



Working Paper 28

Global Taxes and International Taxation: Mirage and Reality

Richard M. Bird

January 2015



ICTD Working Paper 28

Global Taxes and International Taxation: Mirage and Reality

Richard M. Bird

January 2015

Global Taxes and International Taxation: Mirage and Reality
Richard M. Bird
ICTD Working Paper 28
First published by the Institute of Development Studies in January 2015
© Institute of Development Studies 2015
ISBN: 978-1-78118-209-3

A catalogue record for this publication is available from the British Library.
All rights reserved. Reproduction, copy, transmission, or translation of any part of this publication may be made only under the following conditions:
- with the prior permission of the publisher; or
- with a licence from the Copyright Licensing Agency Ltd., 90 Tottenham Court Road, London W1P 9HE, UK,
or from another national licensing agency; or
- under the terms set out below.

This publication is copyright, but may be reproduced by any method without fee for teaching or nonprofit purposes, but not for resale. Formal permission is required for all such uses, but normally will be granted immediately. For copying in any other circumstances, or for reuse in other publications, or for translation or adaptation, prior written permission must be obtained from the publisher and a fee may be payable.

Available from:
The International Centre for Tax and Development
at the Institute of Development Studies
Brighton BN1 9RE, UK
Tel: +44 (0) 1273 606261 Fax: +44 (0) 1273 621202
E-mail: info@ictd.ac.uk
Web: www.ictd/en/publication

Global Taxes and International Taxation: Mirage and Reality

Richard M. Bird

Summary

Many global taxes have been proposed over the years. This study reviews the more important global tax proposals and concludes that, while many such ideas seem inappropriate or inadequately thought through, others are worth taking seriously. In reality, however, no global governance structure to impose such taxes exists or is likely to emerge in the near future. Global taxation – a dream for some and a nightmare for others – thus is, and is likely to remain for years to come, little more than a mirage. But even mirages may be useful if they motivate people to keep seeking better solutions to real problems. The world now faces one such real problem with respect to reforming the existing international tax regime. This paper therefore also considers whether the current ‘soft governance’ approach to resolving the issues arising from the recent financial crisis is likely to produce politically acceptable, technically feasible and economically efficient and effective results. Experience suggests that the current attempts to reshape the international tax regime may in the end fall short. Even so, however, we should continue considering how to move a few more steps further down the road of slowly and painfully adjusting the existing political structure of sovereign nation states to deal more adequately with the increasingly interdependent world of the 21st century. Whether one is searching for the mirage of global taxation or for answers to the real problems arising from the existing international tax regime, lasting solutions require either an improbably radical change in how the world is run or still more of the sort of episodic evolutionary process of inter-state negotiation and compromise evidenced in the history of international taxation if we are to reach an acceptable and perhaps adequate solution.

Keywords: global taxes; international taxation; taxes on finance; carbon taxes; international governance

Richard M. Bird is Professor Emeritus of Economics, Rotman School of Management, and Senior Fellow of the Institute for Municipal Governance and Finance, Munk School of Global Affairs, University of Toronto. He is also Distinguished Visiting Professor, Andrew Young School of Public Policy at Georgia State University in Atlanta, Adjunct Professor of the Australian School of Taxation and Business Law of the University of New South Wales, Australia, and a member of the Centre Advisory Group of the International Centre for Tax and Development.

Contents

	Summary	3
	Acknowledgements	5
	Acronyms	5
	Introduction	6
1	The myth of global taxation	8
2	Global taxes on finance	12
	2.1 Taxing banks	13
	2.2 Taxing financial transactions	15
	2.3 Tobin tax	19
3	Global environmental taxes	22
	3.1 Taxing international transportation	22
	3.2 Taxing carbon emissions	23
	3.3 Reducing fossil fuel subsidies	26
	3.4 Summing up	27
4	Other global tax proposals	29
	4.1 Taxing the arms trade	29
	4.2 Taxing tobacco	30
	4.3 Taxing wealth	30
	4.4 Taxing resources	31
	4.5 Taxing cyberspace	32
	4.6 Fiscal justice and earmarking	33
5	The reality of international taxation	35
6	The way forward	39
7	Conclusion	41
	References	44
Tables		
Table 1	A catalogue of proposed global taxes	9
Table 2	Special bank taxes in OECD countries, 2013	14
Table 3	Financial transaction taxes	15
Table 4	Carbon taxes and emission trading regimes (ETR)	25

Acknowledgements

An earlier version of this paper is available as a Special Study of the International Tax and Investment Center (ITIC) (<http://www.iticnet.org/file/document/download/4217>). The author is grateful to ITIC for making the preparation of the paper possible and to Hafiz Choudhry of ITIC and his colleagues for making the task much easier than it would otherwise have been. The present version has also benefited from the helpful comments of two anonymous reviewers.

Acronyms

BEPS	Base Erosion and Profit Shifting
CTT	Currency Transaction Tax
EITI	Extractive Industries Transparency Initiative
ETR	Emissions Trading Regime
EU	European Union
FAT	Financial Activities Tax
FSC	Financial Stability Contribution
FTA	Forum of Tax Administrators
FTT	Financial Transactions Tax
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GNI	Gross National Income
GNP	Gross National Product
GRD	Global Resources Dividend
IEA	International Energy Agency
IMF	International Monetary Fund
ISP	Internet Service Provider
ITU	International Telecommunications Union
NAFTA	North American Free Trade Agreement
OECD	Organisation for Economic Cooperation and Development
OTC	Over-The-Counter
RTS	Representative Tax System
SME	Small and Medium-sized Enterprise
SMS	Short Message Service
TIEA	Tax Information Exchange Agreements
UN	United Nations
UPU	Universal Postal Union
VAT	Value-Added Tax
WHO	World Health Organization

Introduction

The main subject of this study is whether there can or should be truly global taxes and, if so, how such taxes might be structured, administered, and their proceeds distributed. Although international tax issues as such are considered here only to the extent that the process through which such issues are or may be resolved may suggest some important lessons with respect to the future of global taxes, it may perhaps be useful to begin by noting both the important difference between international taxation and global taxes and the equally important similarity between them. International taxation is concerned with the interaction of national tax systems. Global taxes are taxes imposed not by any one nation but by a group of nations on a regional or even worldwide basis. However, whether the aim is to make international taxation work smoothly or to establish a global tax, all countries involved must be prepared to give up a certain degree of fiscal sovereignty. The desired conclusion may be quite different, but the process of getting there is essentially the same.

International taxation – or its absence – has been much in the news recently. The headline message that some large multinational corporations have dodged national attempts to tax corporate profits by exploiting holes and havens in the current system of international taxation has been heard.¹ Many politicians in many countries have promised that something will be done to fix this problem. However, as yet it is far from clear what can or will be done. One reason no quick or simple fix is possible is because there is really no international tax system. What exists are separate and different national tax systems that incorporate features intended to deal with cross-border flows and are often, though not always, linked through a complex set of treaties. There is no World Tax Authority, no World Tax Code, and no one is in charge. The absence of any effective global governance system is equally a major obstacle for any global tax proposal.

The fairness, efficiency and effectiveness of the international tax system have long been cause for concern. Beginning with the League of Nations almost a century ago and more recently largely under the aegis of the Organisation for Economic Co-operation and Development (OECD), many attempts have been made to rationalise and unify the bits and pieces that constitute the international tax system. The initial motivation behind such efforts was chiefly to alleviate the double taxation of cross-border income flows. After decades of negotiation between countries and between taxpayers and the various national tax authorities, this goal was largely achieved in the decades after World War Two. In the process, however, inadequate attention was perhaps paid to ensuring that international income was being fully taxed by anyone. It is this problem – the under-taxation of international income flows owing to ‘base erosion and profit shifting’ or BEPS, as the OECD (2013, 2013a) now calls it – that has now moved to the headlines and consequently to the top of the international fiscal agenda.²

In contrast, little attention has been paid to the similarly critical implementation issues that arise with global taxes, and they have been much less prominent in recent public discussion. Over the years, however, many varieties of global tax have been proposed and some continue to be put forward in the context of the ongoing discussion of ‘innovative development mechanisms’.³

¹ The discussion here focuses solely on the taxation of corporate income, which is the main subject currently under discussion in the international arena. The somewhat less complex international problems that arise with respect to personal income taxes and taxes on transactions, such as the value-added tax (VAT), are not considered.

² For the latest from the OECD on this issue, see <http://www.oecd.org/tax/beps.htm>.

³ Useful earlier reviews of global taxes from various perspectives include Steinberg, Yager and Brannon (1978), Cline (1979), Mendez (1992, 1997, 2001), Shome (1995), Frankman (1996), Paul and Wahlberg (2002), Wahlberg (2005), and Herman (2012). Many (not all) of these reviews are by advocates of such taxes; for a notable exception see McMahon (2001).

Some global taxes are envisaged as worldwide, while others have a more regional focus. Some have broad bases and others narrow bases. Some could only be administered by a global (or regional) body but others could be administered at the country level (usually preferably in a coordinated manner). The proceeds of some taxes would be kept by those who collected them; for others the proceeds would be allocated by some redistributive formula. Some global taxes might take the form of surcharges on national taxes; others are envisaged as the possible basis of a new regional or even world tax system. Some are linked to specific expenditure programmes and their proceeds earmarked for particular purposes. Section 1 provides a brief overview of many of the global taxes that have been proposed and attempts to separate the wheat – proposals worth more detailed attention – from the chaff – those that have been little discussed or do not seem worth pursuing further.

Although few think that tax issues played a major role in the recent financial crisis,⁴ a common theme in the ensuing discussion has been that new (and possibly even global) taxes on the financial sector might both alleviate the fiscal problems currently afflicting many countries and reduce the likelihood of future financial crises. For this reason, several such taxes are therefore discussed at a little more length in Section 2 of the paper, followed in Section 3 by a review of some of the ideas for global taxes on carbon emission that emerged in the earlier (and ongoing) debate about global warming. In both cases, some attention is paid also to alternative ways in which the intended objectives of such taxes might perhaps be achieved, for example, through financial regulation instead of financial taxes and through reducing fossil fuel subsidies and emission trading instead of carbon taxes. Section 4 then considers several other proposals for global taxes of various descriptions that have been floated at different times, often with the aim of expanding the resources available to foster the development of poorer countries. The discussion of global taxes is rounded off by a brief look at two broader issues – fiscal justice and earmarking – that frequently come up in discussions of substantive global tax proposals.

Because even the most potentially virtuous global taxes seem unlikely to be adopted in the absence of a more effective and inclusive system of global governance, Sections 5 and 6 consider this important issue. A first question is whether the current ‘soft governance’ approach to resolving the international tax issues arising from the recent financial crisis is likely to produce politically acceptable, technically feasible, and economically efficient and effective results.⁵ If success is achieved in this arena, then perhaps this approach may prove able eventually to produce feasible and acceptable solutions to some of the key implementation issues blocking some of the more important global tax proposals. Viewed from this perspective, the immediate problem is not to develop a global fiscal (or regulatory) solution to such big global problems as global warming, financial instability, and inequality. Rather, it is to develop a more encompassing and effective institutional framework within which to develop and implement better and more feasible solutions to BEPS and other international tax problems. Once such a framework is in place, the world may then be able to deal more adequately with the basic issue that underlies most of the proposals for global taxation discussed here, namely, how best to provide adequate levels of such global public goods as the environmental commons (climate changes, etc.), and to deal with such ‘bads’ as communicable diseases (HIV/AIDS, malaria, etc.), to cite only two of the

⁴ Actually, certain features common to most national tax systems – notably, the treatment of interest deductions -- have arguably made the financial world a bit more unstable than it would be otherwise (Alworth and Arachi 2012) although there has been surprisingly little emphasis on this point in the recent discussion.

⁵ The discussion of this issue draws heavily on an excellent recent review of governance with respect to international tax issues by Eccleston (2012). No attempt is made here to discuss, let alone resolve, the many complex substantive issues involved in reforming the international tax regime. For a very small sampling of the vast literature on issues in international taxation in recent decades, see e.g. Picciotto (1992), Avi-Yonah (2007), Cockfield (2010), Shaviro (2014) and the many works cited in these studies.

items that a recent evaluation of the World Bank listed as shared global challenges facing that institution (IEG 2008).⁶

Summing up, whether one begins by searching for the mirage of global taxation or simply for answers to the real problems arising from the existing international tax regime, any lasting solution appears to require either a radical (and unlikely) change in how the world is run or, more probably but also much more tenuously, the kind of continual complex evolutionary process of inter-state negotiation and compromise that may, if we are lucky, eventually yield some kind of acceptable and perhaps adequate solution. Even if current attempts to rethink and reshape the international tax regime fall short in the end, as past experience suggests is not unlikely, the lesson to be drawn is not that we should give up but rather that we need to think much more about how and in what ways the increasingly interdependent world of the 21st century may perhaps be able to move a few steps further down the road of slowly and painfully adjusting the largely 19th century political structure based on sovereign nation states to deal with the reality of supranational problems.

1 The myth of global taxation

Cleaning up the real world of international taxation is such a herculean task that it is perhaps not surprising that some have sought simpler, more direct, and more innovative ways to achieve such important global public goods as environmental sustainability, financial stability, and perhaps even peace and justice – two goals that are arguably connected to the extent that the failure to provide an adequate standard of life for many produces political unrest and even armed conflict. An interesting example is provided by the array of levies recently suggested as possible sources of ‘innovative international financing’ in UN (2012):

- Royalties on natural resource extraction beyond 100-mile exclusive economic zones.
- Taxes on use of fossil fuels and other emission sources.
- A ‘billionaire’s tax’ of 1 per cent of individual wealth holdings in excess of \$1 billion.
- An air passenger levy on airline tickets, with proceeds earmarked for UNITAID.⁷
- A currency transaction tax collected through a central clearing house.
- A financial transaction tax.

A fuller list of such global tax proposals may be found in Table 1. Over the years, many proposals have been made to impose assorted global taxes and levies to finance the activities of international agencies – often, unsurprisingly, by such agencies themselves. Frankman (1996) mentions, among others, the early benefits-received approach adopted to finance the International Telecommunications Union (ITU) and the Universal Postal Union (UPU), the early

⁶ For interesting and useful discussions of these and such other candidates for global public good status as peace and equity, see the studies collected in Kaul, Grunberg and Stern (1999), Kaul et al. (2003), and Kaul and Conceicao (2006), as well as Kaul (2012), Sandler (1997, 1998, 2002) and Barrett (2007). While this vast subject is not further discussed here, it is perhaps worth mentioning that some writers on this issue appear at times to be pushing for particular solutions to problems that do not much resemble the theoretical concept of public goods. For example, international financial instability may be an undesirable feature often associated with increased international capital flows. However, such instability is not simply a market failure that is a technical by-product of such flows but seems instead to result from particular market failures that are as yet not fully understood (Wyplosz 1999). Similarly, banning even therapeutic cloning and genetic enhancement may well be morally desirable from many perspectives, but it is not clear how such a ban can be characterised as a global public good (Barrett 2007) when such a good is defined as an outcome that makes ‘people everywhere better off’ (Barrett 2007: 1).

⁷ UNITAID is an UN agency established under the auspices of the World Health Organization (WHO) to supply drugs to treat malaria, tuberculosis and HIV/AIDS in developing countries.

ability-to-pay approach suggested for financing the League of Nations, and a variety of proposals put forward for various purposes by such well-known economists as James Meade (progressive taxes based on average per capita income), Keynes (levies on balance of payments surpluses), Jan Tinbergen (a 0.5 per cent tax on selected consumer durables, as well as taxes on non-renewable resources, on international pollutants, a form of ‘brain drain’ tax, and a tax on activities of transnational companies), Mahbub ul Haq (a 10 per cent tax on international arms sales), and James Tobin (a currency transaction tax).⁸

As Herman (2012) notes in a recent review of this literature, although many of the earlier proposals for various global taxes emphasised the importance of creating an automatic source for financing international development, this emphasis has not been nearly so prominent in most recent discussions. One reason is perhaps because experience has shown that countries are reluctant to cede even the most limited taxing authority to international organisations. Of course, formal international organisations of various types have long existed at both the global and the regional level and such organisations need to be financed. Several international organisations including the United Nations (UN) are currently financed by levies on their member countries. However, as Barrett (2007, 128) correctly states, such ‘contributions can only be mandatory if states agree that they are mandatory. But under these circumstances, the amounts raised are determined endogenously’ so that in effect ‘... all international financing is really voluntary.’ The simple fact is that no real global taxes have ever been imposed. Indeed, except perhaps in the face of a major, immediate, highly visible and undeniable threat to planetary survival, the prospects that such taxes will be implemented in the near future seem dim.

Usually, long and difficult negotiations between countries have been required to work out acceptable funding arrangements for international organisations. Once such arrangements have been worked out they have generally proved to be sustainable – indeed, almost unchangeable – for long periods. To cite two long-standing examples, the ITU, established in 1865, and the UPU, established in 1874, were both financed by banded membership assessments, initially with countries being grouped in seven categories, based roughly on their level of development, and all countries grouped in the same category paying the same share of the budget. Illustrating the strength of institutional inertia, to this day the contribution structure of both organisations still resembles that negotiated long ago although it has, as seems common, become considerably more complicated over time, with the UPU now having 11 contribution bands and the ITU 22. As in the beginning, however, member states may still essentially choose to be any band they choose (except that the very lowest bands are limited to the least developed countries).

Table 1 A catalogue of proposed global taxes

Type of tax	Taxes proposed
Taxes on the financial sector	<ul style="list-style-type: none"> • Taxes on international currency transactions (other names – Tobin tax, currency transaction tax, or Robin Hood tax). • Taxes on financial transactions, defined in various ways (other names – speculation tax, global financial tax, financial tax, or financial instruments tax). Such a tax is scheduled to be introduced in some EU countries in 2014; some countries have imposed such taxes in various forms. • Tax on bank balance sheets, adjusted for risk and perhaps other factors (other names – bank tax, bank levy, financial stability contribution, or financial crisis responsibility fee). Numerous countries already impose such taxes (see Table 2). • Tax on financial activities, as measured by some combination of bank profits and bankers’ remuneration packages (other names – financial institutions tax, bankers’ tax).

⁸ The last of these ideas – the subject of an interesting book (Haq, Kaul and Grunberg 1996) -- is discussed further later in the present study.

Environmental taxes	<ul style="list-style-type: none"> • Taxes on the carbon content of fossil fuels (other names – climate change levy, fuel tax; sometimes on narrower bases – coal tax, car tax, or motor fuel tax). Some of these taxes are already levied in most countries (although many also subsidise such fuels in various ways). • Taxes on international transportation (other names – aviation, shipping, international passengers) have been proposed both as one way to tax carbon emissions and as a means to fund specific activities. A ‘solidarity contribution’ in the form of a small tax on air passenger tickets is now imposed in several countries (at different rates and bases) with the proceeds going to a special agency UNITAID, which deals with HIV/AIDS and certain other diseases. • Taxes on international pollutants.
Other global tax proposals	<ul style="list-style-type: none"> • Tax on international trade. Like taxes on transnational companies and taxes on international transfers of investment profit, trade taxes already exist in most countries but global taxes on these various activities have also been proposed, usually to finance aid to poorer countries. • Tax on countries receiving international migrants (‘brain drain’), with the proceeds going to countries of origin. • Taxes on natural resources. <ul style="list-style-type: none"> ▪ Royalties or fees on natural resource extraction (other name – global resources dividend). ▪ Taxes on economic rent from seabed mineral extraction (other name – global undersea resource royalty). ▪ Taxes on non-renewable resources more generally. ▪ Taxes on international fisheries. • Taxes on very high incomes. • Tax on wealth (sometimes called billionaires’ tax). • Taxes on selected consumer durables (e.g. dishwashers, TVs). • Taxes on international arms sales (sometimes called weapons tax or gun tax). • Taxes on cigarettes (or tobacco). Most countries already have such taxes but a special global tax has been proposed to finance international health programmes. • Taxes on digital activities (other names – global internet tax, internet access tax, email tax, text or SMS tax, franchise tax). • Taxes levied on countries to finance international aid and activities. <ul style="list-style-type: none"> ▪ Progressive taxes based on average per capita income. ▪ Taxation on basis of estimated national revenue capacity.

The League of Nations established after World War One was financed on a somewhat clearer ability to pay basis, with country contributions being assessed on the basis of an index based on a combination of population (with the largest European member’s population as an upper limit) and government revenues. Interestingly, the UN, which replaced and expanded the League after World War Two, still receives its ‘basic funding’ (which, however, now constitutes only 10 per cent of total UN funding) from a very similar ‘ability’ related assessment based on Gross National Income (GNI) adjusted for per capita income and some other factors and with upper and lower limits. Most UN activities, however, including the most expensive, peacekeeping, are financed largely on a voluntary basis. All aspects of UN funding, like that of most international organisations, continue to be a matter of considerable political controversy and constant negotiation.⁹

At the regional level, similar essentially voluntary contributions have also been used to fund a variety of international bodies, agencies and organisations, but again, with one exception, none of these many and diverse funding structures can be characterised as a tax.¹⁰ The sole exception is the European Union (EU). Although the EU itself has no tax administration, it has since 1970 been largely funded by its own resources and is not dependent on voluntary contributions from Member States. In addition to 75 per cent of customs duties¹¹ and a progressive personal income tax on its own employees, the EU has two additional sources of own-revenues. Initially, the most important source was a levy on a harmonised value-added tax

⁹ For some interesting (largely pro-UN) reading on this topic, see Mendez (1997) as well as other references cited in <http://www.globalpolicy.org/un-finance.html>. See also the useful appraisal of UN financing in Barrett (2007).

¹⁰ Payments made on a voluntary basis for which specific benefits such as those from belonging to a particular international organisation are presumably obtained in return are not taxes as customarily defined (that is, compulsory unrequited payments to government).

¹¹ The other 25 per cent is kept by the collecting country. The arrangements recently negotiated to finance the EU for 2014-2020 will reduce the share kept by the collecting country to 20 per cent.

(VAT) base (adjusted to be on a comparable base) in EU Member States. Like customs duties, the EU share of national VAT collections is collected by national tax administrations and remitted to the EU. The rate of this levy has over the years been reduced from the initially agreed 1 per cent (raised to 1.4 per cent in 1986) to the current level of only 0.3 per cent. Most of the EU tax burden imposed on Member States – which is currently limited to a maximum of 1.23 per cent of GNP – now takes the form of a residual assessment based (essentially) on the GNP of Member States. As EU (2008) describes in detail, the multi-annual financial framework is considerably more complex than this capsule description and includes a variety of special adjustments for particular countries. As always, who pays exactly how much for an international organisation, whether regional like the EU or global like the UN, is a highly political issue that invariably requires complex negotiations between countries with differing interests and agendas.¹²

The EU VAT levy takes the form of a proportional tax on a similarly-defined consumption base. Moreover, it is collected by existing national tax administrations, subject to EU audit, and the proceeds of this levy are used to fund activities that in principle benefit the entire ‘tax community’. Few of the key characteristics of this closest existing approximation to an accepted global tax – a ‘fiscal contract’ that imposes a flat rate tax on a harmonised consumption base to finance activities that clearly are considered to benefit those taxed (since they have agreed both to join the EU and to pay this tax), which is collected by existing national tax administrations (though subject to some form of global (EU) supervision) – have been prominent in the literature on global taxation. Much more attention has been paid to the remote but presumably highly desired (by the proponents of such proposals) possibility that a supranational taxing authority would be able to impose progressive taxes to fund activities that will, at least in the first instance, directly benefit others than those taxed.

In one of the earliest detailed examinations of global taxes, for example, Steinberg, Yager and Brannon (1978) considered a variety of such taxes that had been mentioned in the earlier literature – on international trade and on international transfers of investment profits, for example, as well as economic rents from seabed mineral extraction.¹³ In addition, however, this study also suggested that development aid (at the level set by the then common target of 0.7 per cent of GNP) could be financed by a shadow tax to be calculated by applying to each country a variation of the ‘representative tax system’ (RTS) familiar from the intergovernmental grants literature.¹⁴ This calculation allocates the tax burden to countries that are richer in terms of their capacity (ability to pay) as measured by the estimated yield of a set of ‘standard’ taxes if levied on the relevant tax base at the average rates applied by all countries. The RTS approach has two advantages compared to most proposals for global taxes: it leaves countries free to collect what taxes they want to collect and involves no international intrusion on national fiscal sovereignty.¹⁵ Many countries (e.g. Canada) have used variants of this approach in allocating equalisation transfers to poorer regions. However, few such countries have thought that the national consensus underlying regional redistribution was strong enough to apply the same

¹² After over two years of negotiation, a new financial framework for the EU covering the period from 2014-2020 was recently agreed. Although the same (1.23 per cent) limit on EU taxation remains and almost no changes in the financing system were made, that the discussion continues is indicated by the fact that a special high-level group is to be appointed to investigate whether the system should be changed in the future (http://europa.eu/rapid/press-release_MEMO-13-1004_en.htm).

¹³ The last of these items, as well as taxes on international fisheries (Cooper 1977), is also discussed in Cline (1979).

¹⁴ Bahl (1972) had earlier used a similar approach in the international context in a pioneering paper on measuring tax effort across countries. In fact, however, an alternative approach based on regression analysis (Bahl 1971) subsequently came to dominate this literature: for a recent analysis, see Fennochietto and Pessino (2013).

¹⁵ In another interesting early contribution, Dosser (1963) suggested that the burden of international aid should be allocated not on the basis of average per capita income but rather on the basis of increases in per capita income on the (perhaps overly optimistic) assumption that giving up a potential improvement in income rather than reducing existing income might make such a global tax approach more politically acceptable.

approach to calculating the extent to which such transfers should be financed by richer regions. Since the politician who could extend this approach to the global level has not been born it is not surprising that, like all attempts to develop an acceptable automatic redistributive formula for global taxation, this proposal never advanced beyond the idea stage.

Indeed, as Frankman (1996: 807) concluded some years ago, 'at the global level, discussion of an organised system of redistribution has not yet made its way to the negotiating table in any meaningful sense'. The same is true today. Frankman (1996: 809) attributed this reality in part to '...the continuing stumbling block of sovereign agreement to grant revenue-raising authority to supranational bodies' and went on to note that, since 'a global economy requires structures of global governance' one must first solve that small problem before being able to resolve the issue of 'financing global order and development through international taxation' (Frankman 1996: 815). The prognosis for extensively redistributive global tax schemes is thus bleak. This is not surprising since any sustainable supranational system must not only provide net benefits (gains from membership less costs of membership) for all member countries as a whole but also provide a net benefit for each and every member if it is to be rational for them to participate in what is, as Barrett (2007) emphasises, an inherently voluntary system.¹⁶ Countries find it difficult enough to build and maintain a sustainable consensus on interjurisdictional distribution within their own boundaries. To do so across and between countries is inevitably a much more demanding task. Nonetheless, as discussed further below, the fact that what some consider morally desirable is unlikely to be achieved in the near future does not imply that nothing can be done to improve matters with respect to either international taxation or the challenges of global public goods. As always, our inability to achieve perfection should not deter us from trying to do better.

2 Global taxes on finance

One global public good (GPG) that has been much discussed recently is international financial stability. Whether or not this is a GPG,¹⁷ a number of corrective tax proposals were put forward during several recent international summit meetings concerned with this problem.¹⁸ The taxes that drew most attention in this discussion were three: the financial stability contribution (FSC), the financial transactions tax (FTT) and the financial activities tax (FAT). This section takes a closer look at these three as well as an earlier and still live suggestion for a special type of FTT, the currency transaction tax (CTT).¹⁹

An IMF (2010) report to the G20 concluded that two of these taxes in particular – the FSC and the FAT – warranted careful consideration. In a comment on this report, a former senior Fund official suggested that, while something like the FSC may indeed make sense as a way of reducing the existing implicit subsidy in many countries to excessive risk-taking by many financial institutions, the FAT – as is perhaps suggested by its acronym – seems to be more a reaction to populist politics than a sensible policy (Rogoff 2010). Not much has been heard

¹⁶ This is a brief summary of arguments developed at length in e.g. Sandler (1998) and Barrett (2007).

¹⁷ Although, as Wyplosz (1999) notes, from one perspective international financial instability may be considered a public 'bad' (a negative externality imposed on all by the actions of some) that may, in principle, be corrected by a correctly designed and implemented fiscal offset (tax). However, it is neither as clearly nor as readily understood to be a correctable externality as, say, the effect of carbon emissions on global warming.

¹⁸ For useful overviews of some of the issues discussed at these meetings, which were widely covered in the financial press, see IMF (2010) and Munk (2013).

¹⁹ There are, of course, many excellent discussions of financial taxes that raise important issues other than those discussed here: see, for an interesting example, Edgar (2013).

about the FAT recently, but the FTT has been much discussed in both the financial and the popular media. As IMF (2010) stresses, cumulative taxes like the FTT, which tax transactions between businesses, are particularly difficult to analyse because of their complex and uncertain effects on business decisions. Since such problems with turnover taxes are one of the main reasons for the (almost) worldwide adoption of the VAT, it is not obvious why countries would want to replicate one of the main defects of such taxes by introducing an FTT. Indeed, one reason IMF (2010) preferred the FAT to the FTT was because a FAT would likely be easier to implement than attempting to encompass the financial sector within VAT and its effects would be closer to those of the (more efficient) VAT than the less efficient, cascading FTT. In practice, however, the financial tax of choice for most countries so far appears to have been some variety of the relatively neglected FSC – the bank tax.

2.1 Taxing banks

Like most financial sector taxes, the FSC is an idea that has surfaced in different countries with many variants and under many different names including bank tax, bank levy, financial bailout levy and financial crisis responsibility fee, all of which are henceforth referred to simply as bank taxes. IMF (2010) suggests that the best bank tax is a flat tax imposed on the balance sheets of financial institutions, preferably with rates varying with the assessed riskiness of the portfolio. Some of the many proposals made along these lines in both global forums and national discussions have suggested that the proceeds of any such tax should be earmarked to an insurance fund to bail the contributing institutions out in any future crisis rather than making taxpayers pay for bailouts. As Table 2 illustrates, taxes more or less like the FSC have proved to be a popular response to the financial crisis, especially in Europe.²⁰ However, as Table 2 also makes clear, almost every country has imposed a somewhat different variant of the FSC, and there is little harmonisation to be seen anywhere. Some of the countries included in Table 2, like others that have not imposed such bank taxes, have also sought similar results – minus the revenue – through various reforms in financial regulation and especially in capital requirements for financial institutions.²¹

In contrast to the FSC approach, which essentially taxes some balance sheet characteristic, a Financial Activities Tax (FAT) is a tax imposed on some combination of bank profits and bankers' remuneration packages. Other labels that have been used for such levies include Financial Institutions Tax (FIT) and Bankers Tax. Rogoff (2010) suggests that there is no rationale for such a tax if the basic regulatory system is adjusted properly – which in practice might mean imposing something like an FSC. On the other hand, IMF (2010) noted that if inappropriate regulatory policy created substantial rents (unearned incomes) in the financial sector and a country decided to subject such rents to special taxation, a FAT could not only

²⁰ The effects of these levies are only beginning to be understood: see, for instance, a recent analysis of the German bank levy (Buch, Hilberg, and Tonzer 2014). For an example of how complicated some of these taxes may be, take a look at the 252-page official manual issued at the time of the introduction of the UK bank levy (available at <http://www.hmrc.gov.uk/budget-updates/autumn-tax/bank-levy-manual.pdf>).

²¹ For the most part governments have chosen not to pursue regulatory ends through taxation, whether with respect to taxing finance or carbon (as discussed below). From a purely fiscal perspective, this may seem sensible: use taxes to collect revenue and regulations to regulate behaviour. However, means and ends can seldom be so neatly divided. Taxes may affect behaviour in the same way as regulations, and regulations may affect firms' profits just as taxes (or subsidies) may do: see the seminal study by Posner (1971) on 'taxation as regulation' as well as such more recent studies as Otsuka and Braun (2002) and Avi-Yonah (2011). While it is not always clear why the regulatory approach seems to be preferred the burgeoning new literature on political economy and behavioural economics is beginning to close this important analytical gap (Congdon, Kling, and Mullainathan 2011). As yet, however, no one seems to have made much progress in applying these emerging techniques to the world of international – let alone global – taxation, so little more is said here about such matters.

generate increased revenues efficiently but also provide a uniquely efficient way to achieve the equitable end of taxing overly generous reward structures.²²

An appropriate FAT to achieve these ends might, for example, be one that taxed profits on a cash flow basis through any of the approaches often discussed with respect to the reform of profits taxation: by allowing both interest expense and a notional return on equity, taxing only net distributions to shareholders, or defining taxable receipts and expenditures to include principal amounts (IMF 2010: Appendix 3). Somewhat similarly, Vella (2012) argued that there was a stronger case for a FAT than for an FTT on both equity and efficiency grounds. In practice, however, although both the UK and France introduced temporary bonus taxes at the time of the crisis, countries have generally been hesitant to single out employees in the financial sector in this way. Perhaps for this reason the EU in 2013 followed the apparently more politically palatable approach of adopting a regulation that will, beginning in 2014, limit bonuses paid to high-paid bankers to the amount of their salary or double that amount if approved by shareholders (PwC 2013). Unsurprisingly, perhaps, by far the strongest opposition to this approach came from the UK.²³

Table 2 Special bank taxes in OECD countries, 2013

	Name of tax	Date imposed	Maximum rate 2013	Comments
Australia	Supervisory levy	1998	0.0044706% ^a	A fee imposed by regulatory authority on the asset value of entities regulated
Austria	Stability levy	2011	0.085% ^b	On balance sheet of banks
Belgium	Subscription (unit) tax	1993	0.0965%	On various bases for different classes of institutions (e.g. certain reserves of insurance companies)
	Stability levy	2012	0.035%	On liabilities less equity and guaranteed deposits
	Annual tax on savings deposits	2012	0.12% ^c	On qualifying deposits less interest attributed in previous year times ratio of qualifying to attributed interest
Finland	Bank tax	2013	0.125%	On combined risk-adjusted assets. To end in 2015
France	Bank levy	2011	0.5%	On risk-weighted bank assets for banks with capital requirement over EUR 500 million
Germany	Bank levy	2011	0.06% ^d	On liabilities with some exemptions
Greece	Bank levy	1975	0.6% ^e	On value of loans made
Hungary	Surtax	2010	0.053% ^f	On adjusted balance sheet total
Iceland	Bank levy	2011	0.04%	On year-end total liabilities
Korea	Bank levy	2011	0.2% ^g	On foreign currency borrowings
Netherlands	Bank levy	2012	0.044% ^h	On 'unsecured' debts (balance sheet equity and liabilities less certain adjustments)
Portugal	Bank levy	2011	0.05% ⁱ	On total liabilities
Slovak Republic	Bank levy	2012	0.4% ^j	On liabilities
Slovenia	Bank levy	2011	0.1%	On balance sheet. To end in 2015
Sweden	Stability fee	2009	0.036%	On liabilities
United Kingdom	Bank levy	2011	0.13%	On global balance (with some exclusions)

Notes: (a) 0.00414% is the cost-recovery rate on authorised deposit-taking institutions, subject to a maximum of AUD 2.1 million. In addition, a rate of 0.000566% is applied to all assets of such institutions. Certain other financial institutions are subject to different rates. (b) Rate on EUR 1-20 billion is 0.055%. An additional levy of 0.013% is imposed on the trading volume of derivatives. (c) Rate varies from 0.03-0.12% depending on ratio of loans granted to 'real economy' as opposed to other financial institutions. (d) Progressive rates with maximum shown applying to base over EUR 300 billion; additional tax of 0.0003% on derivatives held (on or off balance sheet). Maximum is lesser of 20% of (adjusted) annual profits or 50% of (adjusted) annual profits of most recent three

²² The perceived need for either or both an FSC (for efficiency) and a FAT (for equity) would presumably be reduced by closer control of 'unacceptably aggressive tax planning' as proposed in IMF (2010: 10) and discussed at length in OECD (2013, 2013a) as well as by the reduction or removal of the strong tax bias favouring debt financing suggested in Alworth and Arachi (2012), but such matters are beyond the scope of the present study.

²³ The reasons for this opposition are discussed in detail in Seely (2013)'s interesting account of the lengthy UK discussion of both the bonus tax and the bank levy (see Table 2).

years, subject to further limitation that must pay at least 5% of calculated annual contribution. (e) Rate on mortgage loans is only 0.12%. (f) 0.15% up to HUF 50 billion; banks can reduce liability by certain factors. Rates differ for other financial institutions. (g) This is rate on liabilities with maturities of one year or less; rate for longer maturities is lower. (h) This is rate on short-term debt; 0.22% on long-term debt. (i) Also a rate of 0.00015% on derivatives (with some exemptions). (j) Rate varies with amount of levies in previous year and share of total assets of banking sector.

Source: Based on information in OECD (2013b)

2.2 Taxing financial transactions

Despite the popularity of bank taxes like those shown in Table 2, in many ways the current favourite flavour of financial taxation in public discussion is some form of financial transaction tax (FTT) – a tax imposed not on financial institutions as such but on specific types of transactions. Such taxes may be levied on the sale of specific financial assets, such as stock, bonds or futures whether through organised exchanges or over-the-counter (OTC); they may be applied to currency exchange transactions; or they may be general taxes imposed on a variety of different transactions. Brondolo (2011) lists 23 different types of financial transactions that may be subject to such taxes and, as Table 3 shows, many of these possible tax bases seem to have been used to varying extents by different countries. Other names for similar taxes include speculation tax, global financial tax, financial tax, and financial instruments tax.

The attraction of an FTT is obvious: not only are people everywhere still smarting about the behaviour of the financial sector during the recent crisis but such taxes have a potentially huge base and hence yield. However, despite continuing concern about the dangers of speculative bubbles, only a few countries have imposed specific taxes on certain types of financial transactions with the avowed aim of controlling short-term speculative actions. No global or regional FTT yet exists – although, as discussed below, the EU (or at least part of it) is scheduled to introduce such a tax in the near future.

Table 3 Financial transaction taxes*

Country	Year imposed	Rate (max)	Base	Comments
European Union	2014	0.1%	Equities and bonds	0.1% on derivatives
Argentina	2001	0.6%	All financial transactions	
Australia		0.3%		0.15% on corporate bonds
Austria		0.15%		
Belgium		0.5%	Certain financial instruments	Rates from 0.07%; capped (max 750 Euro)
Brazil	2011	1%	Tax on financial operations	Tax on foreign exchange derivatives abolished in 2013; short-term overseas loans and credit card transactions still taxed
Chile	1974		Financial transactions	Imposes 18% VAT on trade costs
China		0.8%	Securities	Rates differ in different stock markets
Colombia	2000	1.5%	Stocks, bonds	
Cyprus		0.15%	Transfers on stock exchange	
Finland	1997	1.6%		Transfers not made on stock exchange
France	2012	0.2%	Equities and similar	
Greece	1998	0.6%	Stocks, bonds	
Guatemala		3%	Stocks, bonds	
Hungary	2014	0.1%	Equities, bonds, etc.	0.01% on derivatives
India	2004	0.125%	Stock exchange	
Indonesia		0.14%	Stocks, bonds	0.03% on bonds; 10% VAT on commissions
Ireland		1%	Transfers on stocks	Stamp duty with rates varying up to 9% on transfers for non-real property
Italy	2013	0.2%	Equities, OTC transactions	0.1% on equities
Korea		0.35%	Stocks, corporate bonds	

Malta		2%	Transfers not on local stock exchange	Stamp duty
Netherlands		6%	Purchase of large amount of shares in real estate company	
Pakistan		0.15%	Stocks, corporate bonds	
Peru	1989	0.08%	Stocks, bonds	Plus 18% VAT on trade costs
Poland		1%	Securities	
Portugal	2013	0.3%	Equities, bonds, other	0.3% on derivatives; 0.1% on high-frequency trading
Russia		0.8%	Secondary offerings	Plus 20% VAT
Spain	2014		Equities and similar	
Switzerland		0.3%	Stamp transfer tax	0.15% on Swiss securities
Taiwan		0.3%	Share transactions	0.1% on corporate bonds
Ukraine	2013	1.5%	OTC transactions	Rates vary up from 0.1%
United Kingdom		0.5%	Securities transfers	Stamp duty
United States			Securities Exchange Commission (SEC) fee	
Venezuela		0.5%	Stocks	
Zimbabwe		0.45%	Stocks	VAT on trade costs

*Information in this table has been compiled from diverse sources that are not always in agreement and refer to different time periods. VAT often applies to commissions and trade costs even when this is not specifically noted and may similarly apply to such costs in countries not listed here. Moreover, countries often change the rates and coverage of these taxes. In short, the table should be seen as only illustrative of the level and kinds of national FTT found in the world.

Sources: Credit Suisse (2013); European Commission (2010); Brondolo (2011); Beitler (2010); Coelho (2009)

As Table 3 shows, many countries have imposed a variety of taxes on various categories of financial transactions in part to help regulate and control the financial sector and in part simply for revenue. Like the bank taxes listed in Table 2, most of the taxes on financial transactions listed in Table 3 are imposed on bases that are not uniform from country to country and that over time have often – like the rates – been changed, usually in response to countervailing forces that Coelho (2009: 2) categorises as ‘... the strong appeal of... a good tax handle in times in public finance distress’ on one hand and, on the other hand, ‘... the controversial nature of the tax, which finds hard to hold when the strong need for additional tax revenue subsides’. Indeed, some countries have a history of imposing, altering, abolishing, and re-imposing such taxes. In addition to the countries included in Table 3, for example, Denmark, Ecuador, Singapore, Sweden, and probably others have had some variety of FTT in the past – some on securities, some on bank debits or transactions, some on currency transactions and some on automated payment systems. Some of these taxes, notably the UK stamp duty (and the similar taxes in a number of countries heavily influenced by British experience), are very old; others, notably the post-crisis levies recently imposed in a number of European countries (European Commission 2010; Credit Suisse 2013) are very new. The simple attraction of a large, expanding, and easily accessible tax base has even led some recent authors to suggest that countries would be well-advised to replace all or most of their existing tax systems with such a tax.²⁴ As Coelho (2009) notes, however, even in Brazil, where his analysis suggests the tax at one time was perhaps the most productive in Latin America, it never yielded much more than 1.5 per cent of Gross Domestic Product (GDP).²⁵ The popularity of taxes on financial transactions is primarily political: although they may negatively impact the cost of capital and hence investment and growth, they are invisible to most people – and who, apart from a few economists, doesn’t think that banks should pay more taxes?

Although much of the initial discussion of an FTT envisaged a global (worldwide) levy, the only real action beyond the country level has taken place at the regional level in the EU. The

²⁴ For such a proposal, see Cintra (2009). A very similar proposal has recently been put forward in India, in part as a way to reduce corruption: see ArthaKranti (2013).

²⁵ European Commission (2010) provides a similarly restrained view of the likely revenue potential of an FTT as well as a useful review of the literature on the incidence and effects of such taxes.

European Commission formally proposed a plan to implement an EU-wide FTT in 2011 with the principal objectives of ensuring that the financial sector contributed in a 'fair and substantial' way to covering the costs of the crisis, discouraging financial institutions from undertaking excessively risky (speculative) activities and, of course, raising revenue. However, the unanimity required to implement such a proposal at the EU level could not be achieved in view of the opposition of such countries as the United Kingdom and Sweden – both of which, interestingly, had had experience with somewhat similar taxes.²⁶ In early 2012 the Commission proposed that two-thirds of the revenue from the tax would go to the EU budget, with the balance to the Member States. Later that year, however, in reaction to resistance to its earlier proposal, the Commission suggested a so-called 'enhanced cooperation procedure' that would allow a minimum of nine EU members to go ahead with the FTT without other Member States being involved. After 11 (out of 27) Member States decided to proceed, in February 2013 the European Commission adopted a proposal for an 11-nation FTT that would come into force in 2014 if approved by all the participating Member States and the European Parliament (Siebert 2013).²⁷ At the time of writing, however, it appears that the 11 had not yet been able to reach full agreement on such basic matters as the scope of the tax and, not least, on how to distribute the revenue, with some countries being very reluctant to see any of the revenues flowing to Brussels. As a result, it now appears that the EU FTT is not likely to be imposed much before 2015 (Fairless 2013).

The EU FTT proposal is for a small tax on the sale or purchase of a wide range of financial instruments when one of the parties to the transaction is a financial institution and one (whether a financial institution or not) is established in a participating Member State. The purchase and sale of shares and bonds is to be taxed at a minimum rate of 0.1 per cent and the exchange of derivatives is to be taxed at 0.01 per cent. These rates may seem low but if a transaction from one investor to another goes through a broker, a clearing house and another broker it would be taxed six times. Although OTC trading is also taxable, it is obviously much more difficult to enforce the tax on such transactions (Brondolo 2011) so some, perhaps considerable, divergence away from organised exchanges to OTC trading may occur. Even more questionable is the fact that the FTT is supposed to be applied even to transactions outside of the participating EU Member States when one party is taxable under the proposal as well as when the financial instruments traded are issued in participating Member States, although it is unclear how this provision could be enforced in many cases. Its scope is bounded by the exclusion from the FTT of transactions where there is no link between the economic substance of the transaction and the territory of a Member State. However, it is expanded by the fact that the definition of a financial institution may include certain non-financial institutions and also non-EU financial institutions with branches in Member States. On the other hand, the scope of the tax is reduced by excluding several important categories such as transactions on the primary market, spot currency transactions, and the issuance of government bonds.

²⁶ The UK stamp duty is generally considered to work reasonably well. It takes the form of a small (0.5 per cent) levy paid by purchasers of UK shares and is assessed and collected primarily through an electronic securities settlement system. However, registered market makers and large banks are exempted from this tax. In contrast, a similar small tax imposed by Sweden in 1986 is usually considered to be a failure. Although initially the rate on share transactions was doubled and the base was soon expanded to include all transactions in shares as well as bonds, the effect on trading volumes was dramatic: most bond trading soon vanished and most (60 per cent) of trading in Swedish shares moved abroad. All financial transactions taxes were abolished by Sweden in 1991. However, Sweden introduced a new 'stability fee' at a rate of 0.036 per cent on the liabilities of banks and other credit institutions in 2009. This levy is similar to the bank levy imposed on bank balance sheets in 2011 by the UK at a rate of 0.05 per cent but as of 2013 levied at a rate of 0.13 per cent: the rate was increased a number of times, largely to ensure that despite reductions in the corporate tax rate, the taxes paid by banks would not be decreased (Seely 2013).

²⁷ The 11 countries – all in the Eurozone – that have indicated they will sign on are Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovak Republic, Slovenia, and Spain. Several other members of the Eurozone (e.g. Finland and Ireland) have at times indicated they too might sign on, but none of the nine non-Euro EU countries seems to have publicly shown much interest in doing so.

Although the original EU FTT proposal (as quoted by Vella 2012: 90) stated that ‘private households and SMEs (small and medium-sized enterprises) not actively investing in financial markets would hardly be affected’, the implication that the incidence of the tax will fall solely and completely on the parties who pay over the tax to the government is unfounded. As IMF (2010) correctly notes, it is naïve to assume that the tax will be borne entirely by rich banks and bankers. Like all taxes on transactions, much of the burden will probably be passed on to users of financial services, both individuals and businesses, and any businesses affected will in turn pass on their share also to consumers if they can. Moreover, although the Commission justified the FTT both on the grounds of fairness and the strengthening of the internal market, it may well end up weakening that market in at least some respects. As Siebert (2013) suggests, it is not perhaps far-fetched to think that this proposal may have been motivated as much or more by populist desires to visit retribution on bankers in return for the pain imposed by the financial crisis as by evidence-based analysis that supported this particular way to adjust the institutional structure of financial sector activity in the EU.

In any case, the expected objections to such taxes have been heard from the financial sector itself. As an example, the Institute of International Finance (2013) presents five arguments against the EU FTT. Three such arguments apply to all such taxes, while the last two relate to the limited geographic coverage of the EU FTT:

1. It will hurt savers and pensioners among others because its ultimate burden will be borne by end-users of financial services.
2. It will reduce market liquidity resulting in higher volatility, higher transactions costs, and a higher cost of capital.
3. It will be ineffective because over time the system will work around it.
4. It will place affected institutions at a competitive disadvantage and lead to loss of jobs in the participating Member States.
5. It will create serious extraterritorial concerns for non-EU investors and reduce capital flows.

All of these arguments have been countered with varying degrees of effectiveness by the European Commission (2010) as well as by many others such as Schulmeister (2012) and Schaefer (2012). To take the first point, although it was noted above that it was naïve to assume that the FTT would stick where it hit, it is equally naïve to assume, as such opponents of the tax as the Institute of International Finance (2013) seem to do, that all or even most costs will necessarily be passed through to end-users – let alone to such politically resonant categories as savers and pensioners. Does anyone really believe that there are no ‘rents’ in the financial industry, as such statements seem to assume? All that can really be said with certainty is that no one knows how any FTT will be shared between the owners and employees of financial institutions, their immediate customers and others.

Similarly, arguments can easily be made – and supported or refuted by selective recourse to the unsatisfactory and uncertain evidence – for and against the other points in the above list. For example, while the second claim is supported by some studies (e.g. Oliver Wyman 2012) it is countered by others, including the European Commission’s own Impact Assessment accompanying the original FTT proposal which noted, correctly, that ‘... the effects of the FTT on volatility is largely inclusive and depends on market structure’ (as quoted by Vella 2012: 94). Moreover, there is really not much to support either side when it comes to deciding whether a financial market with FTT will be less prone to crisis than one without FTT. All in all, without going further into the many complex details of what is a growing but still far from definitive body of analysis, as Vella (2012: 90) concludes, all too often both proponents and opponents of the

EU FTT seem to be making assertions ‘... with an assuredness and lack of qualification that, at best, masks the uncertainty which underlies them’.²⁸

Finally, while, as mentioned earlier, not all details of how the EU FTT will work are fully clear, and no doubt many problems will be encountered in attempting to implement this levy in a number of very different countries, the extensive experience that these and other countries have had with related taxes (Table 3) suggests that to say that it will be ineffective and will result in lost jobs and reduced capital flows overstates the case somewhat. As both the IMF (2010) and Brondolo (2011) conclude, the existence of similar taxes in many countries and the similarity of the international aspects of the administrative problems involved to the problems that already exist with other taxes suggest that, although an FTT is indeed unlikely to work perfectly and may well – like most taxes – give rise to some distortions, it can in all likelihood be made to work satisfactorily without bringing ruin to those countries that choose to impose it. Nonetheless, introducing such a cascading tax on the financial sector seems unlikely to make countries better off on balance, given the uncertainty of its stability effects, which appear highly sensitive to the detailed structure of financial markets, and the likelihood that at least some dampening of investment and growth will occur.

2.3 Tobin tax

Although the FTT has sometimes been called a Tobin tax, this term is more accurately used for a tax limited only to international currency transactions (also sometimes called a currency transaction tax (CTT) or, more colourfully, the Robin Hood Tax). Interestingly, while this idea has been around for a long time, having been initially proposed by a Nobel prize-winning economist (Tobin 1974, 1978), major institutions and countries have not so far demonstrated much interest in moving in this direction. Somewhat provocatively, one reason for this reluctance may be simply because the CTT has been examined more carefully than most other global taxes on finance that have been proposed recently. In summing up a useful volume of diverse papers on the Tobin tax, Eichengreen (1996: 285) concluded that, before adopting such a tax, more definitive answers were needed to ‘... questions about the operation of foreign exchange markets: the scope for asset substitution, the feasibility of market migration and the possibility that foreign exchange transactions might be reorganised on an over-the counter basis’ as well as to ‘... questions about the political economy of taxation: about the economic as opposed to the statutory incidence of the Tobin tax and about the political coalitions that are likely to form in favour and in opposition’. As suggested above with respect to the EU FTT, although considerable useful research has been carried out on some of these matters since this passage was written, our understanding of both the economics and the political economy of such proposals has not yet reached the point where such taxes are likely to be easily accepted regionally, let alone globally.

Nonetheless, taxes on international currency flows have been long been taken seriously by economists and have been the subject of considerable analytical work. Tobin’s original proposal was aimed at reducing volatility in the foreign exchange markets – an issue about which there is still considerable discussion. As Rajan (2003) notes, for example, a good case can be made for a small tax on such transactions as part of the set of safeguards – prudential regulations, liquidity enhancing measures, and restraints on financial flows (including the Tobin tax) – intended to prevent rather than resolve financial crises. Owing to its likely effects on market

²⁸ There is of course a large literature on the FTT which is not reviewed here, ranging from such early overviews as Spahn (1995) and Shome and Stotsky (1995) to more recent policy-oriented papers such as TUAC (2010) and Griffith-Jones and Persaud (2012) and more analytical papers like Bierbrauer (2012) and Fricke and Lux (2013).

expectations, the immediate result of imposing such a tax once a crisis has occurred, however, may perhaps exacerbate rather than improve matters.²⁹

Rajan (2003), like many who have written about the Tobin tax, emphasised the desirability of imposing it permanently on a global basis and using the revenue redistributively as a supplement to aid.³⁰ However, his analysis did not presume either of these features since in effect it considers the Tobin tax to be like any other Pigouvian tax (named after Pigou (1920)) intended to correct undesirable externalities. From this perspective, the government in any country large enough for the expected benefits from reducing the negative externality to offset any jobs lost in the affected sector cannot lose from imposing such taxes if they are properly designed and applied. If the tax base is highly elastic, the undesired activity will be deterred to some extent, which is, by definition, a desirable result. If the tax base is less elastic, the deterrent effect of the tax will be less but in compensation, it will generate more revenue from a less distorting tax system, which no government should really view as an undesirable result. If a national Tobin tax were indeed such a win-win levy, it is surprising that the United States and perhaps the Eurozone countries have not already jumped on this bandwagon.

In fact, as Stubbs (2012) discusses in detail, no country has done so, although Brazil and Chile have arguably at times come close.³¹ As Coelho (2009) notes, the few national examples of the Tobin tax have generally been established in response to a specific national economic crisis and then removed when the crisis was past. The electronic basis of the clearing and settlement system currently operating in most countries with large currency transfers suggests that the administration of such taxes should be relatively simple (Taskforce 2010). However, there seems to be no realistic prospect for global currency transaction taxes (Stubbs 2012). The reason is simple: there is insufficient agreement on the need for such taxes, on the appropriate basis for such taxes, on the structure of such taxes, on the use to be made of any revenues such taxes may generate or, most importantly, on who would decide on all these matters and how. Before the day of global taxation can begin to dawn, these fundamental problems need to be overcome.³²

Consider, for example, the unusually well worked-out proposal in Taskforce (2010) for a global tax on international currency transactions. This report suggests that this CTT – labelled, presumably for reasons of marketing, the Global Solidarity Levy – should be administered by ‘... an authority with formal oversight powers for licensed international settlement infrastructure and executive oversight of the proposed settlement institution’s tax-raising functions in conformity with the legislation in the jurisdiction of residence or operation of the settlement institution’ (Taskforce 2010: 28).³³ It then goes on to propose (1) that the arrangements to create such an authority should be worked out by an inter-governmental tax commission, to be chaired by the IMF and convened by such worthies as the finance ministers and central banks of the G20 and the countries that host the larger international financial centres, the Board of Directors of the Bank of International Settlements, and representatives of the World Customs Organisation

²⁹ For a recent result suggesting that, on the contrary, the Tobin tax is effective in reducing exchange rate volatility even in turbulent periods, see Damette (2013), which also provides a useful review of the conflicting theoretical and empirical literature on the effectiveness of this tax.

³⁰ Essentially the same position was taken more recently by ECLAC (2011), with respect to both the FTT and the Tobin tax.

³¹ The (recently largely abolished) Brazilian tax – the tax on financial operations (usually called IOF after its Portuguese initials) is described in Coutinho (2012); for an analysis of the earlier Chilean experience, see Agosin and Ffrench-Davis (1996).

³² Even if countries were convinced that they could impose such a tax with few undesirable consequences, it would of course require a very different political decision for them to agree to devote any revenues thus gained to international development.

³³ The settlement institution envisaged in Taskforce (2010) is based on the Continuous Linked Settlement Bank, a privately organised network of banks providing an institutional framework for trading in most world currencies.

Council, and (2) that the proceeds of the CTT to be imposed on all international currency settlements should flow to a Global Solidarity Fund which will disburse the funds collected as determined by ‘... its own decision-making board comprising a range of stakeholders including civil society and business sector [from developed and developing countries] together with the Consultative Forum [which would include NGOs and other stakeholders not on the board]’ (Taskforce 2010: 31). Unfortunately, since no one has yet come up with any acceptable way to establish any such global administrative entity – let alone the World Tax Organisation proposed by Tanzi (1995)³⁴ – establishing an automatic way of channelling increased resources to fund development seems still to be a bridge too far down the road to global government to be attainable in the near future.

As Morozov (2013) notes, those who oppose social change invariably adopt one of three themes:³⁵

- Perversity – the proposed change will not improve matters but worsen them.
- Futility – the proposed change will have no effects in the long run.
- Jeopardy – the proposed change will threaten some existing hard-won achievement.

Many of the arguments made in opposition to the FTT can be categorised in these terms. Some have argued that rather than reducing the volatility of financial markets, the result may be to increase it, or that any benefits obtained would be more than offset by the administrative and compliance costs such levies will impose. Others have said that it would either prove impossible to administer such taxes or that over time any initial effects would inevitably be cancelled out by market adjustments. Still others have emphasised that the tax will reduce investment and growth and hence jobs, or eliminate good jobs in the financial sector, or require giving up some sovereignty to unelected (and presumably untrustworthy) foreigners.

On the other side of the debate, the recent discussion about the bad behaviour of the financial sector and the perceived need to impose additional forms of regulation and taxation on this sector (both to compensate the rest of us for their past errors and to prevent them imposing similar negative externalities in the future) implicitly implies that the Wall Street interests of the wealthy few have dominated the Main Street concerns of the less wealthy many. In reality, however, as Eichengreen (1996: 283) noted, this dichotomy does not describe present reality. Most of us now live on Wall Street in the sense that we are all engaged to some extent, whether we are aware of it or not, in an international market: most businesses are, directly or indirectly, affected by what happens in interdependent international financial markets as are all households with pensions or other assets (including housing). It follows that measures affecting those markets are in all likelihood going to flow through and affect all of us, and not always in obvious ways. For example, although the final incidence of global taxes – in other words, whose real income is affected – is seldom if ever confined solely to those who pay the money over to the taxman, even if much of the tax ended up taxing savers and investors it would still be progressive (Michalos 1997). Nonetheless, even in democracies dominated by the middle class (that is, those who have some assets) a critical mass of voters may be unhappy with this result. Perhaps if such taxes were to be coupled with higher taxes on the rich (and perhaps also more support for the marginal middle class) and hence reduced inequality, especially in terms of opportunity, they may become accepted (Bird and Zolt 2013) but these deep and dark waters cannot be further explored here.

³⁴ The related remark by another international expert that ‘... the idea of an autonomous international tax institution has, perhaps, arrived’ (Shome 1995: 25) has, it seems, turned out to be rather optimistic.

³⁵ He attributes this useful categorisation to Hirschman (1991).

3 Global environmental taxes

Well before the recent concern about the potentially undesirable effects of cross-border currency flows and financial speculation, other forms of global taxation had been suggested as possible ways to achieve two apparently contradictory ends – discouraging activities which demonstrably (or at least arguably) harmed others than those who decided to carry out such activities and at the same time producing additional revenue. The idea of using taxes to offset the mispricing (or divergence between private and social costs) that may induce private decision makers to take action that impose costs (negative externalities) on others has of course long been familiar in the form of Pigouvian taxes. Only in recent decades, however, has this concept received much emphasis in the global context, particularly with respect to the issue of financing global public goods.³⁶ Four examples of such taxes are taxes on the arms trade, taxes on tobacco, taxes on international transportation, and, most importantly, taxes on carbon emissions more generally. By far the most important of these is the last, which – together with the related issue of taxing international transport – is discussed in this section. The other possible ‘externality’ taxes mentioned are discussed more briefly in the next section.

3.1 Taxing international transportation

Global tax proposals relating to aviation and shipping have largely been made in the context of discouraging carbon emissions. Perhaps partly for this reason, such proposals have often ignored the existence of a myriad of existing international agreements that shape the present national tax systems on such traffic and distribute revenues between countries (Keen, Parry and Strand 2013). For example, Oxfam (2011) proposed a tax of \$25 per metric ton (tonne) of carbon emission as a way of taxing the estimated 3 per cent of carbon emissions coming from international shipping. As is not uncommon in this literature, the proposal focuses less on the technical and institutional way in which such a levy might be implemented or about its effects and more on the more politically attractive question of how to allocate its proceeds. Forty per cent of the revenue was to go to developing countries to offset increased shipping costs with at least a similar share going to a Green Climate Fund which would also be directed to developing countries to help them adapt to climate change and control their emissions. The balance was to be spent on developing cleaner shipping. Allocating funds in such ways is presumably intended to muster political support for the proposal.

However, since the real benefits from taxing negative externalities are associated with the tax rather than the expenditure, more attention should be paid to the fact that agreement on the need for international cooperation is required by developed and developing countries as well as the industry if such taxes are to be successfully implemented (Keen, Parry and Strand 2013). Much the same may be said with respect to taxing international air travel. As in the case of shipping – and indeed with respect to reducing carbon emissions in general – a sensible way to launch any reform in this area would seem to be to focus first on the substantial extent to which the carbon-emitting activities associated with international transport are now in effect subsidised through under-taxation, in part owing to deliberate national policy decisions and in part as a result of the network of international agreements on the taxation of such activities that have evolved over the years.³⁷

³⁶ See the references cited in note 6 above.

³⁷ For more on the subsidy issue, see the discussion of fossil fuel subsidies below as well as the discussion of the specific arrangements in international transportation in Keen, Parry and Strand (2013).

The idea of imposing global taxes on international air travel as a means of financing development was suggested at least 50 years ago (Seers 1964). Unlike most such proposals, however, this idea became a reality at least to a limited extent when nine countries (France and a number of developing countries) imposed a small tax on air passenger tickets – the so-called solidarity contribution – in 2009, with the proceeds going to UNITAID.³⁸ The tax varies in different countries but in 2013 in France it was imposed at the rate of one euro for a domestic economy seat, ten euros for a higher-class seat, six euros for an international economy seat and 40 euros for a higher-class international seat.

UN (2012) suggests that one reason this small levy appears to have been accepted by the public is because it is earmarked for a popular cause. This hypothesis appears to be untested. An interesting recent study by Kaufman, McGuirk, and Vicente (2012) suggests that, even though survey evidence indicates that people in most countries believe their country spends much more on foreign aid than it actually does, it also shows that they would nonetheless like to see even higher levels of aid than those they perceive.³⁹ Two notable exceptions to this conclusion are the US and Japan, where perceived aid levels exceed desired aid levels. Even in these countries, however, the data suggest that most people would still apparently support increasing aid above its current level.⁴⁰ Counterbalancing the apparently high degree of support for increased foreign aid in some EU countries, an early EU working paper on the tax on air tickets concluded the amount likely to be collected from a voluntary surcharge on such tickets might not be sufficient even to pay for the cost of administering the system (Commission 2005). When the EU included international air flights in its more general emissions trading system (see below) in January 2012 for flights to and from European airports, in effect it introduced such a carbon tax (though one that produced no revenue). Subsequently, however, the EU first suspended the tax for flights to and from non-Member States and then, in October 2013, revised the tax so that it applies only to the portion of such flights occurring within EU territory (and with flights to and from many developing countries being exempted).

3.2 Taxing carbon emissions⁴¹

Fifty years ago high school students were, at least in Canada, told more about the prospect of a 'little ice age' than about the dangers of global warming. Times have changed. One of the most striking results of the substantial scientific work on climate change that has been carried out in recent years has been to reinforce the case that not only is something is going on with respect to global warming but that we should do something about it. Even Canadians, who react like others to pictures of lonely polar bear cubs floating on an ice floe in their rapidly receding frozen north, are becoming worried. In 1997, after lengthy discussion and negotiation, the first binding international agreement on climate change, the Kyoto Protocol, to which most countries in the

³⁸ Arguments supporting such a tax may be found, for example, in WHO (2009). On UNITAID, see note 7 above.

³⁹ Economists are sometimes a bit sceptical of results based on even the best-constructed survey data. Hirschman and Bird (1968) suggested years ago that one way to test the extent to which taxpayers were really willing to support foreign aid might be by permitting them to earmark a small fraction of their income taxes for this purpose, but no one appears to have done so. Even in the (unusually and consistently generous) Nordic countries the linkage between how much (and what kind of) aid the public would support if they had the choice and what is actually done by their governments seems rather tenuous (Selbervik and Nygaard 2006).

⁴⁰ The Netherlands is also an exception. Kaufman, McGuirk, and Vicente (2012) suggest that one way to reduce what they label the 'democratic deficit' between the aid people seem to want to support and the amount of actual aid might be for governments to 'match' charitable expenditure abroad in the same way as they match (usually through the tax system) charitable donations domestically. This is already done to a limited extent in some countries; in Canada, for example, foreign donations are given the same tax treatment as domestic donations when given to a charity to which the government has itself given funds.

⁴¹ Many government policies affect the 'price' of carbon emissions such as energy efficiency standards, fuel taxes, and support for renewable energy. However, only emissions trading schemes, carbon taxes, and the removal of fossil fuel subsidies are considered here. Other greenhouse gas (GHG) emissions such as nitrous oxide are not discussed.

world were parties, was agreed; it came into effect in 2005.⁴² The United States neither signed nor ratified the Protocol (and Canada, which had done both, formally withdrew in 2012). In contrast, the EU not only signed and ratified the Protocol but introduced an emissions trading scheme as its major instrument for emissions reduction. A recent review of several dozen studies of the effectiveness of this scheme in reducing carbon emissions and its possible effects on growth and employment concludes that, on the whole, the results of such studies may best be summed up as ‘not conclusive’ (Martin, Muuls and Wagner 2012).

Nordhaus (2011) goes further and argues that not only has the Kyoto Protocol failed to produce any noticeable reduction in global emissions but that its ‘inefficient and opaque’ approach to the problem does not provide a sound basis for dealing with the problem of climate change arising from carbon emissions. This conclusion is not surprising. As Nordhaus (2011: 10) says, ‘... thousands of governments, millions of firms, billions of people, all making trillions of decisions each year – need to face realistic prices for the use of carbon if their decisions about consumption, investment, and innovation are to be appropriate’. To bring such results about is not easy in a world in which obligations can be imposed on a sovereign state only with its consent. The bottom line is that everyone – or at least most – may perhaps be able to agree at some point that we should do a better job in controlling carbon emissions. But it is difficult to measure the relevant costs and benefits of doing so given the complexity (and time dimension) of the problem and there are major distributional concerns with respect to both costs and benefits. Uncertainty combined with conflicting interests is a recipe for delay and inaction, as the climate debate has amply demonstrated.

The world has, over the centuries, managed to develop various instruments and institutions that with varying degrees of success attempt to deal with such problems. Good arguments that are persuasive to most economists (Nordhaus 2011) can be made in favour of carbon taxes instead of the type of quantity regulation embodied in the Kyoto Protocol. Since, as mentioned earlier, it is the tax and not how it is spent that is important, the simplest approach would seem to be to let countries collect any agreed uniform carbon tax and spend it as they wish. Unfortunately, it is not easy to determine how to develop and implement the conceptually ideal system of a uniform tax on carbon emissions from every source everywhere in the world. Even in the EU, where concerns about global warming have had most effect on policy, most such policies have tended to take the form of quantitative controls, regulation, and subsidisation of supposedly more carbon-efficient alternatives such as renewable energy sources (wind, solar) rather than tackling the deep public reluctance (and industry resistance) with respect to the outright imposition of carbon taxes. No one really knows how best to achieve desired policy outcomes through the regulatory approach and, as experience in many fields suggests, as a rule it is not all that difficult to manipulate regulations (and regulators) to generate rents for some while failing to produce the apparently clear and precise outcomes they seem to offer.

A carbon tax – a simple levy of a fixed amount per unit of carbon emissions – is preferable to the more complex approach of an emissions trading scheme, which places a limit on total emissions and allows permits, up to that cap, to be traded in order to establish a uniform price for the ‘right’ to produce carbon emissions. The tax approach has several advantages. Taxes yield revenues, whereas most existing emission trading schemes, such as that for carbon emissions in the EU, basically give the right to emit pollutants away to existing producers, thus dissipating any

⁴² The Kyoto Protocol committed countries to meet international binding targets for reducing GHG emissions, with heavier burdens being placed on developed countries as being primarily responsible for the increased GHG found in the atmosphere: see http://unfccc.int/kyoto_protocol/items/2830.php. For a useful overview of the lack of effective enforcement under this agreement, see Gillenwater (2013). As usual with such international agreements, the targets set are mandatory only to the extent that countries voluntarily live up to them.

potential revenue. To avoid this outcome, some jurisdictions (e.g. California) have auctioned off allowances rather than dispensing them for free. However, the second advantage of a tax – that it is fixed – cannot be so easily attained with an emissions trading scheme even when allowances are auctioned because the price of emissions will vary, thus creating potentially distortionary effects on investment and production decisions. To deal with this problem, additional provisions are needed to stabilise emission prices, essentially by government setting floor and ceiling prices and selling additional allowances when prices near the ceiling and buying them when they near the floor. As Keohane (2009) and others have argued, in principle, with careful design and management one can craft an emissions trading scheme that would achieve the same results as a simple uniform carbon tax. In practice, however, as the existing array of emission trading regimes (ETRs) set out in Table 4 suggests, no one has come close to doing so.⁴³ Finally, taxes are simpler to administer than ETRs and do not require the creation of a new regulatory authority. In short, though far from simple, carbon taxes are easier to design, simpler to administer, and more likely to be effective than equivalent regulatory approaches. Nonetheless, as Table 4 shows, although a number of early adopters like the Nordic countries did impose such taxes on fossil fuels, most recent adopters have instead favoured various versions of ETRs whether at the subnational, national, regional, or – as the Kyoto Protocol shows – global level.

Table 4 Carbon taxes and emission trading regimes (ETRs)

Jurisdiction	Year introduced	Rate US \$/tonne ^a	Base ^b	Estimated coverage of emissions	Comments
EU	2005		CO ₂ and two other gas emissions	45%	ETR
Canada: BC	2008	\$39	Fossil fuels		Offset by lower income taxes
Canada: Quebec	2007	\$9.89		30%	ETR auction reserve price, to increase by 5% plus inflation annually
Denmark	1992	\$26	Fuels other than petroleum		To increase by 1.8% annually until 2015
Finland	1990	\$39-\$78	Fossil fuels		Rate depends on fuel type
Ireland	2010	\$26	Fossil fuels		
Netherlands	1990		Fossil fuels		
Norway	1991	\$4-\$71	Mineral oil, gasoline and natural gas		Rate depends on fuel type and usage
Slovenia	1997	\$20			
Sweden	1991	\$163			Fixed rate
Switzerland	2008	\$19		10%	Fixed rate
UK	2001	\$7			Carbon price floor; scheduled to increase to 2020
Australia	2012	\$24		60%	ETR fixed price, to increase by 2.5% plus inflation
China	2013			35-60%	Pilot ETR in 2 provinces and 5 cities
India	2010		Coal		
Japan	2012	\$3	Fossil fuels	20%	ETR in 3 cities. Price scheduled to increase gradually over next few years
Kazakhstan	2013			50%	ETR
Korea	2015			60%	ETR
New Zealand	2008	\$0.85		50%	ETR fixed price ceiling
South Africa	2015	\$14			Substantial exemptions for most firms. To be increased by 10% a year until 2020

Notes: This table combines incomplete and not always compatible information from several different sources for illustrative purposes only. (a) 2013 prices per metric ton of CO₂. (b) Base is usually carbon content of fuels unless otherwise indicated. All countries also

⁴³ For descriptions of existing market-based mechanisms for reducing carbon emissions in the form of both emission trading regimes and taxes, see OECD (2013c) and World Bank (2013).

apply other taxes on motor fuels and most exempt certain uses. Sources: World Bank (2013); OECD (2013c); Vivid Economics (2012); various news sources on specific countries.

The reasons why most countries prefer the more complex (and uncertain) ETR approach over carbon taxation are primarily political. That a carbon tax produces revenue may be seen to be a problem rather than an advantage for two distinct reasons. First, some may object to additional taxes of any sort, and such protests will undoubtedly be heard even if the revenues from the carbon tax are used to replace other, more obviously distorting taxes, such as corporate income taxes. There are always both losers and gainers with any tax change. Because losers are seldom happy to lose while gainers are often unaware that they have gained, the political calculus inevitably favours losers. Secondly, if the revenues are indeed additional – and perhaps even if they are not – there are always arguments about whether other taxes should be lowered or if expenditures should be increased and, if so, which expenditures. Some will argue for more to the poor, others for compensatory expenditures to regions, industries or groups that may lose from the imposition of the tax, and still others for earmarking revenues to activities seen to serve the same goal of environmental improvement such as expanding solar and wind power generation.⁴⁴ In contrast, an emissions trading scheme may appear to be a winner from a political perspective (perhaps especially if it inefficiently allocates existing producers tradable emissions rights for free) since governments can then claim to be doing ‘something’ without appearing to hurt anyone.⁴⁵

The long-standing debate about carbon taxation received new impetus recently when the IMF (2013) issued a report (responding to earlier G20 communiques in 2009 and 2012) concluding that not only are additional taxes on carbon emissions needed but that it is also essential in pricing properly the economic damage created by carbon pollution to eliminate the subsidies for fossil fuel use that exist in many countries. Like all proposals for carbon taxes, the IMF report was immediately criticised – for one example, see Lewis (2013) – for many reasons, some plausible (such as the uncertainty of many of the estimated parameters) but many seemingly based on little more than simple assertions about the evil of the (presumed) international control of the revenue or about how badly it would be used even if spent by the governments that collected it. However, almost none of these criticisms weaken the strong case made in IMF (2013) for reducing subsidies to fossil fuels.

3.3 Reducing fossil fuel subsidies

Indeed, subsidies to the production and consumption of fossil fuels in many countries are so inefficient and inequitable and the budgetary impact of eliminating them so obvious (IMF 2013) that it is surprising that so much effort has been spent on reaching an international agreement on carbon emissions control through regulation and taxation, when it may appear to be so much easier just to revise bad subsidy policy.⁴⁶ Of course, even if all subsidies are abolished a strong case could still be made for additional carbon taxation (IMF 2013), but it appears to be at least

⁴⁴ The same phenomenon may emerge with an emission trading scheme if firms are permitted to satisfy their quota by spending on such emission-reducing activities instead of reducing emissions directly. In practice, it appears to have been difficult to measure and verify such offsets (Keen, Parry and Strand 2013).

⁴⁵ A more comprehensive model of the political distortions that may arise from both the regulatory and the taxation approach to dealing with externalities by Masciandaro and Passarelli (2012) shows that both approaches are all too likely to end up being distorting. Determining which is more likely to be better given the national, let alone international, political setting requires knowing a number of things that we are, alas, unlikely to know. Life is difficult to model.

⁴⁶ As McLure (2013) documents, fossil fuel subsidies use up over 10 per cent of budgetary revenues in at least 21 poor countries, including such giants as India, Indonesia, Pakistan and Egypt as well as such other countries as Thailand, Sri Lanka, Vietnam, Malaysia and most oil-producing countries. He reports that, for the 37 countries for which the International Energy Agency (IEA) had complete data for 2011, the average fossil fuel subsidy rate was 24 per cent, with 54 per cent of the total subsidy going to the consumption of oil products, 20 per cent to natural gas, and the balance mainly to electricity generated by fossil fuels.

as hard to take away a subsidy as it is to impose a new tax. A country – indeed the world – may well lose in environmental as well as budgetary terms from subsidising fossil fuels and, as McLure (2013) shows, the benefits of such subsidies may flow mainly to those with higher incomes (and hence more ways to use cheap fuel). Nonetheless, it is always and everywhere difficult to take a fiscal benefit away from anyone without giving them something roughly equally valuable in return.⁴⁷

Subsidies provide jobs for some (e.g. coal miners), direct benefits for others (e.g. vehicle owners), and to some extent indirect benefits to everyone (e.g. through lower transport costs). The sum total of these benefits may be less than the costs imposed on the country (not to mention on the world as a whole) by the combination of the less efficient use of scarce investible resources and the external costs of increased pollution arising from the subsidy. However, such costs are – apart from such highly visible instances as a bad air day in Beijing – difficult to understand compared to the headlines generated by the direct and visible losses to some that result from reducing fuel subsidies. Many governments require the support of those who lose from altering subsidies, and it is not surprising that attempts to reduce subsidies have often aroused strong and sometimes violent public opposition (e.g. from taxi drivers and farmers) with the result that governments wishing to stay in power have soon backed down and restored the subsidies.

Nonetheless, fossil fuel subsidies are almost always a bad idea, for many reasons:⁴⁸

- They discourage investment in the energy sector.⁴⁹
- They may crowd out growth-enhancing public spending (e.g. on education).
- They diminish the long-term competitiveness of the private sector.
- They create incentives for smuggling.
- They make it more difficult to deal with the volatility of international energy prices.
- They complicate budgetary management.
- They create substantial negative externalities (ranging from global warming to such more local concerns as pollution, excessive vehicle traffic, and overuse of irrigation pumps) and hence environmental and health costs.⁵⁰
- They increase global energy demand and prices
- They often – indeed, in all likelihood, almost always -- are inequitable and mainly benefit higher-income groups.

These are strong arguments. There is a good case in both environmental and fiscal terms for reducing fossil fuel subsidies in many countries (McLure 2013), although doing so may, like any changes in energy prices, raise complex political and technical issues.

3.4 Summing up

By far the most important form of global tax intended to counter negative externalities is a tax levied on the carbon content of fossil fuel – in effect, a form of carbon pricing that would act like an environmental fee on the production, distribution or use of fossil fuels such as oil, coal and natural gas. The amount of the tax depends on how much carbon dioxide each type of fuel emits

⁴⁷ For further development (in a different context) of the concept that an implicit ‘fiscal contract’ underlies politically sustainable fiscal policy in most countries, see Bird and Zolt (2013).

⁴⁸ This list is based largely on IMF (2013).

⁴⁹ Incidentally, subsidies to forms of energy production that are less obviously polluting – biomass, wind, solar – are themselves often distorting and may have undesired effects.

⁵⁰ As Zivin and Naedel (2013) document, there is increasing evidence that the negative impact of worsening environmental conditions on growth and well-being is even stronger than previously thought.

when it is used to run factories or power plants, provide heat and electricity to homes and businesses, drive vehicles and so on.⁵¹ Many varieties of taxes have been discussed under this general heading – climate change levy, fuel tax, motor fuel tax, coal tax, car taxes. Importantly, unlike many of the proposed ‘global’ taxes discussed in this paper, various forms of carbon taxes have actually been introduced in a number of countries in recent years, as shown in Table 4, in addition to the substantial taxes imposed for more purely fiscal reasons on motor fuels in almost all countries.⁵²

Of course, there remain serious political problems in working out how to deal with such global problems owing in large part to the differing inter- and intra-country distributional impacts of corrective policies. When so many countries, from the richest to the poorest, have been unable to move very far in this direction even when there is strong evidence (as in the case of reducing fossil fuel subsidies) of the direct benefits to them from doing so, the prospects for sensible global policy on carbon emissions remain remote. It took the great smog of 1952 in London, which killed at least 4,000 people and left at least 100,000 ill, for England to adopt the Clean Air Act of 1956, which ended the choking yellow smog that had for decades blanketed its capital city.⁵³ Something similar may be happening in China now, where the recently launched effort to reduce air pollution has no doubt been stimulated at least in part by the fact that, as in the case of London, national leaders, like other inhabitants of the capital, are enjoying the benefits of bad air.⁵⁴ Short of an equally visible and dramatic crisis on the world level, it may be a long time – perhaps too long – before enough leaders in enough countries are willing to act in a sufficiently coordinated and cohesive way to deal with carbon emissions.

The path to success in this field, as with respect to all global public goods, is thus unlikely to be either straightforward or quick. The answer – if any – may, as just mentioned, emerge from some cataclysmic event that leads to immediate universal agreement. Alternatively, it may emerge from a set of complex, partial, and lengthy decisions in response to various specific issues as yet another example of the ‘punctuated equilibrium’ that seems often to describe the evolution of institutions as well as species (Mahoney 2012). As with trade in the decades after World War Two – and to a lesser extent with taxes over the century since World War One (as discussed further below) – the world may continue, no doubt painfully, imperfectly, and gradually, to work out ways to deal with international environmental issues until enough decision makers in enough countries decide that they have to do something about the problem. In the end, although the Kyoto Protocol was arguably premature and flawed in some respects, it may perhaps be seen as one of the first steps on the long and crooked path to working out how to reconcile national sovereignty with appropriate global adaptation to climate change.

The case for a global approach to carbon emissions is probably stronger and more important than the case for any other global tax. In some ways, however, the friends of such ideas have at times been as unhelpful as such obvious enemies as those who would directly lose as a result of proposed changes. Demanding that perfect policies be immediately adopted in a world in which history shows that progress towards almost any goal is as a rule accomplished only incrementally is to ask for disappointment. Purists – who to most people seem all too willing to

⁵¹ While all quantitative estimates in this field are subject to qualification and often highly sensitive to assumptions about discount rates and other factors, the most recent official estimate of this cost in the US (for 2010) was \$35 per ton of CO₂ (IAWG 2013), a figure that is higher than most existing carbon taxes (see Table 4). However, even in the data-rich environment of the United States, it can at times be surprisingly difficult to determine the precise allocative and distributional effects of changes in energy prices (Davis 2014).

⁵² As Miller and Vela (2013) show, taxes on motor fuel significantly reduce pollution.

⁵³ The figures cited come from an official source (<http://www.metoffice.gov.uk/education/teens/case-studies/great-smog>); other sources give higher estimates.

⁵⁴ See <http://www.scmp.com/news/china-insider/article/1341969/severe-air-pollution-spikes-beijing>.

sacrifice the immediate well-being of others for the possible long-term betterment of future generations – are unlikely to win the day unless and until the accumulated (and visible) evidence that change is needed is clear to all. For example, to say that even such a (large) incremental change as reducing fossil fuel subsidies is insufficient and inadequate compared to the immediate and full-hearted adoption of a global ETR is like saying that taking two steps in the right direction is useless unless one gets to the goal immediately. At best, such comments may remind us that there is still a long way to go; at worst, however, they may discourage us from even attempting to move in the right direction, not least when added to the chorus of negative voices inevitably raised by those whose direct interests are affected by such changes. As Harrison (2013) suggests in an interesting analysis of the British Columbia experience with carbon taxation, for instance, it often seems to take a chain of coincidences – a surge in public concern about climate change, a government with the trust of the business community, the availability of less-polluting sources of energy, and committed leadership – for a carbon tax to be adopted, and even more for it to be sustained. But it can be done, although it is most unlikely to be done immediately, easily, or evenly around the world.

The case for a carbon tax does not rest on any specific use being designated for the revenues. However, the political acceptability of any such levy may in practice depend on if and how the funds are earmarked, for example, to finance ‘clean’ technology or to compensate low-income households for increased costs owing to such taxes. Countries should be left to direct the revenues they collect as they see fit. Taxes collected or spent by an international agency seem far less likely to be acceptable than taxes imposed and spent nationally. How to achieve coordination at a global scale with such taxes is a sufficiently difficult issue. To attempt at the same time to take the further leap of redirecting the funds to other countries makes the task far more difficult.

4 Other global tax proposals

4.1 Taxing the arms trade

An interesting global tax that has been suggested at least in part as a way of moving the world closer to peace is a tax on the international arms trade (sometimes called a weapons tax or a gun tax) to be imposed on arms sales and possibly on individual gun purchases. However, this tax appears to be not only one of the least well developed proposals but also one of the least likely to be implemented. Apparently first suggested by Mahbub ul Haq (1976) and since revived at various times by the then Presidents of France and Brazil as well as others (Brzoska 2004) neither the case for such a tax nor how it might be implemented has ever been well developed.⁵⁵

Despite the obvious difficulty of taxing illegal trade, a tax on the international arms trade is simply another tax on international trade, and should be technically easier to implement than taxes on either finance or carbon. Curiously, however, most proponents of such taxes appear to ignore the tricky question of tax incidence and to assume that they would be paid by arms exporters in rich countries rather than by the people of poor importing countries, as Brzoska (2004) correctly argues is much more likely. Apart from such intellectual confusion, one reason why such ideas have had so little traction may perhaps be, as many have argued for years, that

⁵⁵ Interestingly, although a UN-sponsored international arms trade treaty (available at https://treaties.un.org/doc/Treaties/2013/04/20130410%2012-01%20PM/Ch_XXVI_08.pdf) was accepted by the United Nations in 2013 and has already been signed by over 100 countries, including the United States (although not yet ratified by the Senate), the issue of imposing special taxes on such trade was little discussed and plays no role in the treaty.

those who gain most directly from wars, civil and international – the international arms traders themselves – simply have too much political influence.⁵⁶ Another reason, however, may be simply because almost everyone, perhaps even those who make proposals for taxes to control the arms trade, thinks that – like the famous \$200 tax on machine guns introduced by the U.S. National Firearms Act in 1934 (which still exists in law, at the same rate) – such proposals are better understood in symbolic terms than in terms of their expected impact in practice.

4.2 Taxing tobacco

The control of communicable diseases (e.g. malaria, SARS) is an example of a global public good. Interestingly, however, the most prominent health-related global tax proposal relates to smoking, which certainly has undesirable health effects but is hardly a communicable disease requiring a global Pigouvian tax in order to control it.⁵⁷ Nonetheless, a global cigarette (tobacco) tax, an additional special tax on tobacco – ideally with its proceeds being earmarked to funding health programmes – has been strongly urged by the World Health Organization (WHO 2012).⁵⁸ Health experts have of course long emphasised the desirable health effects of higher taxes on tobacco (Jha and Peto 2014), and most countries already impose substantial tobacco taxes. WHO (2012) notes that the design and administration of many such taxes could be substantially improved, for example, by monitoring and increasing tax rates as necessary to maintain the effective rate in the face of inflation and growth and by taxing all tobacco products in a comparable way and at similar levels. Commendable as the aims of those advocating higher tobacco taxes may be, however, although increasing tobacco taxation in many countries may often make sense in terms of improving public health outcomes, there seems neither a clear case for or a real need for any kind of global tobacco tax.⁵⁹

4.3 Taxing wealth

Other global tax proposals that have surfaced at various times, with different objectives, include proposals to tax the rich, to tax natural resources, and to tax the digital economy. For example, a global wealth tax has sometimes been discussed to tax the rich, usually with the idea of channelling the revenue to the poor in some way. Such a levy might be based on the aggregate value of all household assets, including owner-occupied housing; cash, bank deposits, money funds, and savings in insurance and pension plans; investment in real estate and unincorporated businesses; corporate stock, financial securities, and personal trusts. Another version is the so-called billionaires' tax, consisting of a tax of (say) 1 per cent on individual wealth holdings of \$1 billion or more. National wealth taxes, usually imposed at a low flat rate, already exist in a number of countries and have recently been receiving some support from economic studies,

⁵⁶ For an early example of this argument, see Engelbracht and Hanighen (1934); for a recent update, see <http://www.globalissues.org/issue/73/arms-trade-a-major-cause-of-suffering>

⁵⁷ The UNITAID tax on air travel discussed earlier does of course finance work on such diseases. However, the tax as such, although arguably contributing in a minor way to one global public good (reducing carbon emissions), has no meaningful connection with reducing communicable disease.

⁵⁸ Health care in general and health expenditures related to smoking in particular may need additional funding but the case for earmarking the proceeds from taxes on smoking to funding these activities is not very strong (as argued in e.g. ITIC 2013). Although this point is not further discussed here, see also Bird and Jun (2007).

⁵⁹ An important exception, stressed, for example, in Allan (2012), is that tax levels may need to be kept close to those in neighbouring countries owing to the relative ease of smuggling cigarettes. Canada learned this lesson some years ago when some provinces raised their cigarette taxes for health reasons well above levels in the neighbouring United States but soon reduced them again to control smuggling, in part because the obvious alternative of increasing border controls worked directly against the intent and reality of NAFTA (North American Free Trade Agreement) and in part because of the serious political problems of dealing with smuggling on the First Nations (Indian) lands located on the border (Kelton 2008).

although the latter tend to favour taxes on wealth transfers.⁶⁰ In practice neither type of wealth tax has been all that popular anywhere in recent decades, although even some conservatives are apparently beginning to rethink the issue in light of the recent marked increase in the wealth of the very wealthiest (McKinnon 2012).⁶¹

4.4 Taxing resources

Taxing natural resources has long been a favourite target of those concerned with the apparent basic inequity of the distribution of the wealth generated by such resources between those who, in the terminology often used, own them and those who exploit them. For example, a Global Resources Dividend (GRD) has been suggested in the form of a tax on the extraction of natural resources, with the revenue being used for poverty relief (Pogge 2008).⁶² For the last 50 years or so, special attention has been paid to the exploitation of what is often called the 'global commons', that is, territory not within national boundaries such as Antarctica, outer space, and, most extensively, the oceans. To consider only the last of these, in the 1980s 162 countries ratified the UN Convention on the Law of the Sea though others, including the United States, objected to provisions relating to undersea mining. As noted earlier, UN (2012) recently restated the case for an agreed global arrangement with respect to potential undersea wealth, recommending a Global Undersea Resource Royalty in the form of a royalty on all undersea mineral resources extraction more than 100 miles offshore of any nation's territory. UN (2012) also mentions possible international taxes or fees on renewable resources such as certain types of forestry exploitation.

As with tobacco, all countries already tax natural resources in some fashion, with such taxes being particularly important in a number of developing countries. Considerable attention has been paid in recent years to increasing the transparency of both national and international fiscal arrangements with respect to extractive industries in particular: for example, 25 developing countries are classified as compliant with the Extractive Industries Transparency Initiative (EITI) with another 16, including the UK and the US, listed as candidate countries.⁶³ Many of the world's largest oil and mining companies are also listed as supporters (stakeholders) of EITI, which reports data on payments to governments from companies, based on separate reports from companies and governments as reconciled by an independent auditing firm (selected by the country). Although clearly much could be done to improve the effectiveness and impact of this pioneering effort (Anayati 2012), efforts to extend such work more broadly in terms of coverage of both companies and countries may in the absence of any real system of global governance perhaps turn out to be a more effective way to improve the global taxation of this sector – and perhaps eventually of other sectors also – than further attempts to introduce more explicitly global taxes on natural resources.

Finally, a quite different type of resource tax proposal may perhaps still be worth mentioning. Some years ago, there was considerable discussion of an international Brain Drain Tax to compensate poor countries for the loss represented by the movement of educated people to rich countries. Proposals along this line were put forward by Bhagwati and Dellafar (1973) and were

⁶⁰ For a useful compilation of wealth data for different countries, see Davies (2008); for interesting recent reviews of the case for increased taxation of wealth and especially transfers of wealth, see Institute for Fiscal Studies (2010, 2011).

⁶¹ As one might expect, McKinnon's opinion piece, when published in the *Wall Street Journal*, immediately called forth a cascade of (mostly opposing) opinions in both the press and the 'blogosphere'. Few of those commenting seemed aware of the extensive documentation of the extent to which the slower growth of the last few decades has accentuated wealth concentration and inequality: see, for example, Alveredo et al. (2013) and Piketty (2014).

⁶² For interesting discussion of this proposal by philosophers, see the subsequent contributions by Casal (2011), Steiner (2011) and Pogge (2011). As with any good philosophical discussion, the debate has not yet ended.

⁶³ See the official web page at <http://eiti.org/>.

subsequently discussed in detail by various authors (e.g. Bhagwati and Wilson 1989). Although international migration (legal and illegal) of skilled and unskilled labour remains important, little has been heard recently of the interesting theoretical and practical issue of how best to tax migrants.⁶⁴ One reason for this neglect may be in part because the earlier discussion was almost completely focused on the personal income tax – a tax that, at least until very recently, has been much less central to public policy discussion in most countries than had earlier been the case (Bird and Zolt 2005).

4.5 Taxing cyberspace

Some years ago Cordell and Ide (1997) issued a clarion call to impose a special tax on the use of 'cyberspace,' which they called the 'new wealth of nations'. Perhaps in part because the contemporaneous view of many that the digital era had ushered in a completely new economy – a belief that justified the marketing of all too many over-hyped new high tech companies – soon proved to be false, the response to this call was disappointing. Recently, however, despite the sobering experiences of recent years, this idea has been reborn. For example, WHO (2009) suggested a global internet tax as a way of taxing the new digital economy and others have at times suggested similar taxes with various names and suggested bases – taxes on internet access (levied on ISPs, or internet service providers), on email sent or received, on bandwidth (speed of internet connection), on 'bits' (internet usage by volume), on text (or SMS) messages, and, more prosaically, on utilities and cable operators.⁶⁵ Other than perhaps reflecting the understandable annoyance of busy people at unwanted interruptions the primary rationale for most of these suggestions was probably simply that the increasing size of the potential tax base offers an opportunity to generate substantial revenue with low tax rates. Most of the serious opposition to such taxation – excluding the sort of general ranting that unfortunately is all too common on internet forums – seems to have emphasised the undesirable deterrent effect such taxes would presumably have on the spread of innovative methods of communication.

Unfortunately, few who propose such innovative tax solutions for the problems of the world seem to understand much about how the present tax system works or why it works that way. Looking at old problems with fresh eyes may sometimes provide a useful perspective. Indeed, a fresh view from outside the fiscal community may not only provide an inspiring vision of the 'city on the hill' to which all good pilgrims should aspire but may also suggest potential solutions to current fiscal problems that have been missed by those locked in the trench warfare of fiscal life. However, reformers who speak from passion and idealism rather than from experience and realism seldom seem to understand either the real nature of the policies they are advocating or how those policies may interact with or be accommodated by the existing international fiscal structure. Much of the discussion of taxing the internet – both pro and con – has, for example, paid little or no attention to the current, long-established international arrangements with respect to telecommunications systems that carry all this digital traffic. Indeed, when the question of revising the ITU fee structure (discussed earlier) came up recently, most of the rather vociferous opposition uncovered by a Google search seems to rest on the notion that the abstraction called the 'internet'⁶⁶ should continue to be free – as, curiously, many of those arguing thus seemed to think that it actually was – with little or no attention to how such freedom related to the existing (or potentially attainable) international tax regime.⁶⁷

⁶⁴ Although see the interesting suggestion in Wilson (2008).

⁶⁵ Many of these suggestions, with sources, are mentioned in McCullagh and Downes (2012). Interestingly, and perhaps surprisingly, a text tax was actually suggested at one point by the Managing Director of the IMF.

⁶⁶ For an illuminating discussion of the many misconceptions underlying the common usage of this term as if it had a clear and unarguable meaning, see Morozov (2013).

⁶⁷ In contrast, tax experts have produced a substantial literature on the potential erosion of the tax base with the rise of the digital economy. Much of this literature is focused on the different treatment of internet sales from 'brick-and-mortar' sales

4.6 Fiscal justice and earmarking

As noted earlier, many proposals for global taxes have as their aim the goal of providing a more automatic and reliable source of financing for the development of poorer countries. Such proposals date back at least to a proposal for a small tax on selected luxury goods such as TVs and dishwashers (UN 1970) and have been the focus of many studies of innovative ways to fund development finance over the years. Politicians and philosophers have put forth a wide variety of other ideas for global taxation, ranging from a 2003 proposal by the then President of Brazil for a tax on arms sales as way of financing a programme to end international hunger (Brzoska 2004) to a more recent proposal by an academic scholar for a global tax on resources (Pogge 2008).

No such idea has as yet produced any significant results, however, and none is likely to do so. A principal reason for this pessimistic conclusion is that most such proposals have two characteristics in common. First, their prime motivation is redistributive: they are explicitly intended to redistribute resources to poor countries. Secondly, the proceeds of the taxes proposed are usually intended to be administered by some international agency rather than by the governments of the countries from which the revenues are collected. Each of these characteristics is worth discussing briefly.

'Tax justice' has, for example, been called 'the lifeblood of functioning democracies' and said to lie 'at the heart of the social contract between citizens and the state' (Christian Aid 2013). Viable and sustainable democracies do indeed depend to an important extent for their sustenance on what is in effect a fiscal contract between citizens and state and there is good reason to think that a tax system seen as fair constitutes an important element of such a contract.⁶⁸ However, extending this argument to the world as a whole assumes that the world can be treated as though it is a meaningful political unit – if not a unitary state, at least a federal state. However, in reality the world is not a state in any sense. Moreover, deplorable as it may be, the evidence suggests that most who live in rich countries do not care as much for those who are so unfortunate as to fall outside their national group as they care (reluctantly or otherwise) for those with whom they share citizenship (or residence).⁶⁹

People everywhere identify more with those they know than with those they do not, and injustice within one's accepted (or legal) group is taken far more seriously as a political matter than injustice between one's group and those outside one's group. Foreign aid thus is, and always has been, a fringe budgetary outlay in most developed countries, and most countries have proved reluctant to hand over more than a fraction of even this small amount to multilateral administration. People may of course be moved by appeals to their better nature, especially when the evidence of crisis is placed before their eyes. But there is little evidence that any significant number of citizens in the developed world are willing to increase their tax burdens in order to fund international income transfers to even the most worthy candidates, let alone to hand over such funds to some international agency that decides who gets how much.⁷⁰ In short, as Christian Aid (2013) and other agencies advocating such views usually, if reluctantly, recognise, there is regrettably little likelihood that the serious imbalances in access to resources

under state retail sales taxes in the United States (Fox (2012) provides a useful starting point), but there is also a large literature on the international ramifications of digital commerce for a range of taxes: an early but still useful overview may be found in Doernberg et al. (2001).

⁶⁸ See e.g. Bird and Zolt (2013) and references cited there.

⁶⁹ This assertion may perhaps be acceptable in the present context but of course, like some of the other complex issues touched on in this paper, it is not easily documented and has long been discussed, from different perspectives, by philosophers (Wellman 2000; Coons 2001), psychologists (Ashmore, Jussim and Wilder 2001), and economists and political scientists (Gradstein and Konrad 2006; United Nations 2006) among others.

⁷⁰ But see note 40 above and accompanying text.

found in the world today will be quickly rectified without major and improbable changes in power relationships both between rich and poor countries and, often, within individual countries.

Attempts to remedy this situation by increasing the transparency and openness of fiscal arrangements (such as the Extractive Industry Transparency Initiative (EITI) mentioned earlier) are a small but desirable step towards this goal. Much the same can be said of efforts to develop workable and perhaps eventually persuasive ways of using taxes (among other instruments) in ways that may, as Pogge (2011: 352) argues '... slow depletion of natural resources and the deterioration of our environment while also greatly reducing the huge unjust burdens now imposed on the world's poor'. More information and better understanding may, over time, lead to more recognition of the connections between these matters and hence to attitudinal changes and eventually even to political responses that may begin to move both national and international systems towards a better world for all. Of course, even without such action, as economists have long argued, and as experience seems clearly to have confirmed in recent years, more generalised and sustained economic growth will continue to reduce world poverty and perhaps, over time, also world inequality.

Incremental improvements in achieving such goals are thus possible on a number of fronts. However, emphasising the redistributive aspects of global tax proposals is unlikely to be a major selling point to the people and politicians of rich countries. Those who wish to change the world would find it more productive to emphasise proposals that provide not just real gains for the less fortunate but some visible gain for almost everyone. For instance, increases in taxes on carbon emissions may perhaps at some point come to be seen as sufficiently beneficial in the eyes of enough groups to overcome the often more immediately politically attractive options of regulation and subsidy – not to mention the even more popular option of doing nothing. Countries, rich and poor, may come to see the benefits of taxing 'bads' of all sorts (pollution, congestion, health-damaging consumption) rather than, as some now do, subsidising them. At times it may even make sense to tie such levies to certain expenditures: for example, properly charging for transport may be feasible only if those who pay can see some direct and visible compensation, for instance in reduced congestion. Until countries can resolve such relatively simple questions sensibly within their own borders, however, regional or global initiatives to redistribute funds in a major way from rich to poor countries, let alone to extend taxing authority to an international body, are unlikely to be successful. On the whole, as Kaul and Le Goulven (2003) conclude, disentangling the issue of aid finance from that of financing global public goods would improve both debates.

One reason countries find it hard to impose good taxes on bad activities is because such activities sometimes support good jobs in poor places. Like trade protection, subsidies to presumably 'good' activities (e.g. renewable energy) are frequently justified in part on similar grounds and in part on 'infant industry' grounds. Over two centuries of economic arguments do not seem to have weakened the political attractiveness of such measures. Those who can tell a good story by generalising a particular (and perhaps atypical) example that seems to support their case seem able to carry more weight in debate than 100 solid econometric studies that support the opposite case. Much of the debate on global taxes has been fought along these lines, with proponents of such taxes postulating a utopian world in which we care as much about poor peasants in some far away country as we do about jobs and income in our own community, while opponents postulate an equally unreal world in which every dollar shifted away from some existing activity not only reduces our income and jobs but is also wasted by a rapacious, corrupt and wasteful international bureaucracy. The intellectual debate may, at times, seem to be won by those who emphasise altruism and internationalism; so far, however, the practical politics of taxation remain firmly dominated by self-interest and nationalism.

5 The reality of international taxation

Most proposals for global taxes on activities such as resource extraction, international transport, and digital transactions, as well as such presumed ‘bads’ as tobacco, the arms trade, luxury consumption and even billionaires, have several features in common: they have not been fully thought through; they are likely to prove difficult to administer effectively; it is not clear that their effects would be as beneficial as their proponents usually argue; and, perhaps most important, it seems unlikely that most of them will ever be imposed. These are serious defects. However, they do not mean that discussing global taxation is a waste of time and effort. Indeed, without utopian thinking about what a better world might look like and how we might get there, and without efforts by some to persuade the rest of us of the importance of such matters, humanity would perhaps have never left the caves and we would find it even more difficult to sort out how to cope with the difficulties and problems that those who live on this planet currently face. However, as successful revolutionaries soon learn, the thinking, skills and efforts needed to overthrow the old regime are not the same as those needed to establish a sustainable – let alone better – new world.

Sandler (2001: 107) suggested over a decade ago that ‘the design of supranational structures is about to enter a new era in which nations may be prepared, for a few specific activities, to sacrifice some autonomy’. Although carefully hedged, this conclusion now seems to have been too optimistic. Indeed, some now think, as *The Economist* recently put it, that ‘the forward march of globalisation has paused since the financial crisis, giving way to a more conditional, interventionist and nationalist model’ (Ip 2013: 3) and that ‘the fate of globalisation rests on whether America, China and the rest of the world see open borders as being in their national interest’ (Ip 2013: 19). But even this considerably restrained view may perhaps be too optimistic. There is nothing new about the recent pause in the march to globalisation. The extent to which sovereign states agree to give up any degree of sovereignty remains, as it has always been, limited, dependent upon what those who control political decisions think is in it for them, and conditional on their continuing to perceive that they gain from the deal. As American history from the League of Nations (an American initiative that in the end was not accepted by the United States) to the Kyoto Protocol (which the United States first agreed with and then failed to affirm) suggests, the strengthening of democracy in significant parts of the world in the last few decades may in some ways make it even more difficult to make such deals. The interests of the many (or at least the interests of many influential groups) and not just those of the ruler (and close associates) must now be taken into account.

A closer look at how, over the years, countries have managed to smooth at least some potential conflicts in the fiscal area may offer some lessons with respect to the prospects for global taxation. For example, one proposal that has been urged by some as the way to resolve the current problems with taxing international income is to adopt what is often called unitary taxation (Picciotto 2013). This term is shorthand for a system of worldwide reporting of corporate income with profits apportioned to different jurisdictions in which corporations are active in accordance with an agreed formula. Over the years, experts have often suggested that the unitary approach is a more sensible approach on both conceptual and practical grounds to the reality of firms that operate across national borders than the current system of separate entity accounting, under which a branch or subsidiary within the jurisdiction is accounted for as a separate entity.⁷¹

⁷¹ For example, the present author made such a proposal in Bird and Brean (1986).

Under the current approach transfer prices must be estimated for transactions with other parts of the corporation or group, with the objective being to produce a result as close as possible to that which would emerge if all such prices were set at arm's length by unrelated companies. In practice, however, such estimates are generally complicated, uncertain, and often somewhat arbitrary. The outcome of the exercise may bear as little relation to reality as does the underlying assumption that the parties on both sides of such transactions are independent entities rather than components of the same company. In contrast, formulary apportionment – the approach used to allocate profits to subnational jurisdictions within federal countries like the US and Canada – is simpler in both concept and practice, attributing profits (or losses) to each jurisdiction based on such more observable and measurable factors as the proportion of sales, assets or payroll in that jurisdiction. There are clearly good arguments in principle for this approach (Picciotto 2013). However, the lengthy history of international taxation suggests that such a radical change in the system is less likely than continuation of the traditional process of marginal adjustments by specific countries attempting to cope with specific problems in specific ways.

The rationale for the current approach to taxing cross-border transactions rests on a stylised set of facts: (1) small and evenly-balanced flows of cross border investments; (2) relatively small numbers of companies engaged in international operations; (3) heavy reliance on fixed assets for production; (4) relatively small amounts of cross-border portfolio investments by individuals; and (5) only minor concerns with international mobility of tax bases and international tax evasion. These assumptions do not reflect current reality. Many business operations have changed drastically as production has become more dispersed, with different (though integrated) operations taking place – in reality or at least in terms of the fiscally relevant records on which taxes are based – in different countries. The share of total value-added – the ultimate tax base – arising from services and intangibles has increased to the point that it is difficult to locate the source of corporate income or taxable activities sufficiently clearly in space (or time) for any country to be able to tax that income with a demonstrably superior relative claim than other countries involved.⁷²

The commonly accepted arm's length standard for measuring and allocating the international income of business enterprises among taxing jurisdictions is intended to provide a basis for national taxation of the 'correct' share of such income. As noted above, however, to do so this approach applies traditional conventions based on separate entity accounting to multinational and global corporations that consolidate commercial activities organised and operated along functional lines according to centres of business interest. Assuming that such economic units can meaningfully be divided into legally separate components for tax, management accounting or other purposes flies in the face of reality. Multinational enterprises exist precisely to avoid the costs and limitations of dealings between unrelated parties. The economic rent such firms obtain by operating as a single economic entity that avoids these costs and limitations cannot be properly captured and allocated by the prevalent tax approach. National tax administrations need effective institutional ways to tax such enterprises, but characterising them in a manner that directly contradicts their essence and manner of operation does not provide a promising path to sustainable tax policy. Indeed, the effort to make this approach workable may result in its becoming so reliant on a series of fictional assumptions – conceived initially as practical expedients to adjust for possible profit distortions attributable to common control – that over time the inherent weakness of this approach is magnified and compounded to the point that it becomes unworkable.⁷³

⁷² This paragraph, like much of the remainder of this section, is based in part on Bird and Wilkie (2013).

⁷³ For example, the well-known OECD Transfer Pricing Guidelines (OECD 2010) started out as a way to provide valuation guidance in identifying when and to what extent there were distortions in the distribution of profit within a group attributable

One path to global taxation might perhaps be to establish as clearly as possible the Wicksellian connection between taxes and expenditures so that those who pay, those who benefit and those who decide are essentially in agreement.⁷⁴ But there is no effective political unit within which such ‘fiscal contracts’ between countries and interests can be negotiated. One cannot have either global taxes or an effective, coherent and coordinated international tax regime without ‘global governance’ – and, as yet, the latter is much more a dream (or, for some, perhaps a nightmare) than a reality. In the absence of any effective world governance framework a more workable approach may perhaps be to establish small taxes with relatively modest goals which can be piggybacked as much as possible on existing fiscal and political institutions and implemented through a relatively ‘soft’ regime resting largely on explicit and implicit agreements between states.⁷⁵ Whatever approach is taken, those interested in developing better ways of financing the achievement of particular global goods, like those concerned with reforming the existing international tax system, should perhaps focus more on issues of ‘process’ (how things get done) than ‘substance’ (what gets done). Both are important; but if something does not get done it matters little how sound it may be in principle since it will not exist.

In a globalising world, countries face a difficult dilemma with respect to politics and economics: there is no simple way to have both autonomous nation states and full global integration. The power to tax is a key attribute of the modern nation state and no state will readily forgo that power. The present international tax regime is the outcome of many previous attempts to reconcile increasing globalisation and national sovereignty. As experience over the last century clearly demonstrates, countries are more willing to forgo full integration than to give up state power. Much of the discussion of global taxation does not face up adequately to this central problem in a world in which there is no world government with the moral, political or economic basis for imposing taxes. An efficient global Tobin tax, for example, may well be technically possible (Taskforce 2010). But it is likely to be politically feasible only if countries are guaranteed that those who are taxed have full control over the amount of revenues collected and how it is spent – that is, if the system is run by real (imperfect) national tax regimes and not by some mythical (perfect) supranational entity.

Another approach is to focus on the practical regulatory dimension of the emerging new world economic and tax policy order. The seeds of such an international approach to tax regulation may be found in various more or less formal interactions of tax policy and regulatory authorities such as the OECD’s Global Tax Forum and others.⁷⁶ Countries have increasingly been sharing financial and tax information through a plethora of Tax Information Exchange Agreements (TIEAs) in addition to information exchange arrangements contained in bilateral tax treaties. In principle such agreements are intended to limit the possibility that income can be hidden from

to the possibilities for manipulation engendered by common control. It is far from clear that the application of these guidelines as transactional accounting standards is or ever can be adequately matched by the legal concepts and tax law provisions needed to give them life.

⁷⁴ ‘... Wicksell (1896) and Lindahl (1919) ... recognised that if genuine links or connections were to emerge between revenue and expenditure decisions and if true demand functions were as a result to be revealed, the public (collective) provision of goods and services would be efficient. ... I will henceforth call this connection the Wicksellian Connection.’ Breton 1996: 3. For an elaboration of this approach at the sub-national level, see Bird and Slack (2013).

⁷⁵ This concept comes close to Krasner’s classic definition of an international regime (1982: 186) as ‘implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge in a given area of international relations’. For an excellent helpful review of the global governance literature as it applies to international tax issues, see Eccleston (2012).

⁷⁶ A recent overview of many of the issues discussed here may be found in OECD (2013). Relevant groups include the Forum of Tax Administrators (FTA), a panel of national tax administrators established in 2002 by the OECD’s Committee on Fiscal Affairs to promote dialogue between administrations; the Leeds Castle Group, a group of tax administrators from a number of major countries, including some non-OECD countries like China and India, who meet regularly to discuss mutual compliance problems; and the Joint International Tax Shelter Center established by the US, UK, Canada and Australia to develop and share information on abusive tax avoidance.

interested tax authorities although success in this respect remains elusive.⁷⁷ One way or another, both tax administrators and tax policy makers are becoming increasingly well informed about and influenced by developments and approaches in other countries.

No country is going to abandon tax claims in favour of the interests of another country when it comes to taxpayers with observable connections to both unless there is a significant reason to do so in its own interests. Countries act, at best, in the interests of the 'national welfare' of their citizens, not some abstract conception of 'world welfare'; at worst, they may act mainly in the interests of those with substantial economic or political influence. Whatever the motivation, it is this axis of interest – countries acting as if they were economic actors in relation to each other through their respective taxpayers – that underlies the internationalisation of tax policy and rules and has given rise to the complex administrative web of tax treaties, information sharing, transfer pricing agreements among taxpayers and tax administrations, and the like. Looking at the way in which international taxation currently works, it is difficult to discern that anyone involved has been thinking very clearly about the objective of international tax policy. Provisions such as those on controlled foreign corporations and foreign tax credits found in national tax laws, like the many tax treaties that now exist, are at best pragmatic attempts to accommodate the many physical and legal ways in which commercial activities actually take place by adding on particular features to tax laws developed essentially for domestic purposes, with little attention being paid to how such new international features interact with domestic tax policy objectives let alone achieve any more global objective.

Nonetheless, although no one can be quite sure what is going on and why, for many years taxpayers and their various governments have one way and another, through language and through commercial relations, been communicating with each other to the point that, at least in conceptual terms, it is perhaps not unreasonable to argue that a sort of loose confederation of a number of more developed national tax systems has emerged. This construct is not all that different in some respects from the more formal arrangements that exist within federal countries to coordinate the contemporaneous application of national and subnational taxes on similar income and consumption bases. One reading of the extensive literature on taxation in federal states, like the broader literature on decentralisation in general, is that what may at first seem to be the costly duplication of functions and unnecessary costs of coordination inherent in a decentralised decision system compared to a single monopoly decision maker may in reality both provide useful redundancy in a complex system coping with constantly changing conditions and an increased possibility that innovative solutions may emerge as a result of involving different decision centres. Similar arguments may perhaps hold in the even more heterogeneous and changeable international setting. Of course, a quite different reading is also possible: current international tax rules and practices may be interpreted not as the outcome (given coordination costs and conflicting objectives) of a rational process but as little more than a last ditch rationalisation for clinging to outmoded practices and constraints. Time will tell which characterisation is closer to reality.

Taking the more positive perspective, however, there appears to be increasing realisation that competing tax systems have been factored into national policy decisions, as evidenced by heightened awareness and responsiveness in each country to the economic and tax policy characteristics of other tax systems. One outcome may be that such theoretical concepts as inter-nation equity (fair international sharing arrangements) may over time become more

⁷⁷ For an optimistic view of the prospects for future international tax information exchange and cooperation, see Grinberg (2013). For considerably more restrained appraisals of these prospects, from two very different perspectives, see Shaviro (2014) and Eccleston (2012).

important.⁷⁸ At present, however, as Lang and Owens (2013) note, the international tax regime falls far short of satisfying any conceivable distributional goal. Tax treaties, for example, are mainly geared to the interests of richer (residence) countries, and some observers such as Thuronyi (2010) have suggested that most developing countries might be better off not signing such treaties, essentially because the degree of ‘reciprocity’ (reciprocal gain) critical for attaining a mutually beneficial outcome is unlikely to be present. Indeed, even within residence countries treaties inevitably reflect the fundamental tension between their two conflicting objectives: to raise more revenues from residents while at the same time attracting more investment from abroad. Both within and between countries, it seems, more explicit and transparent discussion and, one must hope, agreement as to who should tax what and how much are needed, if countries are to be able to tax international transactions to any significant extent.

Current efforts (OECD 2013a) to establish a more leakproof international tax regime may end unhappily unless both the political foundations of the regime are strengthened and the critical issue of administrability is resolved. Even the best-designed international tax regime will not work if it cannot be reliably collected – for instance, because some key parameters are porous or indefinite, or because it is simply too complex to expect adequate compliance even from diligent and honest self-enforcers or adequate enforcement from even the best tax officials. Such problems are unlikely to be resolved quickly or easily by the widespread adoption of a radical policy change like the unitary approach. Instead, the path to workable solutions is more likely to lie in the kind of continuing evolutionary and accretionary process of change – ‘punctuated equilibrium’ (Mahoney 2012) – that marks the past history of international taxation.

One way or another, no relatively open economy can now think of what tax regime is best for it in isolation from the taxes that exist in other countries. The current international tax and trade regime is the result of decades of effort to reduce both the distortionary effects of multiple trade taxes and the use of taxes to shape, colour and subsidise trade and, to some extent, investment. The questions debated by League of Nations experts in the 1920s, like the language of that debate, are eerily similar to present debates at various international and cross-national levels about how to grapple with the even more difficult (and considerably broader) problems that arise from the increasingly large share of income arising from such ‘footloose’ factors as intangibles and financial structuring. Tax systems have always competed with each other for shares of tax bases. Historically, when countries’ interests collide, solutions have been reached either through conflict or, in one form or another, through cooperation. Few issues are more important in determining tax policy today than deciding how to cope with the international environment. The extent to which and the manner in which the issues currently at the forefront of international tax discussions are resolved will have important implications – for better or for worse – for the future prospects of global taxation and, indeed, for the critical question of global governance in general (Eccleston 2012).

6 The way forward

It is not hard to think of potentially large global tax bases on which even a low tax rate might potentially yield a lot of money. But this does not mean that such taxes are necessarily acceptable, feasible, or desirable at the global level. Until nation states, in the interest of their own survival and (one hopes) the continued well-being of their citizens, are willing to forgo substantial sovereignty in favour of an effective world governance structure, matters are unlikely

⁷⁸ For a useful recent discussion of inter-nation equity, see Brooks (2009).

to change much. It may be fun to think of global tax proposals; it may be possible to make impressive calculations of their revenue potential; it may even, as mentioned earlier, be a good idea to discuss and explore such proposals because important global public goods like stability and even survival may in the end only be achievable as and when countries begin to act as well as think globally. Those who put forth such proposals have usually done so with the best intentions and for reasons that are worth taking seriously. However, not only is the way forward unlikely to be quick or simple but the path to progress is much more likely to be through the further evolution of the sort of 'soft' international context in which international tax matters are now discussed than by creating any kind of effective supranational tax authority.

When solutions to problems are hard to find, sometimes the best approach may be to approach them differently. Taxes, like the world itself, are never perfect and always in need of constant revision and interpretation. Even the most technically perfect legal designs or technological solutions (e.g. to increase tax transparency or to foster international tax cooperation) cannot and will not ever achieve perfection let alone stasis in a changing environment. The best and most sustainable approach to both international and global tax problems lies less in cleverly innovative tax design than in developing and improving the process through which such problems are (and will almost certainly continue to be) defined and resolved.

One essential condition for a sustainable solution is greater inclusivity: more of those affected in a significant way by decisions must be heard – and know that they are heard – in reaching those decisions. Even the best, most prolonged and thorough consultation process may never reconcile some to accepting decisions to which they object. But when such decisions are reached as part of an on-going reciprocal process, with some losing on this and others on that front, they are more likely to be acceptable even to those who lose than are decisions that losers can rationalise as having been imposed from above or outside.

A major failing of the current international tax system has been the (generally correct) extent to which it has been seen to reflect primarily the interests of the major developed countries. Many of the proposals for global taxation discussed earlier have suffered from the reverse problem: too often they appear to represent only the interests of the poorer emerging countries to the detriment of the interests of those who are (or think they are) expected to bear most of the burden. Despite the limitations of the OECD-type soft law consensus approach to at least partial and acceptable solutions to complex international issues through a lengthy and on-going process of technical work and policy discussions involving an increasingly large and more representative group of countries and interests, gradually extending this process and making it more inclusive remains the most promising way available to develop common goals, definitions, concepts, assessments and evaluations of the very broad ranges of activities and interests affected by tax decisions.⁷⁹

Global issues of justice and fairness need not be dealt with globally and cannot be dealt with solely by nation states: what is needed is some forum between these extremes in which such issues can be discussed and, perhaps, resolved (Sen 1999). Because the traditional closed economy analytical box no longer adequately encompasses the critical marginal (international) component of tax policy, national policy choices increasingly have to be framed outside that box. Relatively open developed countries have already begun in effect to delegate more and more

⁷⁹ Of course, matters are never quite so simple: the OECD has, as noted, clearly taken the lead role in the current process, but the leadership of an organisation long seen as a 'club of rich countries' has, unsurprisingly, not always or easily been accepted by other international organisations, let alone by governments outside the 'core' group. However, this is not the place to go further into this complex issue.

elements of national tax authority to such informal arenas as associations of tax administrators and policy makers concerned with international tax issues.

However, those charged with shaping and implementing national tax policy must also continue to work towards more transparent and balanced processes in shaping the international tax policy decisions that impact on and to some extent limit national tax policy autonomy. The on-going policy discussions reflected in OECD (2013, 2013a) seem unlikely to produce results that are in any sense definitive or likely to be acceptable to all, or for that matter to be quickly implemented. Indeed, if pushed too far and too fast, the outcome of the current process may prove to be as unsuccessful as was the earlier attempt to attack 'harmful tax competition'.⁸⁰ Even if the process eventually led to the establishment of some kind of nascent 'world' tax organisation, it is inconceivable that it would have even the small degree of independent taxing power of the European Union.⁸¹ Moreover, although strong leadership by strong states like the US will remain an essential element in resolving international (let alone global) tax issues it may no longer be enough. An increasing number of other countries must also sign on if such initiatives are to succeed. Indeed, if one extrapolates the experience of the EU to the world at large one possible inference is that traditional leaders in international tax matters like the US may over time perhaps become a bit less likely (and able) to take actions on their own to avoid or reduce their own perceived problems, especially when such actions may arguably pre-empt more broadly acceptable (less US-focused) solutions that may perhaps, over time have emerged from the kind of increasingly formal joint policy actions and administrative cooperation between national administrations that is already taking place.⁸²

7 Conclusion

Three major issues arise with respect to global taxes: are there circumstances in which such taxes are not only desirable but necessary? Is an explicitly redistributive global tax system a reasonable goal? Are there instances in which 'global' taxes may be not only sensible but feasible? The answer to the first of these questions at present appears on the whole to be negative. The day may come when climate-induced starvation and migration, mass deaths from pollution, the worldwide collapse of the financial system or some other catastrophe such as widespread nuclear disaster may change this answer. Fortunately, that day is not yet here. The answer to the second question is much the same: its day has not yet come. Those who seek an automatic (and expanding) way to finance aid to developing countries are no more likely to find general acceptance of explicitly redistributive global taxation now than they were half a century ago when attention began to be paid to this question.

The most critical of the three questions is the last, which is both more subtle and more important. Here, although the answer is less clear, it may well be that there are indeed instances in which a harmonised global tax approach may be both sensible and feasible – perhaps in particular with respect to controlling carbon emissions and, less clearly, perhaps also with respect to reducing international financial instability. However, since even economically sensible and technically feasible solutions to real global problems need widespread political support, the world seems still

⁸⁰ Eccleston (2012) discusses this earlier experience in detail.

⁸¹ A recent study suggests that '... the concept of a fiscal union will only work if political integration goes significantly beyond the current state of affairs, and probably far beyond levels that would be supported by European citizens and voters' (Fuest and Peichl 2012: 9). If this can be said about the European Union after a half-century of economic union, the prospects for meaningful fiscal union at the world level seem bleak indeed.

⁸² See, for example, the contrasting views in the sources cited in note 77 above.

to be some distance away from having established the conditions needed for success even in these limited areas.

International finance, like international trade, is a matter of global concern. Everyone, though to varying degrees, is affected over time by how well the system works. Governments that care about the well-being of their citizens have an interest in ensuring that market decisions take externalities into account to a greater extent than has been evident in recent years. Decades of effort have gone into building the existing complex system of regulating both trade and finance – the one that many now think has not done a very good job. Decades more may be needed to figure out how best to improve that system and to implement such improvements. One component of the answer may in the end be at least some limited form of global taxation or, more likely, relatively coordinated uniform national taxation. Without further crisis-driven stimulus, however, it seems unlikely that any real global FTT will emerge in the near future. Instead, what seems more probable is further evolution of the role of institutions like the IMF and other international soft regulatory bodies combined with even closer attention to coordinating national financial regulatory systems (such as the Basel capital requirement rules).⁸³ Countries may of course continue to impose various forms of FTT for their own reasons but such taxes are unlikely to have very dramatic effects and are in any case not global in any meaningful sense.

More critically, more almost certainly needs to be done to deal with climate change that according to most evidence appears to arise in part at least from the ways in which we use the earth's resources. Unfortunately, apart from the not very successful Kyoto starting point, surprisingly little has yet been done to develop institutions responsible for, let alone capable of, dealing with this complex set of problems. To the extent that actions have been taken they have generally followed the path of regulation rather than taxation, and this is likely to continue to be the case in the future (Baumert 1998). From a fiscal perspective, however, the most obvious way to proceed is, first, to reduce the surprising extent to which even very poor countries continue to squander scarce budgetary resources on clearly inefficient and almost always inequitable subsidies to fossil fuel consumption (McLure 2013), and, second, to focus on developing more coordinated national levies on carbon emissions, perhaps supported by soft law frameworks like those that now underlie the international tax system – frameworks that are essentially voluntarily enforced by countries acting in their own interests (Eccleston 2012). As and when countries decide to reduce carbon emissions, the economically preferable way to do so is to increase the rate of effective taxation on activities that generate negative externalities so that people face the real social costs of their choices, whether about where to invest or what to consume.

On the other hand, although almost everyone likes to tax the very rich (except, one assumes, the very rich themselves) almost no one wants to see outsiders taxing their rich so there is little political support – or indeed economic rationale – for such ideas as global wealth taxes. Nonetheless, a few limited ideas for more coordinated (global) taxes may have some merit, for example, with respect to the taxation on international transportation of goods and people and perhaps even (at the regional level) excise taxation on such 'sin' goods as tobacco and alcohol. These two cases are very different, however. Any significant tax increases on shipping and aviation would require a considerable degree of international agreement to be effective, even if the revenue accrues strictly to the taxing nations, but to the extent that such taxes have the same externality rationale as carbon taxes they make economic sense (Keen, Parry and Strand 2013). On the other hand, while it may be a good idea on economic grounds to increase taxes

⁸³ For the most recent such rules, see <http://www.bis.org/bcbs/basel3.htm>.

on so-called 'sin' goods, and on administrative grounds to coordinate such increases at least with neighbouring countries, there is no plausible argument for any but national taxes on such goods. Pleas to impose special global taxes on such goods, with the proceeds to be channelled to international agencies and earmarked for specific worthy causes, have no economic rationale and seem likely to have as little political traction in the future as they have had in the past.

Most of the controversy about global taxation revolves around three central issues: the economics of the idea; whether it can be implemented effectively or not; and its distributional effects. The economic arguments for taxes (or equivalent regulations) to induce market decision makers to make more efficient decisions with respect to carbon emissions or (considerably less certainly) financial structures have merit. The extent to which such ideas can be implemented effectively through coordinated national activities or soft international arrangements has been less explored but at least in these two cases it may perhaps be possible over time – with enough effort and no doubt after many failed negotiations – to reach a 'soft' solution through largely voluntary cooperation and coordination that would be an improvement on the existing situation. Since in a sense everybody at some level and in some degree has something to gain from resolving these problems, the world as a whole, fragmented and contentious as it is, may perhaps at some stage and in some manner be able to work out some way of accomplishing these goals that will be broadly acceptable at least to the main players – that is, those whose cooperation is essential to reaching the intended goal. Or at least, that is, one must hope, since this appears to be about all one can expect from the world we live in short of some cataclysmic crisis.

However, no matter how desirable one may think it to be for the rich to be taxed to help the poor, major redistributive proposals for global taxation are unlikely to be accepted. One may wish that such schemes existed for ethical reasons as well as for such consequential reasons as (perhaps) improved world stability. But one cannot realistically expect them to be accepted unless and until at least most people in most major countries truly accept that they are part of a larger world polity. If and when that time ever comes, prescribing a sensible world tax system will not pose any insuperable economic or technical issues. Until then, however, we will have to continue to struggle along with the patched-up and partial international system we now have, modified from time to time as new players and new interests enter the decision-making group and as that group faces new realities. If and when that system reaches a sustainable and inclusive agreement about how to treat cross-border transactions, the possible basis for a more global approach to financing global public goods may at last exist. Until then, however, those who would make the world a better place seem best advised to focus more on improving the information and evidence needed for better domestic policy decisions in light of a realistic appraisal of world realities instead of proposing radical reforms – mirages – that are not going to be accepted and that may to some extent run the risk of making it too easy to neglect the hard and necessary work of working out how the world as a whole can possibly cope with some of the real, complex, contested and changing problems raised in the global tax literature.

References

- Agosin, M. and Ffrench-Davis, R. (1996) 'Measuring Capital Inflows in Latin America,' in M. ul Haq, I. Kaul and I. Grunberg (eds), *The Tobin Tax: Coping with Financial Viability*, New York: Oxford University Press: 161-191
- Allan, E. (2012) *The Illicit Trade in Tobacco Products and How to Handle It*, 2nd ed.; Washington: International Tax and Investment Center
- Alvaredo, F. et al. (2013) 'The Top 1 Percent in International and Historical Perspective', *Journal of Economic Perspectives* 27(3): 3-20
- Alworth, J. and Arachi, G. (eds) (2012) *Taxation and the Financial Crisis*, Oxford: Oxford University Press
- Anayati, S. (2012) 'The 'Resource Curse' and the Extractive Industries Transparency Initiative (EITI)', dissertation submitted for MA/MSc degree in Geopolitics, Territory and Security at King's College London, available at <http://www.kcl.ac.uk/sspp/departments/geography/study/masters/dissertations/Dissertation-2012-Anayati.pdf>
- ArthaKranti (2013) 'Exploring ArthaKranti: A Path to Fiscal Consolidation', ArthaKranti Research Project Team, ArthaKranti Pratishthan, Maharashtra Knowledge Corporation, Mumbai, March, available at <http://arthakranti.org/proposal>
- Ashmore, R., Jussim, L. and Wilder, D. (2001) *Social Identity, Intergroup Conflict and Conflict Reduction*, Oxford: Oxford University Press
- Avi-Yonah, R. (2011) 'Taxation as Regulation: Carbon Tax, Health Care Tax, Bank Tax and Other Regulatory Taxes', *Journal of Accounting, Economics, and Law* 1 (1): Article 6
- Avi-Yonah, R. (2007) *International Tax as International Law: An Analysis of the International Tax Regime*, Cambridge: Cambridge University Press
- Bahl, R. (1972) 'A Representative Tax System Approach to Measuring Tax Effort in Developing Countries', *International Monetary Fund Staff Papers*, 19 (1): 87-124
- Bahl, R. (1971) 'A Regression Approach to Tax Effort and Tax Ratio Analysis', *International Monetary Fund Staff Papers*, 18 (3): 570-612
- Barrett, S. (2007) *Why Cooperate? The Incentive to Supply Global Public Goods*, New York: Oxford University Press
- Baumert, K. (1998) *Global Taxes and Fees: Recent Developments and Overcoming Obstacles*, Global Policy Forum, available at <http://www.globalpolicy.org/component/content/article/216/45849.html>
- Beitler, D. (2010) 'Raising Revenue: A Review of Financial Transaction Taxes throughout the World: A Report for Health Poverty Action and Stamp Out Poverty', available at <http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&ved=0CC>

8QFjAB&url=http%3A%2F%2Fwww.stampoutpoverty.org%2Fwf_library_post%2Fraising-revenue%2F&ei=v_fOURTXG-G22AWE2YHgBQ&usg=AFQjCNEuo-Y-ThiXnW5n4u3sHhjKCJN4Dg&bvm=bv.59026428,d.b2l

- Bhagwati, J. and Dellafar, W. (1973) 'The Brain Drain and Income Taxation', *World Development* 1 (1-2): 91-104
- Bhagwati, J. and Wilson, J. (eds) (1989) *Income Taxation and International Mobility*, Cambridge MA: MIT Press
- Bierbrauer, F. (2012) 'On the Incidence of a Financial Transaction Tax in a Model with Fire Sales', CESifo Working Paper No. 3870, CESifo Group
- Bird, R. and Brean, D. (1986) 'The Interjurisdictional Allocation of Income and the Unitary Tax Debate', *Canadian Tax Journal* 34 (6): 1377-1416
- Bird, R. and Jun, J. (2007) 'Earmarking in Theory and Korean Practice', in Phua, S. (ed), *Excise Taxation in Asia*, Singapore: National University of Singapore
- Bird, R. and Slack, E. (2013) 'Local Taxes and Local Expenditures: Strengthening the Wicksellian Connection', *Working Paper 13-22*, International Center for Public Policy, Andrew Young School of Policy Studies, Atlanta: Georgia State University
- Bird, R. and Wilkie, S. (2013) 'Designing Tax Policy: Constraints and Objectives in an Open Economy', *eJournal of Tax Research* 11 (3)
- Bird, R. and Zolt, E. (2013) *Taxation, Inequality, and Fiscal Contracting in the Americas*, UCLA School of Law Research Paper 13-14, September
- Bird, R. and Zolt, E. (2005) 'Redistribution via Taxation: The Limited Role of the Personal Income Tax in Developing Countries', *UCLA Law Review* 52 (6, 2005): 1627-95
- Breton, A. (1996) *Competitive Governments*. Cambridge: Cambridge University Press.
- Brondolo, J. (2011) *Taxing Financial Transactions: An Assessment of Administrative Feasibility*, IMF Working Paper 11/185, Washington DC: IMF
- Brooks, K. (2009) 'Inter-Nation Equity: The Development of an Important but Underappreciated International Tax Policy Objective', in J. Head and R. Krever (eds), *Tax Reform in the 21st Century*, Austin TX: Wolters Kluwer
- Brzoska, M. (2004) 'Taxation of the Global Arms Trade? An Overview of the Issues', *Kyklos* 37 (2): 149-170
- Buch, C., Hilberg, B. and Tonzer, L. (2014) *Taxing Banks: An Evaluation of the German Bank Levy*, CESifo Working Paper No. 4704, CESifo Group
- Casal, P. (2011) 'Global Taxes on Natural Resources', *Journal of Moral Philosophy* 8: 307-327
- Christian Aid (2013) *Christian Aid's Tax Justice Strategy 2013-2016*, available at <http://www.christianaid.org.uk/Images/christian-aid-tax-justice-strategy-2013-2016.pdf>

- Cintra, M. (2009) *Bank Transactions: Pathway to the Single Tax Ideal*, São Paulo: Cyan Artes Gráficas
- Cline, W. (1979) 'Resource Transfers to the Developing Countries: Issues and Trends', in W. Cline (ed), *Policy Alternatives for a New International Economic Order*, New York: Praeger Publishers: 333-353
- Cockfield, A. (ed) (2010) *Globalization and Its Tax Discontents: Tax Policy and International Investments*, Toronto: University of Toronto Press
- Coelho, I. (2009) *Taxing Bank Transactions – The Experience in Latin America and Elsewhere. Annex – Value Added Taxes on Banks in Latin America.*
- Commission of the European Communities (2005) *An Analysis of a Possible Contribution based on Airline Tickets as a New Source of Financing Development*, Commission Staff Working Paper SEC 733, Brussels
- Congdon, W. Kling, J. and Mullainathan, S. (2011) *Policy and Choice: Public Finance through the Lens of Behavioral Economics*, Washington: The Brookings Institution
- Coons, C. (2001) 'Wellman's 'Reductive' Justification for Redistributive Policies that Favor Compatriots', *Ethics* 111 (4): 782-788
- Cooper, R. (1977) 'The Ocean as a Source of Revenue', in J. Bhagwati (ed), *The New International Economic Order: The North-South Debate*, Cambridge, MA: MIT Press: 105-110
- Cordell, A. and Ide, T. (1997) *The New Wealth of Nations: Taxing Cyberspace*, Toronto: Between the Lines
- Coutinho, M. (2012) 'Brazil: Understand the Tax on Financial Operations', *International Tax Review*, September 6, available at <http://www.internationaltaxreview.com/Article/3085512/Brazil-Understanding-the-Tax-on-Financial-Operations-IOF.html>
- Credit Suisse (2013) *Regulatory Update, July 2013 – Financial Transaction Taxes*, available at <https://www.credit-suisse.com/media/pb/docs/ch/unternehmen/institutionalclients/fs-transaktionssteuern-en.pdf>
- Damette, O. (2013) *Mixture Distribution Hypothesis and the Impact of a Tobin Tax on Exchange Rate Volatility: A Reassessment*, Document de Travail No. 2013-07, Faculté des sciences économiques et de gestion, Université de Lorraine and Université de Strasbourg, May, available at <http://ideas.repec.org/p/ulp/sbbeta/2013-07.html>
- Davies, J. (ed) (2008) *Personal Wealth from a Global Perspective*, Oxford: Oxford University Press
- Davis, L. (2014) 'Pricing Energy Efficiently', *NBER Reporter* No. 1: 8-10

- Doernberg, R., et al. (2001) *Electronic Commerce and Multi-Jurisdictional Taxation*, The Hague: Kluwer Law International
- Dosser, D. (1963) 'Allocating the Burden of International Aid to Less Developed Countries', *Review of Economics and Statistics* 45 (2): 207-209
- Eccleston, R. (2012) *The Dynamics of Global Economic Governance: The Financial Crisis, the OECD and the Politics of International Tax Cooperation*, Cheltenham UK: Edward Elgar
- Edgar, T. (2013) *Corrective Taxation, Leverage, and Compensation in a Bloated Financial Sector*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2345870
- Eichengreen, B. (1996) 'The Tobin Tax: What Have We Learned?' in M. ul Haq, I. Kaul and I. Grunberg (eds), *The Tobin Tax: Coping with Financial Viability*, New York: Oxford University Press: 275-287
- ECLAC (2011) *Global Tax on Financial Transactions is a Priority for Stability and Development*, Press release, United Nations Economic Commission for Latin America and the Caribbean, 24 August
- Engelbrecht, H. and Hanighen, F. (1934) *The Merchants of Death*, New York: Dodd, Mead
- European Commission (2010) *Financial Sector Taxation*, Taxation Papers, Brussels: European Commission
- European Union (EU) (2008) *European Union Public Finance*, 4th ed., Luxembourg: European Union
- Fairless, T. (2013) 'EU Financial-Transactions Tax Faces More Delays', *Wall Street Journal*, 1 December
- Fennochietto, R. and Pessino, C. (2013) *Understanding Countries' Tax Effort*, IMF Working Paper, WP/13/244, Washington DC: IMF
- Fox, W. (2012) 'Retail Sales and Use Taxation', in R. Ebel and J. Petersen (eds), *The Oxford Handbook of State and Local Government Finance*, Oxford University Press: 406-428
- Frankman, M. J. (1996) 'International taxation: The Trajectory of an Idea from Lorimer to Brandt', *World Development* 24(5): 807-820
- Fricke, D. and Lux, T. (2013) *The Effects of a Financial Transaction Tax in an Artificial Financial Market*, Kiel Working Paper, Kiel: Kiel Institute for the World Economy
- Fuest, C. and Piechl, A. (2012) 'European Fiscal Union: What is it? Does it work? And are there really no alternatives?' *CESifo Forum* 13 (2): 3-9
- Gillenwater, M. (2013) *The Treaty Compliance Challenge: Enforcement under the Kyoto Protocol*, 10 February, available at <http://ghginstitute.org/the-treaty-compliance-challenge-enforcement-under-the-kyoto-protocol/>

- Gradstein, M. and Konrad, K. (eds) (2006) *Institutions and Norms in Economic Development*, Cambridge MA: MIT Press
- Grinberg, I. (2013) 'Taxing Capital Income in Emerging Countries: Will FACTA Open the Door?' *World Tax Journal* October: 325-367
- Griffith-Jones, S. and Persaud, A. (2012) Financial Transactions Taxes, available at http://policydialogue.org/files/publications/FINANCIAL_TRANSACTION_TAXES_Griffith_Jones_and_Persaud_February_2012_REVISIED.pdf
- Haq, M. ul (1976) *The Poverty Curtain: Choices for the Third World*, New York: Columbia University Press
- Haq, M. ul, I. Kaul and I. Grunberg, I. (eds) (1996) *The Tobin Tax: Coping with Financial Volatility*, Oxford: Oxford University Press
- Harrison, K. (2013) *The Political Economy of British Columbia's Carbon Tax*, OECD Environment Working Papers No. 63, OECD Publishing
- Herman, B. (2013) *Half a Century of Proposals for 'Innovative' Development Financing*, United Nations Department of Economic and Social Affairs, DESA Working Paper No. 125
- Hirschman, A. (1991) *The Rhetoric of Reaction*, Cambridge, MA: Belknap Press
- Hirschman, A. and Bird, R. (1968) *Foreign Aid – A Critique and A Proposal*. Essays in International Finance No. 69, Princeton, N.J.: Princeton University
- Independent Evaluation Group (IEG) (2008) *Annual Review of Development Effectiveness: Shared Global Challenges*, Washington: World Bank
- Institute of International Finance (2013) *The Proposed EU Financial Transaction Tax: Potential Harm to Savers, Pensioners and Global Capital Markets*, IIF Council for Asset and Investment Management (CAIM) EU-11 FTT Position Paper, Institute of International Finance
- Institute for Fiscal Studies (2011) *Tax by Design: The Mirrlees Review*, Oxford: Oxford University Press
- Institute for Fiscal Studies (2010) *Dimensions of Tax Design: The Mirrlees Review*, Oxford: Oxford University Press
- Interagency Working Group (IAWG) (2013) *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866*, Interagency Working Group on Social Cost of Carbon, United States Government
- IMF (2013) Energy Subsidy Reform: Lessons and Implications, Washington, 28 January
- IMF (2010) *A Fair and Substantial Contribution by the Financial Sector*, Final Report for the G-20, Washington DC: IMF
- Ip, G. (2013) 'The Gated Globe', Special Report, *The Economist*, 12 October

- ITIC (2013) *Are Earmarked Taxes on Alcohol and Tobacco a Good Idea? Evidence from Asia*. Special Report, Washington: International Tax and Investment Center
- Jha, P. and Pelo, R. (2014) 'Global Effects of Smoking, of Quitting, and of Taxing Tobacco', *New England Journal of Medicine* 370: 60-68
- Kaufman, D., McGuirk, E. and Vicente, P. (2012) *By the People? Foreign Aid and Donor-Country Democracy*, available at <http://www.pedrovicente.org/aid.pdf>
- Kaul, I. (2012) *International Public Finance*, available at http://www.ingekaul.net/wp-content/uploads/2014/01/International_Public_Financ_Fin.pdf
- Kaul, I. and Conceicao, P. (2006) *The New Public Finance: Responding to Global Challenges*, New York: Oxford University Press for the United Nations Development Programme
- Kaul, I. and Le Goulven, K. (2003) 'Financing Global Public Goods: A New Frontier of Public Finance', in I. Kaul et al., *Providing Global Public Goods: Managing Globalization*, New York: Oxford University Press
- Kaul, I., Grunberg, I. and Stern, M. (eds) (1999) *Global Public Goods: International Cooperation in the 21st Century*, New York: Oxford University Press
- Kaul, I., Conceicao, P., Le Goulven, K. and Mendoza, R. (eds) (2003) *Providing Global Public Goods: Managing Globalization*, New York: Oxford University Press
- Keen, M., Parry, I. and Strand, J. (2013) 'Planes, Ships and Taxes', *Economic Policy* 28 (76): 703-749
- Kelton, M. (2008) 'Public Policy Implications of Tobacco Industry Smuggling through Native American Reserves', *International Journal of Health Services* 30(3): 411-417
- Keohane, N. (2009) 'Cap and Trade, Rehabilitated: Tradable Permits to Control U.S. Greenhouse Gas', *Review of Environmental Economics and Policy* 3(1): 42-67
- Krasner, S. (1982) 'Structural Causes and Regime Considerations: Regimes as Intervening Variables', *International Organization* 36(2): 185-205
- Lang, M. and Owens, J. (2014) *The Role of Tax Treaties in Facilitating Development and Protecting the Tax Base*, WU International Taxation Research Paper Series, No. 2014-13, Vienna: Vienna University of Economics and Business Administration
- Lewis, M. (2013) *IMF's Carbon Tax Shenanigans: Part II*, posted on Master Resource, 10 April, available at <http://www.masterresource.org/2013/04/imf-carbon-tax-ii/>
- Lindahl, E. (1919) 'Just Taxation – A Positive Solution'. In R. Musgrave and A. Peacock (eds), (1964) *Classics in the Theory of Public Finance*, London: Macmillan
- Mahoney, J. (2012) *Conceptualizing and Explaining Punctuated versus Incremental Change*, available at <http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CEMQFjAD&>

url=http%3A%2F%2Fpolitics.virginia.edu%2Fsites%2Fpolitics.virginia.edu%2Ffiles%2FGradual%2520versus%2520Punctuated%2520Change%2520Circulation.doc&ei=u07dUqOKOcqj2wWy4oGADw&usg=AFQjCNF_m2aLBk_7SX5OHx_TS-SVwx0Ekw&bvm=bv.59568121,d.aWM

- Martin, R., Muuls, M. and Wagner, U. (2012) *An Evidence Review of the EU Emissions Trading System, Focussing on Effectiveness of the System in Driving Industrial Abatement*, London: Department of Energy and Climate Change
- Masciandro, D. and Passarelli, F. (2012) 'Regulation and Taxation: Economics and Politics', in J. Alworth and G. Arachi (eds) (2012) *Taxation and the Financial Crisis*, Oxford: Oxford University Press, pp. 257-269
- McCullagh, D. and Downes, L. (2012) U.N. Could Tax U.S.-based Web Sites, Leaked Docs Show, CNET News, June, available at http://news.cnet.com/8301-1009_3-57449375-83/u.n-could-tax-u.s.-based-web-sites-leaked-docs-show/
- McKinnon, R. (2012) The Conservative Case for a Wealth Tax, *Wall Street Journal*, 16 January, available at [http://www.stanford.edu/~mckinnon/briefs/The%20conservative%20Case%20for%20a%20Wealth%20Tax%20\(Rov\).pdf](http://www.stanford.edu/~mckinnon/briefs/The%20conservative%20Case%20for%20a%20Wealth%20Tax%20(Rov).pdf)
- McLure, C. (2013) *Reforming Subsidies to Fossil Fuel Consumption: Killing Several Birds with One Stone*, ISPWP 13-12, Andrew Young School of Policy Studies, Atlanta: Georgia State University
- McMahon, F. (2001) *A Global Tax: Unworkable, Unnecessary and Dangerous*, Vancouver: Fraser Institute, available at <http://citeseerx.ist.psu.edu/viewdoc/download?rep=rep1&type=pdf&doi=10.1.1.196.5981>
- Mendez, R. (2001) 'The Case for Global Taxes: An Overview', paper presented to United Nations ad hoc Expert Group Meeting on Innovations in Mobilizing Global Resources for Development, New York, available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.197.6984&rep=rep1&type=pdf>
- Mendez, R. (1997) 'Financing the United Nations and the International Public Sector', *Global Governance*, 3: 283-310
- Mendez, R. (1992) *International Public Finance: A New Perspective on Global Relations*, Oxford University Press
- Michalos, A. (1997) *Good Taxes: The Case for Taxing Foreign Currency Exchange and Other Financial Transactions*, Toronto: Dundurn Press
- Miller, S. and M. Vela (2013) *Are Environmentally Related Taxes Effective?* IDB Working Paper No. IDB-WP-467, Washington DC: Inter-American Development Bank
- Morozov, E. (2013) *To Save Everything, Click Here*, New York: Public Affairs
- Munk School of Global Affairs (2013) *G8: The UK Summit: Lough Erne*, Toronto

- Nordhaus, W. (2011) 'The Architecture of Climate Economics: Designing a Global Agreement on Global Warming', *Bulletin of the Atomic Scientists* 67 (1): 9-18
- OECD (2013) *Addressing Base Erosion and Profits Shifting*, Paris: OECD
- OECD (2013a) *Action Plan for Base Erosion and Profits Shifting*, Paris: OECD
- OECD (2013b) *Revenue Statistics 1965-2012*, Paris: OECD
- OECD (2013c) *Climate and Carbon: Aligning Prices and Policies*, OECD Environment Policy Paper, OECD
- OECD (2010) *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*, Paris: OECD
- Oliver Wyman (2012) *Proposed EU Commission Financial Transaction Tax Impact Analysis on Exchange Markets*, Oliver Wyman
- Otsuka, Y. and Braun, B. (2002) 'Taxation by Regulation: The Case of Local Cable TV Regulation', *Review of Industrial Organization* 21 (1): 21-40
- Oxfam (2011) *Out of the Bunker: Time for a Fair Deal on Shipping Emissions*, Oxfam and World Wildlife Fund Briefing Note, available at <http://www.oxfam.org/sites/www.oxfam.org/files/bn-out-of-the-bunker-050911-en.pdf>
- Paul, J. and Wahlberg, K. (2002) *Global Taxes for Global Priorities*, Global Policy Forum, WEED and the Heinrich Böll Foundation, available at <http://www.globalpolicy.org/component/content/article/216/46027.html>
- Picciotto, S. (2013) *Is the International Tax System Fit for Purpose, Especially for Developing Countries?* ICTD Working Paper 13, Brighton: International Centre for Tax and Development
- Picciotto, S. (1992) *International Business Taxation*, London: Weidenfeld and Nicolson
- Pigou, A. (1920) *The Economics of Welfare*, London: Macmillan
- Piketty, T. (2014) *Capital in the 21st Century*, Cambridge, MA: Harvard University Press
- Pogge, T. (2011) 'Allowing the Poor to Share the Earth', *Journal of Moral Philosophy* 8: 335-352
- Pogge, T. (2008) *World Poverty and Human Rights*, Cambridge: Polity Press
- Posner, R. (1971) 'Taxation by Regulation', *Bell Journal of Economics* 2(1): 22-50
- PwC Financial Services (2013) *EU Bonus Update*, FS Regulatory Brief, available at http://www.pwc.com/en_US/us/financial-services/regulatory-services/publications/assets/fs-reg-brief-eu-bonus-cap-update.pdf

- Rajan, R. (2003) *Taxing International Currency Flows: A Financial Safeguard or Financial Bonanza?* Adelaide: School of Economics, University of Adelaide, available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.201.6668&rep=rep1&type=pdf>
- Rogoff, K. (2010) 'IMF Proposals get the Big Picture Right', *The Guardian*, 1 May
- Sandler, T. (2002) 'Financing International Public Goods', in M. Ferroni and A. Mody (eds), *International Public Goods: Incentives, Measurement and Financing*, Dordrecht, NL: Kluwer: 81-118
- Sandler, T. (2001) *Economic Concepts for the Social Sciences*, Cambridge: Cambridge University Press
- Sandler, T. (1998) 'Global and Regional Public Goods: A Prognosis for Collective Action', *Fiscal Studies* 19 (3): 221-247
- Sandler, T. (1997) *Global Challenges: An Approach to Environmental, Political and Economic Problems*, Cambridge: Cambridge University Press
- Schafer, D. (2012) 'Financial Transaction Tax Contributes to More Sustainability in Financial Markets', *Intereconomica* 2012/2: 76-83
- Schulmeister, S. (2012) 'A General Financial Transaction Tax: Strong Pros, Weak Cons', *Intereconomica* 2012/2: 84-89
- Seely, A. (2013) *Taxation of Banking*, Standard Note SN5251, House of Commons Library
- Seers, D. (1964) 'International Aid: The Next Steps', *Journal of Modern African Studies* 2 (4): 471-489
- Selbervik, H. and Nygaard, K. (2006) *Nordic Exceptionalism in Development Assistance: Aid Policies and the Major Donors: the Nordic Countries*, CMI Report R2006:8, Bergen: Chr. Michelsen Institute, available at <http://www.cmi.no/publications/publication/?2371=nordic-exceptionalism-in-development-assistance>
- Sen, A. (1999) 'Global Justice; Beyond International Equity', in I. Kaul, I. Grunberg and M. Stern, (eds) *Global Public Goods: International Cooperation in the 21st Century*, New York: Oxford University Press: 116-115
- Shaviro, D. (2014) *Fixing U.S. International Taxation*, Oxford: Oxford University Press
- Shome, P. (1995) *Global Taxes*, Working Paper No. 5, New Delhi: National Institute of Public Finance and Policy
- Shome, P. and Stotsky, J. (1995) *Financial Transactions Taxes*, IMF Working Paper WP/95/77, Washington DC: IMF
- Siebert, A. (2013) 'The European Commission's Proposed Financial Transactions Tax', *EconoMonitor* 27 April 2013

- Spahn, P. (1995) *International Financial Flows and Transactions Taxes: Survey and Options*, IMF Working Paper WP/95/60, Washington DC: IMF
- Steinberg, E., Yager, J. and Brannon, G. (1978) *New Means of Financing International Needs*, Washington DC: Brookings Institution
- Steiner, H. (2011) 'The Global Fund: A Reply to Casal', *Journal of Moral Philosophy* 8: 328-334
- Stubbs, D. (2012) *Adopting a Currency Transaction Tax when Avoidance is a Possibility: Which Currencies would take the Lead and What Rate could they Charge?* Background Paper for World Economic and Social Survey 2012
- Tanzi, V. (1995) *Taxation in an Integrating World*, Washington DC: Brookings Institution
- Taskforce (2010) *Globalizing Solidarity: the Case for Financial Levies*, Report of the Committee of Experts to the Taskforce on International Financial Transactions and Development, Paris, available at http://www.leadinggroup.org/IMG/pdf_Financement_innovants_web_def.pdf
- Thuronyi, V. (2010) 'Tax Treaties and Developing Countries', in M. Lang et al. (eds), *Tax Treaties: Building Bridges between Law and Economics*, Amsterdam: IBFD: 441-456.
- Tobin, J. (1978) 'A Proposal for International Monetary Reform', *Eastern Economic Journal* 4(3-4): 153-159
- Tobin, J. (1974) *The New Economics: One Decade Older*, Princeton, NJ: Princeton University Press
- TUAC Secretariat (2010) *The Parameters of a Financial Transaction Tax and the OECD Global Public Good Resource Gap, 2010-2020*, Paris: Trade Union Advisory Committee to the OECD
- United Nations (2012) *World Economic and Social Survey 2012*, New York: United Nations
- United Nations (2006) *Social Justice in an Open World*, New York: Department of Economic and Social Affairs, United Nations
- United Nations (1970) *Towards Accelerated Development: Proposals for the Second United Nations Development Decade*, Committee for Development Planning, New York: United Nations
- Vella, J. (2012) 'The Financial Transaction Tax: Some Questionable Claims', *Intereconomica* 2012/2: 90-95
- Vivid Economics (2012) *Carbon Taxation and Fiscal Consolidation: The Potential of Carbon Pricing to Reduce Europe's Fiscal Deficits*. Report prepared for the European Climate Foundation and Green Budget Europe, available at http://www.foes.de/pdf/2012-05_CETRIE_Carbon_Pricing_Report_web.pdf
- Wahlberg, K. (2005) *Progress on Global Taxes?* Global Policy Forum, available at <http://www.globalpolicy.org/component/content/article/216/46020.html>

- Wellman, C. (2000) 'Relational Facts in Liberal Political Theory: Is There Magic in the Pronoun 'My'?' *Ethics* 110(3): 537-562
- Wicksell, K. (1896) 'A New Principle of Just Taxation', in R. Musgrave and A. Peacock (eds). *Classics in the Theory of Public Finance*, London: Macmillan, 1964.
- Wilson, J. (2008) 'A Voluntary Brain-Drain Tax', *Journal of Public Economics* 92 (12):2385-2391
- World Bank (2013) *Mapping Carbon Price Initiatives: Developments and Prospects*, Washington DC: World Bank
- World Health Organization (WHO) (2012) *Draft Guidelines for the Implementation of Article 6 of the WHO Framework Convention on Tobacco Control*, Report of the Working Group, FCTTC/COP/5/8, Geneva: World Health Organization
- World Health Organization (WHO) (2009) *Public Health, Innovation and Intellectual Property*, Report of the Expert Working Group on Research and Development Financing, EB 126/6 Add.1, Geneva: World Health Organization
- Wyplosz, C. (1999) 'International Financial Instability', in I. Kaul, I. Grunberg and M. Stern (eds) *Global Public Goods: International Cooperation in the 21st Century*, New York: Oxford University Press: 116-115
- Zivin, J. and M. Neidell (2013) 'Environment, Health, and Human Capital', *Journal of Economic Literature* 51 (3): 689-730



International Centre for Tax and Development
at the Institute of Development Studies
Brighton BN1 9RE, UK
T: +44 (0)1273 606261
F: +44 (0)1273 621202
E: info@ictd.ac
www.ictd.ac