

The Effects of International Tax Competition on National Income Distribution

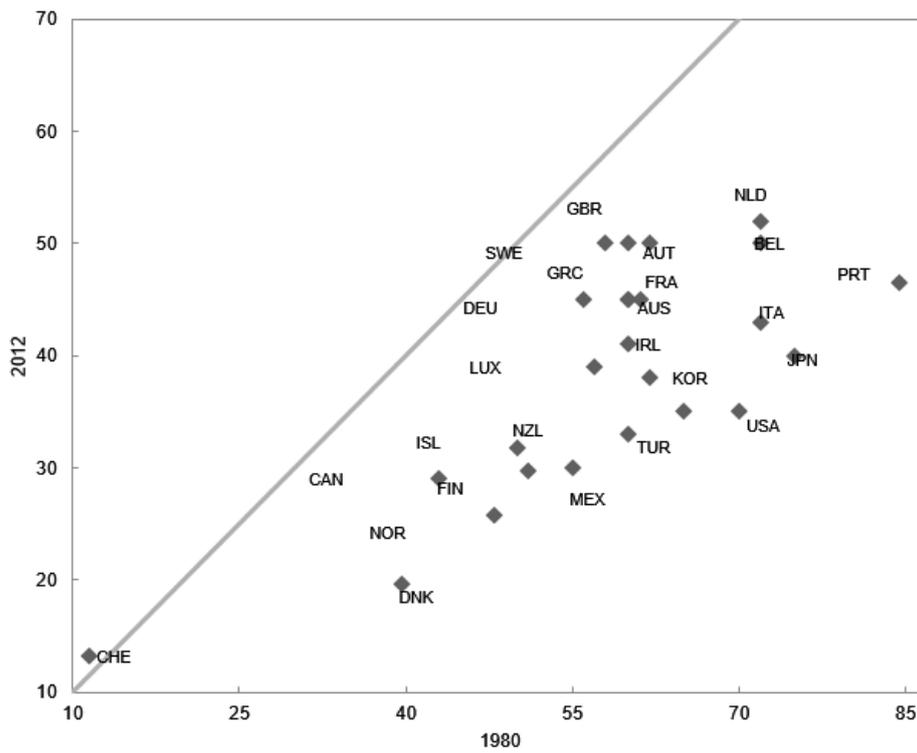
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Introduction

Globalization involves increasing freedom of capital movement: both for firms from industrialized countries investing in developing countries, and for financial asset owners in developing countries themselves. Standard principles of international taxation suggest that the tax burden should fall most heavily on those factors of production which are least mobile, in order to maximize government income and minimize the disincentives to economic growth. As global market integration has deepened, tax competition drives down taxes on mobile factors of production (capital and highly skilled labor) and thus tends to both increase taxation on immobile factors (not only land and natural resources, but also unskilled labor and those outside the labor force) and reduce government expenditure—or raise indirect taxation—thus worsening income distribution.

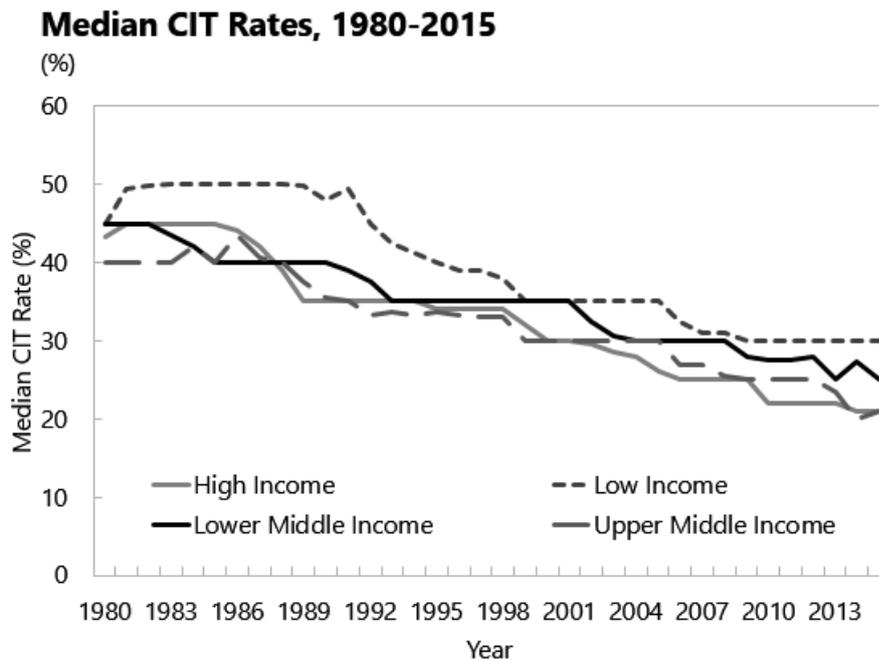
The long-term trend towards lower rates of both corporate income tax (CIT) and personal income tax (PIT) is clear from Figure 1.1 and Figure 1.2. As shown in Figure 1.1, CIT rates have declined by about one-third in all country groups over the past three decades; while, as shown in Figure 1.2, the top marginal PIT rate has declined in almost all countries by a similar proportion. Both forms of income taxation are in fact dominated by capital income—directly in the case of CIT and indirectly in the case of PIT, where higher incomes are dominated by dividend returns and asset gains. The downward trend in statutory rates and the pressure on the taxable base itself is the result of countries competing to attract investment—both by foreign investors and by domestic wealth holders able to move their capital abroad.

Figure 1.1: Revenue from the Corporate Income Tax (CIT) in Percent of Total Revenue



Source: IMF (2014)

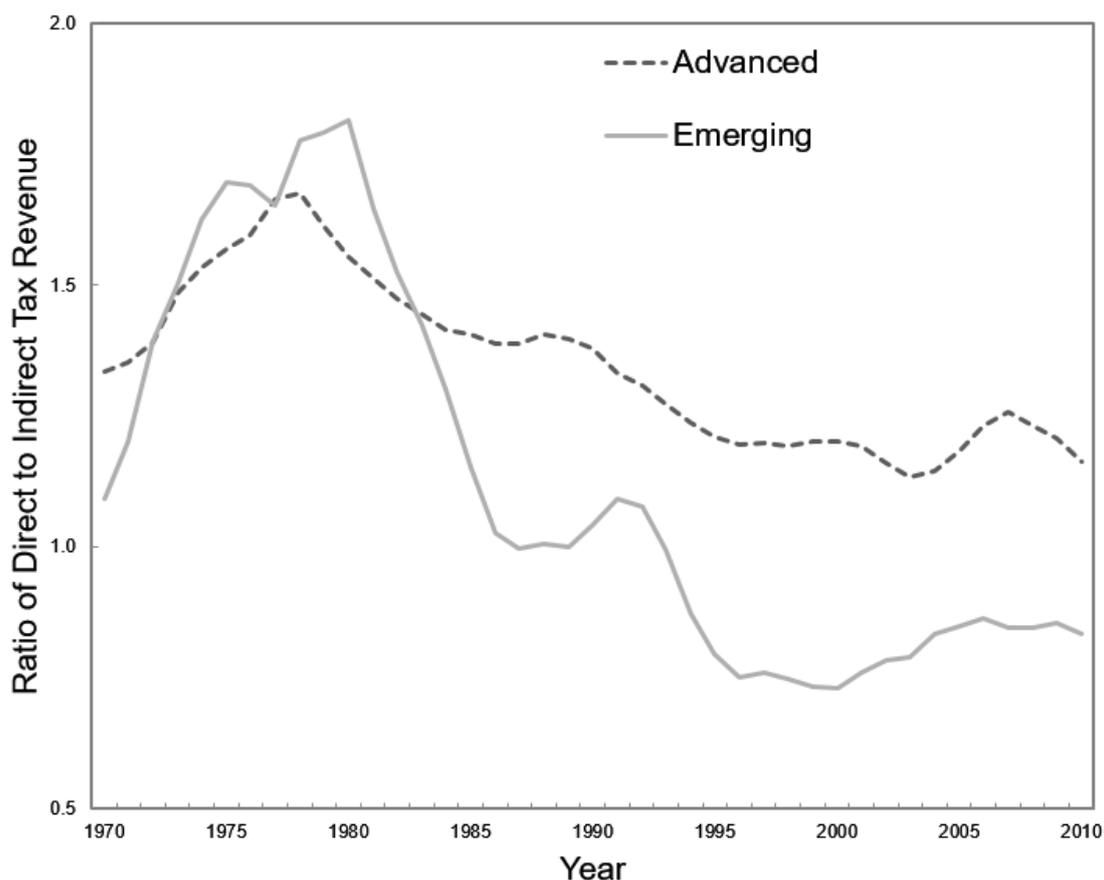
Figure 1.2: Comparison of Top Marginal Personal Income Tax (PIT) Rate Between 1980 and 2012 (Percent)



Source: IMF (2013)

Because governments must maintain expenditure levels, an important consequence of the downward trend of the rates of both types of income tax has been a shift towards consumption taxes over the past three decades, as figure 1.3 shows. Consumption taxes are essentially taxes on labor incomes, so that the effect of this changing balance is to increase income inequality in both developed and developing countries.

Figure 1.3: Long-term trend in balance between direct and indirect taxation as sources of government revenue



Source: IMF (2013)

This downward pressure on income tax rates (both CIT and PIT) is derived from domestic political pressures as well as international competition, of course, and reflects a shift away from the post-WWII consensus on the welfare state in developed countries, market transitions from socialism, and planned economic development in poor countries. In effect, the two drivers are mutually reinforcing but it is reasonable to assume that in larger economies domestic political pressures will predominate, while in the smaller and emerging economies international competition will do so.

That these changes pose a serious equity issue is without doubt, as the Organization for European Economic Cooperation and Development (OECD) points out:

It is generally assumed that choices related to corporate taxation are most affected by globalisation because of the ease with which multinational enterprises can move the location of at least some of their activities. However,

highly skilled workers are also becoming more mobile and some countries are taking this into account in designing their personal tax systems.

In contrast, the taxation of lower-skilled workers and of consumption is seen as being less affected by globalisation because these tax bases are less mobile. ... a shift in the tax structure from mobile income taxes to less mobile taxes, such as consumption taxes, would reduce progressivity since consumption taxes are in general less progressive than income taxes.

Therefore, such tax shifts imply a trade-off between growth enhancing tax reforms and equity. (OECD 2010a, 20).

This “new orthodoxy” espoused by international organizations (including the IMF) differs from the traditional position of neoclassical economists who argue, assuming full employment, that lower profit taxes will raise the capital-labor ratio and thus wages as well, so that there is no such trade off. In other words, lower profit taxation will increase growth and reduce inequality. However, as we shall see, even belief in the existence of a “trade-off” —based on the idea that lower profit taxes increase investment rates and thus growth—however intuitive, is not really justified on either empirical or theoretical grounds.

The erosion of the direct tax base through tax avoidance and evasion has been a major concern for the advanced economies for almost two decades (OECD 1998). Corporations mainly engage in tax avoidance (within the letter if not the spirit of the law) while it is high net worth individuals who mainly engage in tax evasion – mainly by not declaring their overseas assets to the relevant authorities in their country of tax residence. Profits tax revenue is even more important to developing countries which are hosts to major international investments with beneficial ownership resident abroad.

However, current international taxation arrangements clearly require strategic enhancement to effectively address tax competition given the difficulties in acquiring the potential fiscal resources generated by both foreign and domestic trans-border firms; and the consequences for both capital flight and social equity of the inability to tax residents’ overseas assets. That is, the problem is not only one of the tax *rate* applied, but also—and more importantly—of the tax *base* to which these rates are applied.

This tax base is increasingly undermined by aggressive avoidance schemes and “offshore” asset structures. Competition to attract such investments merely on the basis of preferential taxation leads to global welfare losses, exacerbated by secrecy protections for beneficial owners. Nonetheless, the global network of offshore financial centers, which promotes tax avoidance and evasion and generally impedes financial regulation, is vast.

In order to address these issues, this paper examines both the direct impact of international tax competition on income distribution through tax incidence and the indirect effect through fiscal adjustment. Section 2 summarizes the evidence on the nature, scale, and consequences of international tax competition; focusing on corporation tax for which most evidence is available. The effect of PIT evasion on domestic income distribution, while less researched, is fortunately uncomplicated in its immediate impact on inequality.

The economics of profit taxation are addressed in Section 3 in terms of its effect on wages, investment, and growth on the one hand and on fiscal balances and income distribution on the other. It is shown that profit taxes do have a positive redistributive effect through their various channels of impact and thus that international tax competition has the effect of increasing inequality at the national level. Section 4 explores the implications for developing countries in

particular with regard to effective international tax coordination, because in relative terms at least they are the main victims of international tax competition; while Section 5 examines the evolution of international tax cooperation and the improvements necessary to increase fiscal income and replace the failing system of official development assistance. Finally, the last section concludes with some observations on the changes in intergovernmental institutions required if the international tax regime is to contribute to reduced inequality at the national level.

2. The Nature and Consequences of International Tax Competition

All countries levy CIT, largely because it is easier to collect from registered and regulated companies than from individual shareholders, many of whom may reside (or pretend to reside) abroad. Indeed, since many shareholders may not reside in the host country, especially in developing host countries, taxing only personal wealth would remove the ability of source countries to tax the income of corporations operating within their borders. Furthermore, CIT effectively taxes earnings that companies retain, which are hard to tax at the personal level. Similarly, if there was no corporate tax, small businesses could escape tax by incorporating and labelling their earnings as capital income.

Nonetheless, since the 1980s, statutory CIT rates have declined from an average of some 45 percent of (declared) profits after allowed deductions to around 25 percent in developed countries. In high- and middle-income developing countries (“emerging markets”) the average rate has fallen from 40 percent to 25 percent; and in low-income developing countries from 45 percent to 30 percent (IMF 2014). There are domestic reasons for this shift, including changing attitudes to the private sector and the decline of organized labor, but with increasing capital mobility worldwide, the competition between countries in a to attract foreign firms (and retain their own) has been a major driver (Leibrecht and Hochgatterer 2012).

In fact, as Table 1.1 shows, *effective* CIT rates—that is, the amount of tax corporations actually pay as a proportion of profits (World Bank 2016)—are much lower than the statutory rates depicted in Figure 1.1 because of the large allowances made to firms in domestic tax legislation. Indeed, such deductions from the taxable base are a key form of international tax competition. In high-income OECD countries the effective rate is now only 13 percent of profits, while in developing countries it varies by region—from 11 to 20 percent—with an average of around 16 percent. Worldwide, the World Bank estimates that the CIT burden is only 14 percent of (declared) profits. In other words, about one half of the statutory rates which have themselves declined steadily over past decades.

Table 1.1 Corporate Income Tax (CIT) Paid, as a percentage of corporate profits

Region	CIT as % of profits
East Asia	17
Europe and Central Asia	11
Latin America and the Caribbean	20
The Middle East and North Africa	13
South Asia	15
Sub-Saharan Africa	18
Sub-total developing	16
OECD (high income)	13
World	14

Source: World Bank (2016). Sub-total and world weighted by GDP.

Multinational enterprises (MNEs), furthermore, pay an even lower effective rate because a large part of their profits is reported in offshore financial centers (which gives them an unfair advantage over domestic firms). At the same time, the importance of CIT revenue to developing

countries is much greater and has been rising over time: in the 1980s it represented about 12 percent of fiscal revenue and now about 15 percent; while in developed countries it has remained at around 8 percent (albeit rising and falling during the recent boom).

The key issue, in consequence, is not so much the CIT *rate* (which appears to be converging worldwide at around 25 percent—apart of course from tax havens) but rather the CIT *base*, which is eroded both by excessive allowances to firms and the shifting of profits to lower-tax jurisdictions. A recent survey (Reidel 2014) of econometric work on this issue shows quantitative estimates varying across approaches and studies, but suggests that MNEs as a whole transfer up to 30 percent or more of their income earned at high-tax affiliates to lower-tax entities. The US, for instance, suffered estimated losses in 2004 and 2008 of \$60 and \$90 billion respectively or about 30 percent of CIT revenues (Clausing 2011).

The OECD “conservatively” estimates that base erosion and profit shifting (BEPS) causes revenue losses worldwide of between \$100 and 240 billion annually—equivalent to between 4 percent and 10 percent of global revenues from CIT. Given developing countries’ greater reliance on such revenues, estimates of the impact on these countries, as a percentage of GDP, is even higher. These sums are of a similar order of magnitude to the total flow of international development assistance (OECD 2015).

The rising ratio of CIT revenue as a proportion of GDP, despite this reduction in rates, implies that the corporate tax base of developing countries has in fact been growing despite profit shifting abroad by large firms. This appears to be due to two factors: on the one hand, the growing share of profits in national income in response to structural adjustment programs (liberalization, privatization, wage restraint, etc.); and improved tax administration and market formalization of micro-, small- and medium-sized firms on the other. Nonetheless, there are enormous competitive pressures from foreign investors and foreign governments to lower CIT rates and extend further concessions in the form of tax holidays, tax-free zones, investment treaties, and acceptance of corporate ownership structures designed to facilitate tax avoidance.

The IMF identifies two separate “spillovers” from this de facto regime built up of different and competitive national systems and a patchwork of double taxation treaties, which permits increased MNE tax avoidance. Tax base erosion by profit shifting incentives (“base spillover”) means that a 1 percentage-point increase in a country’s CIT rate will reduce its CIT tax base by about 0.6 percent of GDP. Tax policy response to other countries (“strategic spillover”) means that a one point CIT rate reduction in all other countries induces a 0.5 point rate cut, with a slightly larger response to rates in “haven” countries and with larger countries’ tax policies have a stronger effect (IMF 2015).

In consequence, the IMF argues:

Base erosion, profit shifting and international tax competition really matter for developing countries ... at least as much as for the advanced economies. Base spillovers from others’ tax rates may be noticeably stronger for non-OECD countries than for OECD countries, and statistically more significant. And the signs are that these may operate less through effects on real investment decisions than through profit shifting. The revenue losses through avoidance activities associated with tax havens (are) in the order of something over one point of GDP in the long run—a large amount, far larger relative to their total tax take than is the case in OECD members, and harder for them to replace from other sources (Crivelli et al. 2015).

The scale of tax losses for developing countries is large, according to the OECD (2010):

Data on revenues lost by developing countries from offshore non-compliance is unreliable. Most estimates, however, exceed by some distance the level of aid received by developing countries - around USD 100 billion annually.

The IMF derives sensible policy recommendations from its research. For instance, “For the *corporate income tax*, quantify and review tax expenditures, resisting further inappropriate base erosion and pressure to cut statutory rates; reduce the tax bias toward debt finance” (de Mooij and Keen 2015). Yet IMF operational advice and conditionality seems unaffected: a recent ILO study of IMF Article IV reports in 183 countries over 2005-15 finds that tax measures are discussed in 138 cases; but are all restricted to extending or collecting consumption taxes—VAT in particular (Ortiz et al. 2015).

Unbridled competition between countries to attract foreign firms by lowering statutory rates and extending allowances creates “winners” and “losers,” but overall such coordination failure leads to a welfare loss worldwide. There is no evidence which supports the theory that international tax competition makes governments more efficient. The welfare losses arise from the externalities generated by one countries’ tax rate setting on the welfare of other countries (Zodrow 2010; Wilson 1999). A lower tax rate in other countries moves capital out and reduces tax revenue and public spending; whether the best response is to raise or lower the tax rate depends on the marginal value of public spending. In terms of the game theory underlying the literature, the Nash equilibrium is Pareto inefficient: that is, all countries would benefit from a uniform increase in tax rates. This is the central result in the argument against unconstrained international tax competition. This conclusion is strongly reinforced where (a) CIT resources are used to enhance productivity; and (b) income distribution has an effect on growth.

The fact that international tax competition is focused on the location of financial assets (rather than productive capital itself, which is predominantly attracted by labor skills, local markets, natural resources, infrastructure, etc.) increases the opportunities for offshore financial centers to offer extremely low tax rates to substantively corporations and individuals while maximizing their own fiscal income as free riders. However, such facilities are only meaningful if combined with secrecy which shields owners from their own revenue authorities (Slemrod and Wilson 2009). Ironically, such secrecy must be combined with strong property rights—so that such jurisdictions are invariably within or effectively underwritten by—major financial centers. Further, such secrecy on beneficial ownership encourages not only criminal behavior by companies, but also impedes domestic financial regulators from ascertaining the balance sheet position of multinational corporations.

In sum, tax competition between jurisdictions has not only lowered income tax rates but has also encouraged aggressive tax avoidance by large firms and the marketing of tax evasion schemes to high-net-worth individuals, with serious global economic and social consequences. It is vital for developing countries to be able protect their corporate tax base and levy a reasonable tax rate on large firms, whether foreign or domestically owned, with international policy support. In this regard, information exchange and agreed rules for determining the CIT base would benefit both developed and developing countries; and these actions would be a significant step towards global fiscal coordination.

3. The Economics of Profit Taxation: Investment, Growth and Income Distribution

So far we have seen how tax competition reduces profit taxes (whether CIT on corporate profits or PIT on dividends) and thus directly increases inequality whether expressed as the wage/profit split or the distribution of household income. Indeed, the two are equivalent to the extent that

corporation tax is in effect a “withholding tax” on dividends otherwise payable to shareholders (Stiglitz 1976) affecting both the current income and accumulated wealth of shareholders. In other words, CIT is a tax on the rich who are the main owners of corporations—directly or through pension funds.

This immediate redistributive effect is not disputed (among economists at least): the controversy arises from the difficulty of determining the final incidence of profit taxes because this depends on their indirect effect through the impact on investment and thus growth and employment on the one hand; and the fiscal adjustment with its macroeconomic and welfare outcomes on the other.

Some economists have long argued that the final outcome of CIT in terms of tax incidence—who ultimately bears the real burden of a tax—is quite different from what it appears to be at first sight (Harberger 1962). The premise is that CIT leads to lower investment and thus a lower capital-labor ratio; as labor productivity falls (this model assumes full employment) so do wages. Thus workers, not shareholders, bear the real incidence of the corporate income tax; and as it is more efficient to tax workers directly (for example, through a VAT), the optimal corporate income tax rate is zero.

This concept is theoretically underpinned by Mirrlees (1976) who argued that the efficiency losses (mainly investment incentives) from capital taxation—losses born by labor in the long run due to lower productivity growth and thus wages are so great that in effect capital incomes should not be taxed at all.

By extension, the traditional view of capital income taxation in small open economies is that residence based taxes reduce the after-tax return on domestic savings by driving a wedge between the rate of return on world financial markets and the after-tax rate of return received by residents—in other words, a tax on the ownership of capital or “savings.” In contrast, source-based taxes raise the required rate of return on domestic investment above the rate of return on world financial markets, and thus amount to taxes on the location of capital—that is on investment. In consequence, the traditional literature suggests that a small open economy should not apply any source-based capital income taxation at all, adopting only residence-based systems (Burgess and Stern 1993).

If these residence-based taxes cannot be collected effectively (due to lack of fiscal information, administrative capacity, or lack of international cooperation) then capital income taxation becomes undesirable. In sum, the traditional result from the optimal tax literature is *still* that, “small open economies should adopt no source-based taxes and that capital income taxes should be eliminated altogether if countries cannot enforce residence-based taxes” (Bovenberg 1994, 118).

Similarly, for the small open economy, it is suggested that firms must take as given the *after-tax* rate of return on investment because investors (foreign and domestic) will move their capital abroad if they earn less than this rate; so if CIT rises, capital moves abroad and the *before-tax* rate of return rises leaving dividends unchanged, but the outflow leads again to a lower capital-labor ratio, lower labor productivity, and thus lower wages. In sum, because capital tends to be much more mobile than workers, a significant share of the burden of corporate tax tends to get shifted to labor (Auerbach 2006).

Nonetheless, there is remarkably little empirical evidence for this fundamentalist position. A recent systematic review of the empirical literature finds, “*some* evidence that suggests that corporate taxation may lower wages, but the *preponderance* of evidence does not suggest any wage effects from corporate taxation ... there is no robust evidence that corporate tax burdens have large depressing effects on wages” (Clausing 2012).

Moreover, the link between higher CIT rates and lower growth—however attractive intuitively—is far from solid empirically. Econometric studies recently surveyed by the IMF are ambiguous on the size and even the direction of the effect of increased CIT on growth; and while their own estimates do find modest negative effects, these are small and not very statistically significant (IMF 2015). Specifically, in relation to foreign investment, the IMF finds that there is evidence that CIT rates affect capital flows into developing countries, but that these do not in fact contribute to gross private fixed capital or economic growth (Klemm and van Parys 2009).

There are several reasons why the standard theory of the negative effect of profits tax on growth is in fact invalid, which may in turn help explain the unconvincing empirical evidence. First, the textbook causality runs from lower savings (corporate savings—retained earnings—reduced by a profit tax, and private savings reduced by progressive income tax) to lower investment and thus growth, employment, and wages. This conclusion requires the assumption of full factor employment and complete wage-price flexibility; neither of which hold in practice. Moreover, savings are not determined in this simplistic way, and may well be raised by rentiers cutting consumption, or by corporations borrowing from banks to fund planned investment. Indeed, the Keynesian view is that investment causes savings rather than the other way around, with macroeconomic adjustment to aggregate investment generating the required savings level, assuming government adopts an accommodating fiscal and monetary policy. Indeed as Kalecki (1937, 449) argued eight decades ago, raising capital tax, “does not tend to lower the net profitability of investment (which covers the risk) or to raise the rate of interest.” Because if the investor borrows, her net (taxable) capital does not increase; and if she uses her “own means” then she would be taxed anyway. “Thus,” says Kalecki, “the net profitability of investment is unaffected by capital taxation.”

Second, corporate investment decisions are complex, and rely on the fact that external finance (e.g. from banks) is always an alternative to retaining profits; so that tax levels will influence funding structures (the use of debt in particular) rather than the level of investment as such (Stiglitz 1976). Evidence suggests that the adverse effects, if they exist, are much less than is commonly alleged, especially by politicians and corporations. Almost all countries provide tax exemption for interest. Since at the margin, a very large fraction of investment is financed by debt, the reduction in return is commensurate with the reduction in cost: there is no adverse effect. Indeed, since most countries provide depreciation allowances that are greater than true economic depreciation (i.e. that would correspond to the true decline in market value), higher tax rates can be associated with greater investment (Stiglitz 1973).

Third, intergenerational distribution is central to the neoclassical model (although its founder Ramsey himself wanted to weight all generations equally and was thus opposed to a social rate of discount), even though intra-generational distribution is not. As Kalecki (1937) points out, capitalists do not accumulate for their own future consumption nor for future consumption of their heirs: rather their aim is to increase capital and leave it to their heirs, so that the latter can continue their own work. More recently Uhlig and Yanagawa (1996) show that increasing capital income tax can lead to faster growth even in a standard overlapping-generations model if there is endogenous growth: while capital income taxation affects the old, it stimulates young workers to save and learn. The net effect on savings is positive if the interest elasticity of savings is relatively low, as in practice it appears to be.

Fourth, the standard neoclassical model also assumes that government expenditure itself is a deadweight loss in terms of output and growth (though there may of course be redistributive welfare gains to particular household groups), but this assumption is also inconsistent with modern endogenous growth theory. As Aghion and Howitt (1998) show, when public expenditure is used for human capital investment with strong externalities (and where markets

will not fund education through credits) then taxing higher incomes to pay for the public education of the poor leads to higher levels of aggregate income.

Fifth, in a similar direction, FitzGerald (2012) shows that if the profit tax revenue is spent—all or in part—on infrastructure provision, then this will raise capital productivity within a standard growth model, so that the optimal profits tax rate is positive. This rate is a function of the relative marginal productivities of public and private capital, and is in fact independent of the international tax rate—so that there are no gains from tax competition. Moreover, capital taxation, “has all the merits of financing state expenditure by borrowing, but is distinguished from borrowing by the advantage of the state not becoming indebted” (Kalecki 1937, 450).

Sixth and last, but not least, there is growing evidence (and policy consensus) for the positive effect of reduced inequality directly on growth, whether through enhanced social stability (and thus reduced investor risk) or through greater family investment in health and education (Ostry et al. 2014).

Of course, as orthodox economists point out frequently, redistributive goals can be met by an appropriate composition of welfare expenditure targeted towards the poor. However, although this may reduce poverty, it still implies that in the absence of higher profits taxes, the cost of increased poverty reduction will be borne by middle-income groups. Specifically, it implies that raising the income of unemployed and retired citizens will be funded by employed workers. In this limited sense inequality will in principle be reduced in the lower half of the distribution; but increased in the upper half. In fact, both empirically and as the result of public choice, middle-income groups tend to enjoy roughly neutral fiscal incidence, so that raising the share of poorer groups in national income can only be achieved democratically by increasing the tax burden on the wealthy.

Finally, in the wider macroeconomic context, it is worth noting that in economies where there is a balanced budget rule (or a binding rule for the fiscal deficit or public debt) then the effect of raising profits tax and increasing public expenditure on infrastructure or welfare will lead to an increase in output and employment. This in turn will further reduce income inequality; while the increase in overall national income will mean that the absolute level of net profits (and thus investment) will not fall even though the share of the rich declines.

Some of these policy considerations are at last being taken on board by the IMF which now recommends:

Lowering the tax wedge and improving the design of labor taxes and social benefits can strengthen work incentives and induce a positive labor supply response; reforming capital income taxes to tax rents reduces distortions and encourages private investment; well-targeted tax incentives can stimulate private investment and enhance productivity through research and development (R&D); efficient public investment, especially in infrastructure, can raise the economy’s productive capacity; more equitable access to education and health care contributes to human capital accumulation, a key factor for growth. If growth-friendly reforms require fiscal space, revenue measures should focus on broadening the tax base and minimizing distortions; and expenditure measures should aim at rationalizing spending and improving efficiency. (IMF 2015, 1)

Even so, the IMF apparently cannot bring itself to enunciate the logical consequence of its argument—higher profit taxation. The orthodox argument against capital taxation (for both corporations and individuals) continues to be enormously influential—no doubt in part because it

has suited the interests of both the shareholders in, and the executives of, large corporations. Indeed, the neoclassical notion that higher profit taxes are bad for the poor ironically implies that tax avoidance and evasion by the wealthy might even be motivated by altruism!

4. The Implications of Tax Coordination for Developing Countries

In the absence of official estimates (or reliable non-official ones) of the order of magnitude of the losses to developing countries from lack of tax cooperation it is necessary to take into account: *first*, the tax lost on the unregistered outflow of profits (whether by foreign companies or domestic residents) in any one year; and *second*, the tax loss due to the income arising abroad from the undeclared accumulated assets owned by residents. Absent official (or reliable unofficial) estimates the loss of tax base can be estimated by drawing on estimates of unregistered (illicit) capital flows from developing countries trade and balance of payments data (from World Bank data) and then calculating the accumulated stock (FitzGerald 2013).

The total global tax loss immediately before the Great Recession appears to have been of the order of 2.5 percent of developing countries' GDP, which is considerable and of a similar size to total private capital inflows. In terms of tax revenue, the loss represents about 10 percent of revenue in developing countries; but a much larger proportion (probably one third) of corporate and income taxation revenue.

In conclusion, the tax loss for developing countries was approximately \$ 200-250bn a year in the mid-2000s—double the OECD estimate. It is likely that the figure has increased since that date due to growth in the world economy and increased financial integration. While the current crisis may have slowed these two drivers, it has also increased the level of investor risk aversion and thus attraction of “safe havens” for mobile wealth.

This figure is rather more than double the level of official development assistance (ODA) from DAC members. At an aggregate (global) level, if the tax authorities in developing countries—with the assistance of their counterparts in developed countries and comprehensive action on tax avoidance and evasion through offshore financial centers—were in receipt of these sums, either of two outcomes might be achievable: On the one hand, the total amount of international fiscal transfers (aid plus tax) available for development finance could be tripled. On the other, development assistance could be entirely replaced by tax cooperation while doubling the net fiscal transfer.

In the WIDER study (FitzGerald 2013, 234), Boadway states that, “The clearest message that comes out of the fiscal federalism literature seems to be: *it should be fiscal equity among states rather than vertical equity among individuals that informs the design of a development financing system*” (italics in original). This implies redistribution of any gains from international tax cooperation should be biased towards poor countries. International fiscal equity would require that the fiscal transfer take account of the local tax “effort” and perhaps involve an additional incentive, much as national tax systems give additional incentives for household voluntary contributions. Given these difficulties in devising a suitable measure of a nation's capacity to pay, he suggests that it may be necessary to fall back on a macro indicator of fiscal equity that is consistent across nations and, also is a rough index of fiscal equity, in other words the tax/GDP ratio. Extending with this logic, Sustainable Development Goal (SDG) benchmarks could determine the floor for relevant public expenditure, and thus the revenue requirements to be met and the scale of the required international contribution.

As was pointed out in the influential WIDER study of innovative development finance,

A ... main source of finance for development use might be global taxation of tax bases that nations are liable to compete away because of international mobility, or that they underutilize because of monitoring problems. In principle, international agreement should be possible for a harmonized increase in taxes of these types, given that non-cooperative tax competition is responsible for their low equilibrium tax rates (Boadway 2005, 236).

In the long run therefore, international tax cooperation could become for lower-income countries not only a complement to official development assistance but a substitute. This transformation would not be as radical as might seem at first, because ODA is already an embryonic form of fiscal cooperation. In effect, a share of taxes raised in the donor country (ideally, of course, 0.7 percent of GDP and thus roughly 3 percent of tax revenues) is transferred to the recipient countries in the form of a budget subsidy for agreed public programs or investments.

Even if increased international CIT and PIT revenue led to some reduction in other sources of taxation, this could also be beneficial. Low income countries—and Africa in particular—have tended to rely on indirect taxation to a great extent, which tends to be regressive as it is generally focused on manufactured mass consumption items. The switch from trade taxes to VAT has made the regressive effect even greater, because the import duties on imports used to bear more heavily on non-essential consumer goods. The reliance on VAT has also worsened household income inequality, because incidence is highest on immobile unskilled labor (OECD 2010).

Logically, the largest gains from effective international taxation of profits and assets would be made by the larger and richer developing countries, and specifically in per capita terms, the middle-income countries or regions—because these are those that are most integrated into the world economy and generate the profits which underpin tax avoidance and evasion. As table 1.2 shows, the potential tax revenue gains to Asia and Latin America are far greater than ODA flows, as would be expected due to their larger economies, although the difference in per capita gains would be less. Aid allocation generally works in the other direction because (geostrategic considerations (which account for the ODA to MENA and Europe) apart) ODA is focused on poorer countries and regions, particularly Africa.

Table 1.2 Estimated potential tax yield to developing regions: (US\$ billions in 2006)

	Flow (F)	Stock (X)	Tax base (Y)	Potential Yield (T)
Developing Countries	859	3060	1073	215
Sub-Saharan Africa	11	80	17	3
Asia	399	1532	507	101
Europe	186	529	223	45
MENA	165	453	197	39
LAC	97	466	129	26

Source: FitzGerald (2013)

In most of the lower-income developing countries international tax cooperation could not be a substitute for ODA, but could become a complementary source of development finance. Although the funds would be channeled through different institutions (typically ministries of finance and ministries of international development from donor countries) they are both fiscal transfers from government to government, and they both have their origins in taxation. It would be logical, therefore, that the two flows should be administered in parallel, particularly because “best practice” ODA increasingly takes the form of budgetary support in cases of regular development programs as opposed to humanitarian emergencies.

The literature on the economic effects of aid does not address the relationship with international taxation. Domestic taxation is regarded as part of the process of fiscal response to aid to the extent that it affects government decisions on expenditure and borrowing (McGillivray and Morrissey 2001). Empirical results show that the effects are complex and varied, but that aid tends to be associated with government spending increases in excess of the value of the aid, and can also have the effect of increasing borrowing and reducing tax effort. From the literature on open economy macroeconomics it is reasonable to expect that apart from raising the rate of growth (through increased demand and import availability) the real exchange rate would tend to rise and thus exports to fall in the short run. However, the long-run effect would depend upon the use of the new resources, and in particular whether they are employed to increase output and productivity in the export sector. Note also that a major macroeconomic effect would not only be through increased tax receipts through such identification of overseas assets (and possible legal action) but rather from the disincentive to capital flight in the first place. Retention and recovery of such assets would raise domestic investment rates and thus the rate of economic growth.

Finally, while it is true that all developing countries would be in receipt of more resources, a key exception would be those developing countries which are themselves tax havens. The scale of this loss is impossible to estimate precisely because of the opacity that the authorities of offshore financial centers (OFCs) deliberately create about financial assets and transactions within their jurisdictions (after all, this ‘confidentiality’ is what attracts foreign investors). However, given that these OFCs are all closely connected with advanced economies, it would be possible to reallocate a portion of the increase in tax income to maintaining the incomes of their inhabitants and providing an alternative economic future for them. Where they are U.S. or E.U. dependencies, this could be done by the respective tax authorities, who would of course themselves be major beneficiaries of tax recovery, which would undoubtedly be at least equal to the benefits to developing countries estimated above.

Of course, expatriate lawyers and tax consultants might lose their employment; but these latter are not as many as the volume of financial services might imply, because most if not all these services are in fact e-supplied from major onshore financial centers. Indeed, the main beneficiaries of these arrangements to prevent the exchange of information on income and wealth are not the inhabitants of these developing OFCs, but rather the elites of both developed and developing countries, who are in a position to avoid their legal tax obligations. It would still be true that wealthy foreigners wishing to *settle* in OFCs would continue to benefit from low tax rates.

5. Slow Progress Towards International Tax Cooperation

Free movement of financial assets (which need not correspond to the location of the fixed productive assets) and the geographical dispersion of firms (which allows intra-firm accounting to effectively relocate recorded profits independently of where they were generated) thus create fundamental challenges for tax authorities (OECD 1998; FitzGerald 2012). However, it is the location of *financial* assets, rather than the effect on real investment, that is at issue—and this is a classic collective action problem. Offshore financial centers compete for tax revenue with the countries where the productive capital is located, using very low or zero tax rates to attract the corresponding financial assets, without having to provide the infrastructure, labor forces or markets needed for actual production (Slemrod and Wilson 2009).

Under these circumstances, a classic collective action presents itself. If tax authorities could cooperate more effectively, the total tax base would be increased and revenue could correspond

more closely to the country where the economic activity takes place and the real capital is located. Offshore financial centers, broadly defined, reduce revenue available to other countries where they act as a destination for income streams and wealth protected from revenue authorities, which may have taxing rights in respect of that income or those assets (OECD 2010, 6)

The first model for bilateral tax agreements between countries was adopted in 1928 by the League of Nations based on a group of experts, which later became the Fiscal Committee of the League of Nations. A second draft was produced in 1935, followed by subsequent models developed in Mexico (1943), favoring source-based taxation, and soon after an alternative model developed in London (1946), favoring residence-based taxation (Lennard 2008). After World War II, the United Nations, as the successor body to the League of Nations, sought to forge a compromise between the two models. But in practice, a dual track emerged with the OECD representing the interests of advanced market economies and the UN that of developing countries: their approaches differing mainly because the former were net outward investors and the latter hosts to inward investment.

By 1958, the countries of the Organization for European Economic Cooperation, which later became the OECD, had developed the first draft of its own model convention firmly established in residence-based taxation. This draft was amended four times through 1963 and eventually the full model was adopted and published in 1977 through the OECD Committee on Fiscal Affairs (Owens and Bennet 2008). At the same time, the United Nations resumed its work on international tax cooperation in 1967, followed by the establishment in 1968 of an ad hoc group of experts on tax treaties between developed and developing countries. That group produced a *Manual for the Negotiation of Bilateral Tax Treaties between Developed and Developing Countries* in 1979. The next year, the group published a UN Model convention, which was largely based on the OECD Model, but allowed for greater source-based taxation.

Since their development, both the UN and OECD Models have been similar in many respects: both were created to prevent double taxation; both acknowledge taxing jurisdiction (permanent establishment) in similar ways; both allow for reductions to withholding taxes on outbound payments; both provide for the taxation of business profits where they are earned, which is determined under the arm's length principle; both establish a mutual agreement procedure for the resolution of tax disputes; and both models provide for exchange of information by competent authorities, either on request, automatically, or spontaneously. However, in each of these aspects, the UN Model has preserved the taxing rights of countries in which production takes places, for example through shorter time requirements to create a permanent establishment and fewer reductions of withholding taxes on charges such as fees for technical services and royalties. Moreover, while the OECD Model requires mandatory arbitration for unresolved tax disputes after two years, the UN Model has only provided arbitration as an option requiring consent from all parties.

Despite the fact that there are well over 3,000 bilateral tax treaties in place, these agreements have failed to address major areas of tax losses by governments, such as mismatches between country tax laws that result in double deductions, non-recognition of income or even taxable entities. Moreover, most information exchange still takes place upon the request of country tax administrations, and a significant number of countries, such as Panama, and subnational jurisdictions, such as Nevada and Delaware in the U.S., actively promote secrecy as a business model to attract global flows of untaxed individual and corporate wealth through unregulated shell companies.

In 2001, the Zedillo Commission established by the UN identified the key issue in development financing as being the inability of developing countries to effectively tax income from capital (from foreign companies operating in their tax jurisdiction or from assets held abroad by their own residents). The Commission proposed to address the tax cooperation problem from the point of view of developing countries through the creation of an International Tax Organization to: (1) compile statistics, identify trends and problems, present reports, provide technical assistance, and develop international norms for tax policy and administration; (2) maintain surveillance of tax developments; (3) restrain tax competition designed to attract multinationals with excessive and unwise incentives; (4) develop procedures for arbitration when frictions develop between countries on tax questions; and (5) sponsor a mechanism for multilateral sharing of tax information (UN 2001, iii-iv).

In July of 2015, during the Third International Conference on Financing for Development, the G77 and China, with the endorsement of the UN Secretary-General (UN 2014) and other UN Experts (UN 2014a) proposed to upgrade the UN Committee of Experts on International Cooperation in Tax Matters (UN Committee) to an intergovernmental body capable of addressing the above issues. Although a 2004 proposal to upgrade the Ad Hoc Committee recommended an intergovernmental body, members of the current UN Committee serve in their personal capacities only and are not official representatives of their governments. The 2015 proposal for an intergovernmental tax body met strong opposition by the United States and the United Kingdom, and resulted in lengthy and protracted negotiations of the Addis Ababa Action Agenda. In the end, the proposal was defeated, with a vague commitment to increase support for the work of the UN Committee, which now meets twice per year instead of once, but still lacks resources for basic operation of Committee and Sub-Committee work.

Since 2015, the G77 and China have continued to call for upgrade of the Committee (G77 and China 2017). The Government of Ecuador has championed the issue of the upgrade to address the lack of coordination and global network of secrecy and low-tax jurisdictions, which continue to erode the tax bases of all countries, but especially developing ones struggling to mobilize domestic revenues for development. The UN Economic and Social Council annually evaluates the work of the UN Committee and receives inputs from Member States on options for strengthening the work of the Committee, but action in this regard remains to be seen. UN proposals to strengthen its powers (UN 2009, 65-66) have fallen on deaf ears.

The lack of action to strengthen international tax cooperation under the auspices of the UN is attributable in part to the emergence of the G20. In the wake of the financial crisis of 2008-2009, the G20 emerged as the self-designated, “premier forum for international economic cooperation,” and from the outset included taxation as a key area of action (G20 2009). In this regard, the G20 provides mandates on issues of international taxation to the OECD directly, which receives support from the Platform of Collaboration on Tax, whose members include the OECD, IMF, World Bank, and the UN.

In addition to its fifty years of experience providing technical assistance on tax policy and administration to governments, the IMF has increased information reporting through its *Government Finance Statistics*, *Fiscal Monitor*, and Article IV reports, which now contain more information on national tax receipts, estimations of assets in OFCs, and countries’ external asset positions. The World Bank also provides technical assistance and capacity building for tax administrations, while the UN capacity development program specializes on capacity building issues with a focus on least developed countries. Each of the member institutions of the Platform perform a nuanced role based on their respective core competencies, and all collaborate in

supporting developing countries through capacity building, such as producing “toolkits” on specific BEPS topics. The OECD, however, serves as the primary forum for the development of norms and standards on international taxation.

While the UN Committee of Experts on International Cooperation in Tax Matters continues its work on updating the UN Model Convention, international tax cooperation is primarily led by the G20 and directed through the OECD in two major work streams: (1) exchange of tax information related to financial accounts; and (2) tax base erosion and profit-shifting.

Exchange of tax information.

Over a decade before the emergence of the G20, G7 leaders mandated the OECD to address what it called *Harmful Tax Competition* (OECD 1998). The resulting report defined “harmful tax practices” and applied these standards through a Forum on Harmful Tax Practices (FHTP), and created the Global Forum on Transparency and Exchange of Information (Global Forum) to improve the exchange of information between countries. The OECD also created a “black list” of 47 potentially harmful regimes within OECD countries as well as 35 tax haven jurisdictions (most of which were small islands and/or small island developing states) (OECD 2001). A few years later, 46 of the 47 potentially harmful regimes were removed from the list (OECD 2006) and the Global Forum was tasked to engage with both the OECD and non-OECD countries to deal with the tax haven classification through development of the *Agreement on Exchange of Information in Tax Matters* as the gatekeeper for admission of non-OECD countries into the Forum.

Following the 2009 London Summit of the G20, at which G20 Leaders pledged, “to take action against non-cooperative jurisdictions, including tax havens” (G20 2009, para 15), the Global Forum was re-structured with an independent Secretariat. Currently comprised of 134 member countries, the Global Forum monitors the implementation of standards on tax transparency and exchange of information through peer-review mechanisms, country reports, and compliance ratings. Around the same time, in 2010, the United States enacted the Foreign Account Tax Compliance Act (FATCA). Under FATCA, foreign financial institutions are obliged to report basic information (name, address, taxpayer identification number, etc.) on accounts held by U.S. taxpayers or by foreign entities owned by U.S. taxpayers to the U.S. Internal Revenue Service, or account holders are subject to a 30 percent withholding tax penalty (26 U.S.C. §§ 1471-1474).

Soon after, the G20 moved to amend the Convention on Mutual Administrative Assistance in Tax Matters (“Multilateral Convention”), which was first developed by the OECD and Council of Europe in 1988, to allow for participation by all countries. Under Article 6 of the Multilateral Convention, Parties agreed to exchange tax information and sign the Common Reporting Standard Multilateral Competent Authority Agreement to participate in automatic information exchange. The Multilateral Convention is now in force in over one hundred jurisdictions and requires automatic information exchange beginning in late 2017. Notably, even though this agreement is a multilateral instrument, the actual exchange of information occurs bilaterally only between competent authorities which agree to become exchange partners. As of May 2017, there are over 1,800 bilateral exchange relationships activated with respect to more than 60 jurisdictions committed to the common reporting standard.

The G20 Finance Ministers have further requested the OECD to prepare a black list of non-cooperative jurisdictions by the July 2017 G20 Leaders’ Summit, at which point, “defensive measures will be considered” (G20 Finance Ministers 2016). In order to be classified cooperative, the OECD has stated that countries, particularly those classified as financial centers, must meet at least two out of three of following requirements: a compliance rating of “largely compliant” by

the Global Forum; a commitment to automatic exchange of information under the common reporting standard by 2018; and participation in the Multilateral Convention or a sufficient bilateral network of information exchange. It is unlikely that any jurisdiction will be subject to sanctions as all vulnerable countries have acceded to the Multilateral Convention and commitment to the automatic exchange of information.

Tax base erosion and profit-shifting.

Beginning in 2013, the G20 began to focus more attention on the matter of double non-taxation, and mandated the OECD to lead on reform efforts to, “realign taxation with economic substance and value creation,” and tackle BEPS. In just two years, the OECD reached consensus on four minimum standards as its effort to lead coordinated reform of the international tax rules: model provisions to prevent tax treaty abuse; a re-launching of the FHTP peer review process to address harmful tax practices and exchange tax rulings; an agreement to secure progress on dispute resolution through the mutual agreement procedure; and probably the most significant achievement, standardized requirements for country-by-country reporting of tax information on revenues, profits, taxes due/paid, employees, and assets of each entity in a multinational corporate group. In order to implement country-by-country reporting, the OECD has developed the *Multilateral Competent Authority Agreement on the Exchange of Country-by-Country Reports* as well as a standardized electronic format for the exchange of information between jurisdictions. Over forty-five countries have adopted the country-by-country reporting requirements into national legislation and over a dozen more countries are in the process of doing so.

BEPS “Associate status” in the OECD’s Committee on Fiscal Affairs is now being offered to all interested countries who will commit to both the BEPS standards and BEPS implementation peer review. This “Inclusive Framework,” currently comprised of ninety-six countries, will monitor the implementation of the minimum standards, and work on clarifying and developing other standards subsumed under the BEPS process, for example, transfer pricing guidance, digital economy issues, and interest deductibility.

Treaty-relevant provisions, such as the primary purpose test and limitation of benefits provisions, have been included in a “Multilateral Instrument” to modify existing bilateral tax treaties. Similar to the matching process of information exchange under the CRS, countries will indicate which alternative tax treaty measures they choose to adopt in order to modify their existing tax treaties and these measures will only take effect where both countries’ preferences have matched. In addition to the tax treaty-relevant minimum standards (despite the failure to achieve consensus during the BEPS process, particularly due to the objection of non-OECD countries), the Multilateral Instrument includes an optional provision for mandatory, binding arbitration. Notably, the United States, while predominant in negotiations, has not signed on to any of the above-mentioned multilateral agreements and instead prefers to negotiate its own bilateral tax treaties and information exchange agreements, which are not always on a reciprocal basis.

In addition to global efforts of the G20 and the international tax organizations, the trend toward a more focused tax coordination and harmonization efforts through regional cooperation has emerged in the past decade, both through tax cooperation within regional economic communities, such as the Association of South East Asian Nations and the European Union as well as regional tax administration fora, such as the African Tax Administration Forum and the Inter-American Center of Tax Administrations. At the same time, however, nationalist and populist reactions to global and regional integration abound in the current period.

Conclusions

In summary, the detailed Zedillo Commission recommendations for the work of an International Tax Organization have largely been taken up by the OECD and the Platform for Collaboration on Tax through the leadership of the G20; even if the proposed institutional format has been rejected. This loose governance structure, however, has not been able to effectively restrain tax competition, which makes all the difference for efforts to mobilize domestic resources and reduce inequality.

The long-term trend towards lower statutory rates for both corporate and personal income tax and greater incentives to shift tax bases have led to declining effective taxation of profits. This trend is largely driven by competition between countries to attract investment and a widespread belief that this will foster skill and technology transfers and economic growth despite empirical evidence that demonstrates that tax exemptions and lowered rates do not contribute to long-run sustainable growth. Instead, findings from investor surveys continue to attribute investment decisions to economic and political stability and an educated and highly skilled labor force (UNIDO 2010).

For instance, the World Bank's flagship annual *Doing Business* report explicitly promotes tax competition by ranking countries based on indicators which penalize countries for levying taxes that fund education, infrastructure, healthcare and basic social security (World Bank 2016). Added to this pressure, developing country governments are often lobbied by multinationals backed by interest groups, such as Chambers of Commerce—and sometimes even government representatives from a multinational company's home country—to provide preferential tax regimes that can eliminate taxable profits for decades. These tax preferences are found not only in double tax agreements, advanced tax rulings, special economic zones, and legislated tax exemptions, but can also be part of investment agreements and extractives contracts. The latter is especially troubling and has been the source of significant tax losses, especially in resource rich developing countries. Tax preferences may also be in the guise of lax enforcement, especially on transfer pricing.

Efforts to constrain tax competition between developed countries have fared no better, primarily due to the OECD's tacit acceptance of tax competition. The OECD has always made it clear that the work on harmful tax competition set out to create a conceptual and administrative distinction between "helpful" and "harmful" tax competition, with the distinction based on whether country initiatives encourage "free and fair tax competition" internationally, and thus support the "expansion of global economic growth" (OECD 2015, 11). Thus, when the BEPS process took up the issue of patent boxes (tax incentives for income from intellectual property, which is most held in holding companies in low-tax, developed countries with high legal protections), there was no agreement to prohibit patent boxes, or even to set a minimum rate. Instead, the FHTP agreed to a "nexus" principle: taxpayers may only benefit from tax incentives to the extent of qualifying "research and development" expenditures made in the tax jurisdiction. It was also agreed that the only IP assets which could qualify for benefits are patents or assets which are similar and functionally equivalent to patents (OECD 2015). Soon after the BEPS process, countries such as the UK, Ireland, and Switzerland quickly introduced "OECD compliant" patent boxes.

Thus, while BEPS and the movement toward automatic exchange of information has established some consensus on minimum standards, the foundational acceptance and legitimization of tax competition remains unchecked, and the G20 is now embarking on a new work stream to provide tax certainty for investors. On the contrary, absent a single global fiscal authority, the automatic exchange of information between jurisdictions on company accounts, backed up by presumptive withholding provisions, is necessary to eliminate free riding. Negotiations (similar to those for

trade) on apportionment of the taxable *base* (i.e. corporate profits and non-resident assets) within agreed rules is necessary in order to minimize externalities, even if countries continue to be free to set different income tax *rates*. Harmonization of these rates may well be the outcome, but this may turn out to be necessary nor inevitable. In the long run, such fiscal cooperation could substitute for the present system of international development cooperation and global public goods funding, both of which are not only underfinanced, but also depend on the foreign policy discretion of individual governments.

Yet progressive income taxation of both corporations and individuals is an essential element of public fiscal resources and there is no reason to believe that at present rates it significantly constrains investment, growth or employment. Indeed, income tax revenues make a significant contribution to the reduction of income inequality and thus to not only social stability but also to sustainable growth in the long run. The inability to effectively tax the profit income of either international investors or large domestic firms poses a serious problem for developing countries in particular as they seek to make investments in education, healthcare, and infrastructure. Indirect taxation alone—even accompanied by progressive spending—is insufficient to tilt the fiscal balance decisively toward inequality reduction.

The finding of this paper is therefore that enhanced international tax coordination would not only reduce national income inequality (particularly when combined with appropriate fiscal policy), but could also hold the potential to replace the failing system of development aid. While the efforts of the G20 in moving toward more effective international tax coordination are steps in the right direction, without a fundamental commitment to replace tax competition with tax coordination, there will be no sustainable progress.

In making such a commitment, the equal participation of the G77 and China in standard and norm-setting—both in form and function—is necessary. Moreover, the international organizations working on tax will be instrumental in the development and implementation of the tax coordination agenda. For this reason, all operational aspects of the international organizations, such as technical assistance, economic development projects, reports, etc., should be consistent with the goals of coordination, instead of working against them.

Finally, the tax information exchanged by multilateral agreements should, in at least basic form, be available to all citizens to enable their full participation in fiscal governance. Numerous human rights conventions and principles require participation of citizens in government policy making and international tax standard and norm-setting should conform to these agreements (for example, the International Covenant on Civil and Political Rights, the Maastrich Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, etc.).

Managing the effects of globalization, in particular tax competition, will thus require enhanced cooperation beyond national borders if a workable multilateral framework along the lines of the WTO proves impossible. Failure to do so has already had grave effects on income distribution globally, but especially for developing countries. Unless governments are able to provide basic services necessary to human development, conflict and global economic insecurity will increase.

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