, two reasons suggest that abolition is unlikely to happen soon. First, nations impose taxes at the corporate level because many shareholders and other beneficiaries of the firm live abroad, or have structured their economic lives beyond the reach of national authorities. Second, the political debate ignores that corporate taxes are ultimately paid by individuals—in their roles as investors, consumers, or employees—emphasizing instead that corporations *should* pay their “fair share,” as if corporate taxes were not passed on to individual taxpayers. As Pascal Saint-Amans, director of the OECD Centre for Tax Policy and Administration, has pointed out “The great majority of all tax increases since the crisis have been borne by individuals through higher social security contributions, value-added taxes, and [personal] income taxes. This underlines the urgency of efforts to ensure that corporations pay their fair share.”<sup>4</sup>

Since nations will likely continue to tax corporate income for many years, we confine our attention to the quest for a less distortionary corporate tax system. We focus on three very prominent aspects of corporate taxation:

- i. The corporate tax system affects corporate decisions to locate business activities in different countries.
- ii. The U.S. corporate tax system combines very high levels of federal tax rates (by international standards) with repatriation issues (persistent large cash holdings abroad by U.S. multinationals), suggesting the need to broaden the tax base and lower rates to be more competitive with other countries.
- iii. The different treatment of debt versus equity in the existing corporate tax system inefficiently favors debt financing.

3. Mirrlees (1971). In effect, the corporation is simply a conduit. From this perspective, collecting taxes at the corporate level might be redundant: individuals could be taxed directly on their income (personal income tax) or consumption (VAT). This begs the question of the role corporate taxes should play within the overall mix of taxes. From a purely economic perspective, one could even make the case for abolishing the corporate tax.

4. Though the term “fair share” is ubiquitous in discussions of taxation, it is often neither quantified nor well defined.

5. This does not apply to “passive” income, such as interest income. For the repatriated funds income taxes are owed immediately, i.e., on an accrual basis.

## The Interplay between the Tax System and Location Decisions

Unlike most countries, the U.S. has a “worldwide taxation system”—one that imposes taxes on companies’ worldwide income after giving them credit for locally paid taxes. The U.S. also allows U.S. companies to defer taxes on money earned abroad by foreign subsidiaries.<sup>5</sup>

In contrast, a “territorial system”—a core feature of most reform proposals now being discussed in Washington—taxes only corporate profits earned within its borders, and therefore would not tax a company on its worldwide income. While the territorial approach is advocated by some as a desirable reform—in part because it would no longer discourage repatriation of overseas cash holdings—it would have other undesirable effects. Most importantly, it would actually further strengthen the existing incentives to move investment activities to low-tax jurisdictions. In other words, the worldwide system has benefits that need to be considered.

To see these benefits, note that *if* a corporation has its tax domicile in the U.S., its incentives for moving investment abroad are *less* in a worldwide system than in a territorial system because in the worldwide system moving activities abroad does not make the U.S. tax claim disappear: there continues to exist a claim on foreign profits. In a territorial system, there is no U.S. tax claim on foreign profits. Hence, in a relative sense, the worldwide system—even with its currently weak tax claim on non-repatriated profits—provides less incentive to move activities abroad than the territorial system now being proposed to replace it.<sup>6</sup>

But the word *if* is key since the worldwide system puts pressure on the choice of tax domicile. If corporations can easily change their tax domiciles, a practice known as “inversions,” the worldwide system may encourage such changes. This would remove the present U.S. tax claim on such companies’ non-U.S. operations. Over time, this change would encourage shifts in production locations away from the U.S., further reducing the U.S. tax claim and causing a real loss of economic activity. Accordingly, the potential for corporations to move offshore may explain why the U.S. has been lenient with respect to the repatriation issue, allowing funds to remain “offshore” (since it reduces the immediate incentive to change tax domicile),<sup>7</sup> while simultaneously making it difficult to change tax domicile (rules discouraging inversions, etc.). But the latter policies

6. Tax distortions are not fully mitigated however. This may (in part) explain the discussions of measures to further discourage firms from moving activities abroad, e.g. “border adjustments” as discussed by the current U.S. administration. Even if one would see some merit in such measures (see Avi-Yonah and Clausing, 2017; and Summers, 2017, for critical assessments particularly in the context of WTO obligations), having more balanced incentives in the first place would clearly be superior (and desirable).

7. The word ‘immediate’ might be crucial here. Once the deferred tax balances become substantial, finding ways to permanently escape taxation become prominent.

obviously cannot prevent the choice of a foreign tax domicile for new businesses. And thus one of the main conclusions of our discussion highlights that neither the territorial nor the worldwide approach offers a magic solution.

At the same time, we also conclude that the relatively high corporate tax rate in the U.S. is the root cause of repatriation avoidance as well as the incentive to move to a foreign tax domicile.<sup>8</sup> Complications with transfer pricing have made various aspects worse by making it easier for companies to shift profits abroad and so causing larger deferrals. But the territorial system has an even bigger problem with transfer pricing. In the territorial system, moving profits around can reduce or even eliminate tax liabilities, while in the U.S. worldwide system, the potential U.S. tax liability continues to exist. Thus, a further disadvantage to changing to a territorial system is its exacerbation of transfer pricing issues.

Lowering the corporate tax rate would have several salutary effects. We advocate lowering U.S. corporate tax rates to levels that are consistent with the reductions that have occurred in virtually all Western countries. This change would clearly remove stress from the system. “Manipulation” via transfer pricing would become less lucrative, as would not repatriating profits back to the U.S. Furthermore, the inclination to seek changes in the tax domicile would be muted.

When contemplating such changes, it is important for policymakers to consider the downward pressure that exists on corporate tax revenues. Although the effect of lower rates will be partly offset by reduced tax evasion activity and resolving the repatriation issue, revenue neutrality will be very difficult to achieve.<sup>9</sup> This is a reality that exists regardless of our proposals. Indeed, the mobility of capital and IP virtually ensures that corporate taxes will become less important as a revenue source for governments. The inevitability of a significant drop in revenue from corporate income taxes makes clear the need for a comprehensive evaluation of all sources of revenue, and thus of the entire system of taxation. Finding ways to preserve aggregate tax revenue in a least distortive manner is of critical importance to maintaining economic growth and general prosperity.

Nevertheless, more can be done to strengthen the corporate tax base, an issue to which we now turn.

## Strengthening the Worldwide System Would Help Resolve the Deferral Problem

The issue of repatriation needs to be resolved.<sup>10</sup> Removing these tax deferrals once and for all is desirable for a sustainable tax system. Giving up the worldwide system (i.e. moving to territorial) would effectively rule out deferrals but, as noted earlier, might not be the most desirable solution. In our view, the preferred route would be to remove the deferral option in combination with lower tax rates within the worldwide system.<sup>11</sup>

The government could also address existing deferred balances. Once new deferrals are no longer allowed (i.e., by moving to an accrual system) one could enforce a time schedule for repatriation of existing balances possibly combined with a slight discount on tax rates. In any case, it should follow the adoption of measures that prohibit future deferrals. This sequencing is crucial to avoid increases in deferrals in anticipation of future amnesties.

Hence, we advocate:

- i. Recognizing the benefits that the worldwide tax system brings, it should not be given up lightly. It has smaller transfer pricing and production location problems than the territorial system, but might put pressure on the choice of tax domicile (lower rates would help mitigate this).
- ii. Prohibiting future deferrals by moving to an accrual system.
- iii. Lowering corporate tax rates to discourage firms from seeking foreign tax domiciles.
- iv. After such new tax rules are in place, existing deferrals can be addressed. A repatriation schedule could be imposed, possibly combined with slight tax discounts.

Assuming this approach is effective, the U.S. would possibly obtain efficiency benefits over the rest of the world, where the territorial system dominates and problems with transfer pricing are rampant. That is, in a worldwide system (with a prohibition on deferrals) transfer pricing is less of an issue for U.S. tax-domiciled firms. Assuming that U.S. tax rates remain higher than those abroad, any local tax advantage abroad would leave a higher tax obligation (after credit) in the U.S. Thus, while moving profits to a low-tax jurisdiction appears beneficial in a territorial system, it is not (or less so) in the worldwide system because the U.S. would impose taxes on the difference between those low rates and the U.S. rate.<sup>12</sup> However, to control incentives for choosing a foreign

8. Typically, the foreign paid tax is credited towards the U.S. tax obligation. The repatriation issue would not arise if U.S. tax rates were lower than the rates abroad.

9. Also contrary to earlier reforms aimed at lowering rates and broadening the base, few other tax preferences (deductions) can be removed to compensate for lost revenues. The revenue generated by repatriation by itself will be insufficient (see for example Toder, 2014).

10. U.S. corporations have roughly \$2.5 trillion in unrepatriated profits. For well-financed U.S. firms with access to capital markets these balances may not create funding problems. Rather than using repatriated profits, they can borrow domestically to invest at home. The cost of the distortion might only be the difference between the cost of borrowing and the returns on foreign investment.

11. Observe that we see some merit in holding on to the worldwide system. A territorial system may not bring benefits. In such a system, U.S. firms would pay taxes on U.S. profits, but taxed profits from abroad could be repatriated without additional U.S. tax. If such a system were implemented, a U.S. firm would have the incentive to locate large portions of its production in low-tax countries. It would pay U.S. taxes only on U.S. profits. Indeed, if one pushes the idea of a territorial system to its extreme limit, U.S. corporations could even escape much domestic taxation should the foreign subsidiaries from which they buy charge high enough transfer prices. Dealing with the tax-domicile issue – the key issue in the case of the worldwide system – might be preferable.

12. In all cases they end up paying the U.S. tax rates, assuming U.S. tax rates remain (slightly) higher than those abroad. As long as U.S. tax domicile is preserved, firms have no tax incentives to move production abroad.

## Tax Inversions

Put most simply, a tax inversion entails a large U.S. corporation nominally being taken over by a smaller foreign corporation. The tax domicile changes, though for governance purposes the U.S. Company would continue to dominate. For example, Company X, a U.S. firm, allows itself to be nominally taken over by, say, Company I, an Irish firm. As a U.S. firm, all repatriated profits are taxed at 35%. As an Irish firm, U.S. profits are taxed at 35%, Irish profits are taxed at 12.5%, and other foreign profits are taxed at rates generally much lower than 35%. After-tax profits for the former U.S.

firm are now considerably greater. Until quite recently, inversions were uncommon because U.S. taxes and those of most major foreign nations were similar. However, in recent years foreign tax rates have declined relative to U.S. rates. The U.S. tax rate is 35%, while the OECD nations' average rate is 25%. The disparity between the U.S. rate and rates as low as those in Ireland, 12.5%, is considerable. Within the last several years, the U.S. Treasury substantially tightened its rules regarding inversions, including imposing capital gain taxes on the owners of the inverted company.

tax domicile, U.S. rates cannot remain too far above those of other countries.<sup>13</sup>

What remains is how to tax foreign-domiciled firms on their activities in the U.S. Here again a trade-off exists since high taxes could discourage the set-up of production facilities in the U.S. The combination of tax rates and transfer pricing rules should be competitive vis-à-vis those in other countries.<sup>14</sup>

At a more fundamental level, further international harmonization and coordination is important. Global businesses arbitrage nation states, which necessitates a coordinated response.<sup>15</sup> With its worldwide system, the U.S. has insulated itself somewhat from these coordination issues, but that only works when firms continue to choose a U.S. tax domicile. With ever lower rates in some countries, this assumption may become questionable. Thus the U.S. also should be in favor of more coordination. The OECD has proposed various coordination mechanisms, some of which—for example, harmonizing the tax base definitions and dealing with non-OECD or other third-party jurisdictions—have recently been implemented by the European Union.

### Financing Distortions in Capital Structure Decisions

Under current U.S. corporate tax rules, interest payments on corporate debt are tax deductible. Deductibility presumably encourages corporations to borrow to finance their

investments. In any simple computation of the cost of capital, tax deductibility of interest reduces capital costs, meaning new investment proposals have a lower hurdle to clear, everything else constant.

Many economists have argued that the tax deductibility of interest payments encourages “excessive” debt issuance, potentially increasing bankruptcy costs. Though it may be true that the tax deductibility of interest payments encourages real investment, the benefit of the additional investment may not exceed its costs, which include forgone government revenues and higher bankruptcy costs. Evidence clearly points to the benefits of reducing or eliminating the debt bias.<sup>16</sup> Many commentators therefore would eliminate this tax deduction.

A more modest, but not necessarily less effective, approach would be to limit interest deductibility on “excessive” leverage and debt financing costs, in combination with a tax credit for equity. This proposal would also bring more balance between debt and equity. For financial institutions, this proposal is probably the only feasible reform as a full elimination of interest deductibility would effectively multiply their tax obligations.<sup>17</sup> Rules on “excessive” leverage are not new: thin capitalization rules are part of the tax regimes in some countries.<sup>18</sup>

Overall limits on interest deductibility could provide an offset to the revenue loss from lower corporate tax rates. As we

13. In the design and implementation of the tax system administrative costs – including those related to enforcement – should be taken into account. This also points at the need to limit the overall complexity of the tax system. An interesting question is whether the worldwide system is more complex (wider geographic range adds complexity?), or less complex as the discussion surrounding transfer pricing issues would suggest.

14. Interesting considerations come into play when considering location and tax-domicile choices simultaneously. For example, if firms need to have local (U.S.-based) production facilities, very strict U.S. transfer pricing rules may prevent firms from choosing a foreign tax domicile. Strict transfer pricing rules may thus encourage choosing a U.S. tax domicile. The worldwide reach of the U.S. makes transfer pricing less important. But note that if having production in the U.S. is not important, strict transfer pricing rules would encourage both a change in location and tax domicile away from the U.S.

15. Modern information technology could help in providing an integrated financial (accounting) picture of large multinational businesses that provides transparency on the tax situation on a country-by-country basis.

16. See for an overview of the evidence analyzing the benefits of reducing the debt bias, BIS (2016, box V.C, page 100), and in the case of banks, see Schepens (2016).

17. This is called Allowance for Corporate Equity (ACE), see OECD (2007, pages 121-150). Note that banks' interest revenues and interest expenses (paid interest) more or less offset each other. Abolishing interest deductibility would lead to taxing gross earnings (only interest revenues, not netted with interest expenses). See Zangari (2014) on applications of equity-linked credits in Belgium and Italy.

18. In the European Union, several initiatives are in place based on earlier work by the OECD (2013). Political agreement on anti-tax avoidance directive Anti-Tax Avoidance Package – Code of Conduct Group – ECOFIN: Interest limitation: The interest limitation rules take the form of an earnings stripping rule, whereby in principle no deduction would be given for interest exceeding 30% of EBITDA. The rules have been substantially amended to allow for flexibility and exemptions upon transposition, and include de minimis thresholds, escape clauses and a grandfathering provision. (See KPMG (2016)).

saw, this might have the desirable effect of reducing tensions in the tax system. The distortion between debt and equity, like the international competitiveness issue, would be mitigated by lower corporate tax rates.

## Conclusions

We advocate a pragmatic approach to corporate tax reform. We recommend retention of the U.S. worldwide tax system over its territorial alternative. At the same time, we recommend that this system be strengthened by eliminating the current corporate option to defer payment on off-shore profits in combination with a reduction in the U.S. tax rates. Under such a system, the transfer pricing issues that stem from differences in national tax rates—and corporate attempts to take advantage of them—would be easier to address than in a territorial system.<sup>19</sup> As long as the U.S. tax rate remains higher than those abroad, U.S. companies would have little incentive to shift profits to low-tax jurisdictions because, in its worldwide system, the U.S. government would impose taxes on the difference between those low rates and the U.S. rate. And if such reforms were enacted, policymakers could then address the repatriation of the existing deferred balances. A schedule of repatriation could be imposed, possibly with an inducement of one-time lower rates.

One common objection to such a worldwide system is that it has an “all or nothing” feature in the following sense: to the extent U.S. companies perceive U.S. rates to be excessive or even punitive, they will consider switching their tax domiciles to countries with lower rates. Our response to this objection is that such tax competition can be expected anyway, and the recommended response to such competition is to further efforts to broaden the tax base (reducing deductions), thereby making possible still lower rates.

This touches also on the corporate tax bias in treatment of debt over equity. A more equal treatment of debt and equity is desirable but challenging, given how our financial structure has been built around the strong incentives for debt in existing law. However, proposals to broaden the tax base and lower tax rates would mitigate some of the financing distortions and are synergistic with the directions necessary to address global tax competition.

## References

- Avi-Yonah, R.S., and K. Clausing (2017), “Problems with Destination-Based Corporate Taxes and the Ryan Blueprint,” Law and Economics Research Paper Series, Paper No. 16-029, Michigan Law, University of Michigan.
- BIS (2016), Annual Report, BIS 86<sup>th</sup> Annual Report.
- Babkin, A., B. Glover and O. Levine (2017), “Are Corporate Inversions Good for Shareholders?” *Journal of Financial Economics*, forthcoming.
- IMF (2017), Fiscal Monitor: Achieving More with Less, *IMF World Economic and Financial Surveys*, April 2017.
- KPMG (2016), memo on EU-June 21, 2016 agreement.
- Marples, D.J., and J.G. Gravelle (2016), “Corporate Expatriation, Inversions, and Mergers: Tax Issues,” Congressional Research Service, April 27, 2016.
- Mirrlees, J.A., (1971), “Exploration in the Theory of Optimum Income Taxation,” *Review of Economic Studies*, Vol. 38, No. 2, (Apr., 1971), pp. 175-208.
- OECD (2007), Fundamental Reform of Corporate Income Tax, *OECD Tax Policy Studies*, no. 16, 2007.
- OECD (2010), Tax Policy Reform and Economic Growth, *OECD Tax Policy Studies*, no. 20, 2010.
- OECD (2013), Action Plan on Base Erosion and Profit Shifting, 2013.
- Schepens, G., (2016), “Taxes and Bank Capital Structure,” *Journal of Financial Economics*, Vol. 120-3, pp. 585-600.
- Summers, L., (2017), “US Tax Reform is Vital but Donald Trump’s Plan is Flawed,” *Financial Times*, January 8.
- Toder, E., (2014), “Corporate Tax Reform... Dreaming On,” *Milken Institute Review*, First Quarter, pp. 16-27.
- Zangari (2014), Addressing the Debt Bias – A Comparison between the Belgian and the Italian ACE Systems, working paper.

19. Introducing a VAT and changing the overall mix of taxes, could help as well, but requires a fundamental tax reform. See Avi-Yonah and Clausing (2017).

## FINANCIAL ECONOMISTS ROUNDTABLE

*Members Signing the Statement, "Corporate Tax Reform"*

Ahmed Rashad Abdel-Khalik  
*University of Illinois*

Edward I. Altman  
*New York University*

Arnoud Boot  
*University of Amsterdam*

Charles Calomiris  
*Columbia University*

Jennifer Conrad  
*University of North Carolina*

Elroy Dimson  
*Cambridge Judge Business School*

Franklin R. Edwards  
*Columbia University*

Marty Gruber  
*New York University*

Larry Harris  
*University of Southern California*

Richard J. Herring  
*University of Pennsylvania*

Ravi Jagannathan  
*Northwestern University*

Kose John  
*New York University*

Charles Kahn  
*University of Illinois*

Jonathan Karpoff  
*University of Washington*

Jan Pieter Krahnert  
*Johan Goethe University*

Craig Lewis  
*Vanderbilt University*

Robert Litan

Dennis E. Logue  
*Ledyard National Bank*

Olivia S. Mitchell  
*University of Pennsylvania*

Stephen Penman  
*Columbia University*

Rafael Repullo  
*CEMFI*

Jay R. Ritter  
*University of Florida*

Stephen Schaefer  
*London Business School*

Catherine Schrand  
*University of Pennsylvania*

Lemma Senbet  
*University of Maryland*

Erik Sirri  
*Babson College*

Chester S. Spatt  
*Carnegie Mellon University*

Laura Starks  
*University of Texas*

Ingo Walter  
*New York University*

Roman Weil  
*University of Chicago*

Ingrid Werner  
*Ohio State University*

For additional information, contact:

*Chester Spatt*  
*Carnegie Mellon University*  
*cspatt@andrew.cmu.edu*  
*(412) 268-8834*

*Arnoud Boot*  
*University of Amsterdam*  
*A.W.A.Boot@uva.nl*  
*+31 (0) 20 525 4162*

*Dennis Logue*  
*Dartmouth College*  
*dennis.logue2@gmail.com*  
*(603) 667-3955*