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## WHY NEW INTERNATIONAL TAXES FOR DEVELOPMENT ARE INEFFICIENT

#### **BY YOURI CHASSIN**

with the collaboration of Pierre Lemieux





Ideas for a More Prosperous Nation

910 Peel Street, Suite 600 Montreal (Quebec) H3C 2H8 Canada

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#### **Executive Summary**

Developed since the early 2000s, innovative financing for development, or IFD, is a collection of disparate spending projects, organizations and financing mechanisms in the field of development assistance. It is first and foremost a set of current or proposed new taxes. The current IFD taxes are the airline ticket tax and part of the proceeds from pollution allowances in Germany. Several new IFD taxes have been, and are being,

proposed, including financial transaction taxes (FTTs), a carbon tax, a tobacco tax, and new special drawing rights (SDRs)—a hidden tax.

IFD taxes do not meet the criteria of "good" taxes suggested by the standard or orthodox theory of public finance: efficiency, low administrative costs, flexibility, political accountability, and fairness. The airline ticket tax hits relatively elastic demand, which implies a large excess burden (economic cost). FTTs are probably inefficient, despite the fact that many economists favour them (for reasons unrelated to IFD objectives). Higher tobacco taxes would likely be inefficient, and raise less revenue than anticipated. New SDRs could generate inflation. Only carbon taxes, to the extent that they correct pollution externalities, could possibly be justified from a standard publicfinance viewpoint. Many IFD taxes may carry high administrative costs, especially a tobacco tax, and probably an FTT and a carbon tax as well. All IFD taxes have inflexible rates, except perhaps for the hidden tax represented by SDRs. IFD taxes also fare badly against the criterion of political accountability: They are hidden, and the link between the taxes and what they finance is broken or obscure.

Market failures exist, but so do government failures. Analyzing IFD taxes using this approach—called "Public Choice"—reveals further problems.



The danger is that these taxes will serve more for tax exploitation than for providing the public services that taxpayers want. New taxes create new rent-seeking opportunities. Rent-seeking also occurs within governments, on the part of bureaucrats who, like everybody else, naturally pursue their own interests. It comes as no surprise that bureaucrats in development agencies have attractive working conditions and perks. Most IFD taxes

(the proposed tobacco tax being the only possible exception) levy small amounts of money from a large number of people who will, therefore, not be motivated to protest, while the immediate recipients are a small number of bureaucrats in national or international bureaucracies. The incentives of politicians are misaligned too. The fact that IFD taxes are hidden and non-transparent is a feature of such taxes, not a bug. International aid agencies are also particularly opaque, and their auditing procedures often questionable. IFD taxes appear to be more a demonstration of government failure than an efficient way to raise money to correct market failures.

IFD taxes do not, and would not, increase development resources as much as it appears they might at first glance. Money is fungible and a subsidy can just replace other money that would have otherwise been spent on the same things. On top of this, there is much empirical evidence that development aid has not served to further real and sustainable growth. The importance of good institutions, including economic freedom and free international trade, was obscured, if not countered, by development aid.

IFD taxes are in many ways the epitome of inefficient development aid.

Why New International Taxes for Development Are Inefficient

#### **CHAPTER 1**

#### IFD and IFD Taxes

#### 1.1 What is IFD?

Clearly defining Innovative Financing for Development, or IFD, is not easy. An illustration of this difficulty is given by a definition from the World Bank:

Innovative financing involves non-traditional applications of solidarity, PPPs, and catalytic mechanisms that (i) support fundraising by tapping new sources and engaging investors beyond the financial dimension of transactions, as partners and stakeholders in development; or (ii) deliver financial solutions to development problems on the ground.<sup>1</sup>

Like this one, many definitions are obscure. It is easier to see what IFD is from its history.

IFD developed over the last dozen years from a vague concept into a complex set of projects and financing instruments. The idea of finding new forms of financing for development evolved from the Millennium Development Goals (MDGs) adopted by the United Nations Millennium Summit in 2000. The concept of innovative financing was formalized at the United Nations International Conference on Financing for Development held in Monterrey, Mexico, in 2002.<sup>2</sup> The "Monterrey Consensus" declared:

We recognize the value of exploring innovative sources of finance provided that those sources do not unduly burden developing countries. In that regard, we agree to study, in the appropriate forums, the results of the analysis requested from the Secretary-General on possible innovative sources of finance.<sup>3</sup>

The study commissioned by the 2000 General Assembly and completed by 2004 envisioned "a range of innovative sources of finance," including a tax on currency transactions and a carbon tax levied on fuel use.4 It was also in 2004 that a task force set up by French President Jacques Chirac proposed a series of international solidarity taxes to finance the pursuit of the Millennium Development Goals.<sup>5</sup> A few international meetings of heads of state and government culminated in the 2005 Declaration on Innovative Sources of Financing for Development and the creation, one year later, of the Leading Group on Solidarity Levies, later renamed the Leading Group on Innovative Financing for Development. In 2006, the French government introduced an IFD tax on airline tickets. By that time, public health organizations had started operations to tap IFD funds.6

IFD is a collection of disparate spending projects, organizations and financing mechanisms in the field of development assistance. Their common denominator is that they are different from traditional development aid.

The International Conference on 2008 Financing for Development called for scaling up IFD. A High Level Taskforce on Innovative International Financing for Health Systems was also created in 2008, which proposed new forms of financing. The 2009 G8 meeting committed to "explore the potential of new innovative financing mechanisms." In a report produced for a 2011 G20 meeting, Bill Gates, Microsoft founder and cochairman of the Bill and Melinda Gates Foundation, proposed several IFD initiatives.8 In 2011, a United Nations General Assembly resolution stressed "the importance of scaling up present initiatives and developing new mechanisms, as appropriate."9 And the process continues: the Leading Group on Innovative Financing for Development held its 11th Plenary Session in Helsinki in early February 2013.<sup>10</sup>

<sup>1.</sup> Quoted in Sandor et al. (2009), p. 3.

<sup>2.</sup> UNDP (2012), p. 5.

UN (2003), par. 44.

<sup>4.</sup> Atkinson (2005), p. vii.

<sup>5.</sup> Landau (2004).

<sup>6.</sup> Sandor et al. (2009), p. 4.

<sup>7.</sup> *Ibid.*, p. 1.

<sup>8.</sup> Gates (2011).

<sup>9.</sup> UNDP (2012), p. 5.

<sup>10.</sup> See http://leadinggroup.org/article1152.html.

IFD is a collection of disparate spending projects, organizations and financing mechanisms in the field of development assistance. Their common denominator is that they are different from traditional development aid. The World Bank recognizes the difficulty of defining the concept:

There is no internationally agreed definition of "innovative financing for development". In reality, the term encompasses a heterogeneous mix of innovations in fundraising and innovations in spending, i.e. innovative financing for development comprises both innovations in the way funds are raised as well as innovations in the ways funds are spent on international development.<sup>11</sup>

On the spending side of IFD, a number of international projects and agencies have been created. The most important are:<sup>12</sup>

- The International Finance Facility for Immunization or IFFIm (founded in 2006) raises funds on the capital market to finance GAVI.
- GAVI (founded in 2000), formerly known as the Global Alliance for Vaccines and Immunization and now sometimes called the "GAVI Alliance," subsidizes vaccination of children in poor countries. It is often thought of as an NGO but is in fact an international governmental organization. Its board is made up of the World Bank, the World Health Organization (WHO) and UNICEF, plus five representatives of governments of developing countries and five of donor governments. It is the only member of IFFIm.
- The Global Fund (founded in 2002) pools and distributes funds to fight AIDS, tuberculosis and Malaria in developing countries.
- UNITAID is a global health agency founded in 2006 to channel the revenue from an airline ticket tax (see below) to the diagnosis and

treatment of HIV/AIDS, tuberculosis, and malaria in developing countries. More than half of its revenue comes from the airline ticket tax in France; the rest comes from "voluntary" contributions from other countries, as well as from the Bill and Melinda Gates Foundation. The field work is done by field partners, which include international health organizations (as well as the Clinton Foundation). UNITAID's chairman describes his organization as "a veritable laboratory of innovative financing for development." <sup>13</sup>

IFD initiatives implemented thus far focus mainly on health and especially childhood immunization and the fight against HIV/AIDS. Some IFD financing has also gone to environmental protection.

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On the financing side of IFD, many different mechanisms are used. The United Nations Development Programme (UNDP) distinguishes four broad categories:<sup>14</sup>

1) Taxes, dues or other obligatory charges:
These are taxes under different names, and include the current "solidarity levy on air tickets." The other current IFD tax is the portion of the sales of EU allowances (permits to emit carbon dioxide) that the German government devotes to climate protection in developing countries. Other international taxes are being considered, such as financial transaction taxes, carbon taxes, and a "solidarity tobacco contribution."

<sup>11.</sup> Quoted in UNDP (2012), p. 7.

<sup>12.</sup> See Sandor *et al.* (2009) and UNDP (2012) for a summary. See also Cour des comptes (2010), pp. 65, 109, and *passim*; Fan and Silverman (2012)

<sup>13.</sup> UNITAID (2011), p. 1.

UNDP (2012). See also Sandor et al. (2009), Girishankar (2009), and OECD (2011). These categories are not always mutually exclusive.

<sup>15.</sup> Girishankar (2009), p. 59; UNDP (2012), p. 15.

- 2) Voluntary solidarity contributions: These are private initiatives, encouraged and facilitated by governments, whereby private companies allow their customers to voluntarily contribute to the financing of international development projects. "(Red)," for instance, is a licenced trademark that tells consumers that the producer gives 50% of its profits for goods so tagged to the Global Fund for the purpose of fighting HIV/AIDS. 16
- 3) Frontloading and debt-based instruments: The International Finance Facility for Immunization (IFFIm) issues bonds on capital markets that are guaranteed by future official development assistance commitments from eight donor governments. The World Bank issues bonds to finance development or climate change adaptation and mitigation projects.<sup>17</sup> Donor governments may also reduce the debts of debtor governments as a way for the latter to finance health expenditures (through the Global Fund, for example).18
- 4) State guarantees, public-private incentives, insurance and other market-based mechanisms: Under this title, UNDP includes different forms of subsidies—for vaccines, for pollution reduction in developing countries, for insurance against natural catastrophes, etc.<sup>19</sup>

IFD financing mechanisms have raised relatively little money thus far, but estimates vary widely depending on what counts as IFD. They range from US\$6 billion to US\$57 billion between 2000 and 2008,<sup>20</sup> compared to US\$133 billion in official development assistance for 2011 alone. According to a World Bank study, less than 7% of development assistance is financed by IFD.<sup>21</sup>

#### 1.2 IFD Taxes

Aside from the German government's allocation to environmental projects from its sales of pollution allowances, the airline ticket tax is the only current IFD tax.<sup>22</sup>

# Aside from the German government's allocation to environmental projects from its sales of pollution allowances, the airline ticket tax is the only current IFD tax.

Launched in 2006, it is now fully implemented by the governments of Cameroon, Chile, Congo, France, Madagascar, Mali, Mauritius, Niger, and the Republic of Korea.<sup>23</sup> The tax is added to individual passengers' ticket prices, and collected by airlines, on flights departing from these participating countries. The schedule usually levies a low amount on domestic and economy flights, and higher amounts on business or first class. In France, for example, the schedule is the following:

- On domestic and regional flights: €1 per passenger departing from France in economy class; €10 in business and first class;
- On international flights: €4 per passenger departing from France in economy class; €40 in business and first class.<sup>24</sup>

Participating governments channel the proceeds of their airline ticket tax into UNITAID, which derives two thirds of its resources from this source.<sup>25</sup> Thus far, the tax has raised about US\$200 million a year on average over the past six years, mostly from France. Chart 1 shows the amounts (in euros) collected by the French government since 2006. The UN estimates its potential at between US\$1 billion

<sup>16.</sup> UNDP (2012), pp. 11 and 44. See also www.joinred.com.

<sup>17.</sup> UNDP (2012), p. 11.

<sup>18.</sup> Sandor (2009), p. 1.

<sup>19.</sup> UNDP (2012), pp. 14-16.

<sup>20.</sup> Ibid., p. 9; Sandor et al. (2009), p. 3.

<sup>21.</sup> Girishankar (2009), p. 8.

<sup>22.</sup> The government of Norway pays part of a carbon tax into UNITAID, but this is not usually considered as an IFD tax. An exception is Assemblée nationale (2011), which suggests that it is an IFD tax (p. 9).

<sup>23.</sup> See http://www.unitaid.eu/fr/les-financements-innovants.

<sup>24.</sup> République Française (2013). As we are going to press, the French government is announcing an increase of the tax of 12.7% in 2014; see "La taxe Chirac sur les billets d'avion revalorisée de 12,7% en 2014", Le Figaro, July 31, 2013.

<sup>25.</sup> UNDP (2012), p. 10.

Chart 1 Revenues from the Tax on Airline Tickets in France (Millions of Euros)							
Year	2006	2007	2008	2009	2010	2011	2012
	45	164	173	162	163	175	185

Source: République Française (2013).

and US\$10 billion per year if it were to be extended to other countries.<sup>26</sup>

The German government devotes about 10% of its revenues from the sale of EU allowances (permits to issue carbon dioxide) to climate protection in developing countries. This is the other current IFD tax (excluding future taxes that will be necessary to repay IFD bonds).

Chart 2 shows how taxes constitute (currently and in the future) the largest part of IFD revenues. Bond financing has reached US\$2.4 billion, the ultimate goal being US\$4 billion. Donor governments and the Gates Foundation have also pledged US\$1.5 billion for subsidizing and purchasing vaccines. But these are stocks, as opposed to annual flows of financing. Moreover, public bonds and other government commitments (as opposed to private donations) have to be financed by future taxes. Looking at current taxes as annual flows, we see more clearly how IFD is dominated by taxes. IFD tax revenues from the sale of German pollution allowances totaled 120 million euros in 2008 and 230 million euros in both 2009 and 2010.27 (Note that selling pollution permits is equivalent to a tax.) The air ticket levy now raises about US\$250 million a year.

Moreover, proposals for extending current IFD taxes and creating new ones would greatly increase their potential, as shown on Chart 3 (borrowed from the UN). The UNDP declares that "the scope for more innovations in the future is both

enormous and probably inevitable."<sup>28</sup> The current taxes—the air ticket tax and pollution allowances earmarked for developing countries—could be extended to other countries. The chart also shows the potential of the new taxes currently proposed:

- Special Drawing Rights (SDRs) for the governments of developing countries (We will see later in this chapter how this would amount to an inflation tax.)
- Carbon taxes
- Financial transaction taxes (FTTs)
- Billionaire tax
- Currency transaction tax
- Certified emission reduction tax (This is part of the trading schemes proposed by the Kyoto agreement, and we will include it in the category of carbon taxes.)

This Research Paper will focus on the most important of the IFD taxes now proposed: FTTs, carbon taxes, tobacco taxes, and SDR allocations.

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Financial transaction taxes are one sort of proposed IFD taxes. Taxes on different financial

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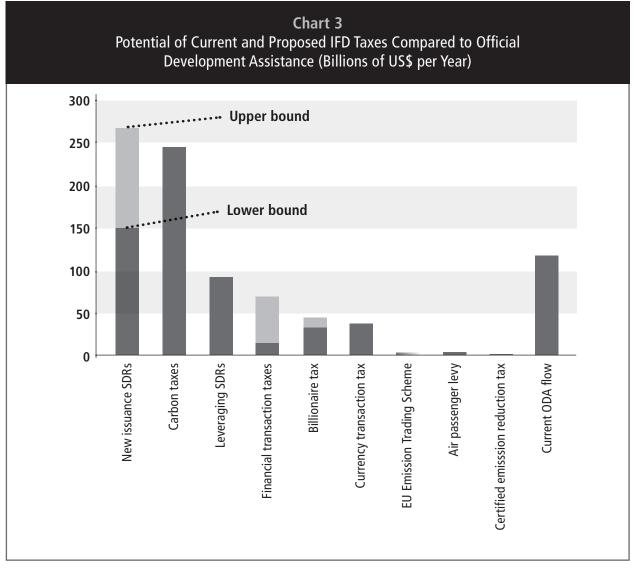
<sup>26.</sup> UN (2012), p. 4.

<sup>27.</sup> See this webpage from the German Ministry for Economic Cooperation and Development: http://www.bmz.de/en/what\_we\_do/issues/development-financing/innovative-development-financing-instruments/Auctioning-emission-certificates/index.html. IFD tax revenues are likely to have gone done since because of the decrease in the price of carbon allowances.

<sup>28.</sup> UNDP (2012), p. 17.

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INITIATIVE	PURPOSE	HOW DOES IT WORK?	REVENUES	IS IT OFFICIAL DEVELOPMENT ASSISTANCE?
NEW AGENCIES				
GAVI Alliance (2000)	Public-private partnership for immunisations.	Pooled funds distributed, based on proposals from poorer developing countries.	About USD 300m. a year. USD 3.7b. approved for 2000-15, as of 2009.	Yes, but only for official contributions.
The Global Fund (2002)	Public-private partnership to fight AIDS, TB and malaria.	Pooled funds distributed, based on proposals from poorer developing coountries.	About USD 3.2b. a year Total of USD 14b. raised by 2009.	Yes, but only for official contributions.
(a) New revenue raising				
Air-ticket levy (2006)	Fund a purchase facility (UNTAID) for AIDS, TB and malaria treatments.	13 countries apply a domestic tax (2009). UNITAID funds are channeled through existing institutions, esp. Clinton Foundation.	USD 251m. a year.	Yes, when funds collected are paid to UNITAID or other international agencies.
Auctioning/sales of emission permits (2009)	Provide funds for climate mitigation and adaptation.	Under EU regulations, EU Allowances (EUA) for carbon dioxide emissions are sold to emitters.	Germany's 2009 budget allocates EUR 225m. in EUA sales to development.	Yes, when proceeds are spent on development.
Currency Transaction Levy	Increase the funds allocated to finance development.	Governments apply a tax on foreign exchange transactions.	Levying 0,005% on major currencies would yield USD 33b. a year.	Yes, when funds collected are spent on development assistance.
(b) Bonds (front-loading)				
International Finance Facility for Immunization (IFFIm, 2006)	Fund GAVI campaigns.	Bonds are sold in the international capital markets against legally binding long-term ODA commitments from 8 donor countries.	USD 2.4b. raised by 2009; aim is to raise a total of USD 4b.	Yes, for governement payments to meet bond interest and principal.
(c ) Voluntary contributions				
Global Digital Solidarity fund (2003)	Promote an inclusive information society.	Public or private bodies voluntarily contribute 1% of digital procurement contracts.	Since 2003, more than EUR 30m. allocated to 300 grantees.	Yes, but only for official contributions.
(PRODUCT) RED (2006)	Provide additional funding to Global Fund's activities in sub- Saharan Africa.	Product RED trademark licensed to global companies that pledge a share of profits from sales of RED Products to Global Fund programs.	USD 134.5m. tranfered to Global Fund to date.	No, only when private funds are involved.
Airline ticket voluntary solidarity contribution	Provide additional resources to fund UNITAID activities.	Individuals or corporations elect to contribute to developement when booking flights.	USD 2 per ticket contribution might raise up to USD 960m. a year.	No, only when private funds ar involved.
(d) Guarantees (incentives)				
Advance Market Commitment (AMC, 2007)	Provide incentive to develop new vaccines.	Donors commit to buy a succesful vaccine from vaccine makers at a negotiated price which covers development costs.	USD 1.5b. pledged by 5 donors and Bill & Melinda Gates Foundation for AMC for pneumococcal disease.	Yes, but only when donor governments pay for vaccines.
Index-based weather insurance	Reduce the vulnerability of rural poor to extreme weather events.		Weather insurance schemes already piloted in Ethiopia, Malawi, Nicaragua, Honduras and India.	Yes, but only for official contributions to insurance premiums.



Source: UN (2012), p. 3.

instruments have been under discussion since the 1970s, when James Tobin proposed a tax on currency trades with the goal of taming speculation.<sup>29</sup> The proposal has since been resurrected and applied to other financial instruments, and with different goals in mind, from raising general revenues to financing development or environmental protection, making the financial sector pay for the recent economic crisis, or redistributing revenues at the global level.<sup>30</sup> The EU plans to introduce its own financial transaction tax but this project is not related to IFD.<sup>31</sup> The rate envisioned by the

EU was to be 0.1% on the exchange of stocks and bonds, and 0.01% on derivative contracts, but the controversial project has been watered down.<sup>32</sup>

Carbon taxes are a second main type of new tax that has been proposed by IFD advocates. Two distinct proposals have been made: (1) carbon taxes on specific fuels; and (2) emission permits as they exist under the EU's cap-and-trade system, called the Emissions Trading System. Regarding the latter, it has been proposed that part of the revenues from such permits be earmarked for international development purposes, "eradicating

<sup>29.</sup> The Economist (2013b).

<sup>30.</sup> UNDP (2012), pp. 17-18.

 <sup>&</sup>quot;Wider Euro 'Tobin Tax' will Net €35bn," Financial Times, January 29, 2013; The Economist (2013f).

 <sup>&</sup>quot;European Lawmakers Vote for Transaction Tax," Financial Times, June 18, 2013.

poverty and hunger," or environmental projects—as the German government now does.<sup>33</sup> Regarding the former proposal, specific global carbon taxes would be imposed on fuels used in international aviation and maritime transport (both goods and passengers).<sup>34</sup> The purpose of these specific taxes would be both to help "reduce carbon emissions" and "to generate a sizeable flow of revenues."<sup>35</sup> The proposed tax rate would be US\$25 per ton of CO<sub>2</sub> emissions—several times what an allowance for a ton of carbon currently costs in the EU.<sup>36</sup> Revenues from these taxes would be earmarked for environmental protection in developing countries.

A third sort of tax, the "solidarity tobacco contribution," was suggested by the High Level Taskforce on Innovative Financing for Health Systems in 2009. The starting idea was to "expand the mandatory solidarity levy on airline tickets and explore the technical viability of other solidarity levies on tobacco and currency transactions."37 The concept of an international tobacco tax, which would be levied on top of existing national tobacco taxes, was developed by the WHO in a subsequent report. This micro-levy of perhaps \$0.05/pack would be "voluntary"38 in the sense that member states of the WHO could choose whether or not to impose it on their taxpayers—for whom, of course, it would not be voluntary at all. The tax proceeds would serve to finance health and development projects. The WHO estimated that it could raise at least US\$5.5 billion in G20+ countries;<sup>39</sup> Bill Gates, who endorses the project of a tobacco tax, evaluates its potential at US\$9 billion.40

A fourth category of proposed IFD tax is for a completely disguised tax. The project would allocate Special Drawing Rights (SDRs) to governments of developing countries, perhaps even on a regular basis. DRs are an international asset created by the International Monetary Fund (IMF) that can play the role of an international currency. Issuance of new SDRs is a hidden tax because it would generate inflation. Inflation amounts to a tax, as higher prices harm everybody but the first recipients of the newly created money; later recipients have to pay more for their goods and services and, thus, are forced to consume less.

# Although IFD revenue-raising activities do include some voluntary programs, they rely mainly on taxes.

Taxes thus occupy a central place in what is called IFD. Although IFD revenue-raising activities do include some voluntary programs, they rely mainly on taxes. One can find other indications of the central place of taxes in IFD. Keeping in mind that illicit flows of capital include "commercial tax evasion and avoidance," the Leading Group on Solidarity Levies "considers the fight against 'illicit financial flows' as an innovative source of development finance," and includes "commercial tax invasion and avoidance" in illicit financial flows. The OECD seems to put transfer pricing in multinational corporations in the same basket.

Taxes are the backbone of IFD, which is why this paper focusses on them.

<sup>33.</sup> UN (2009), pp. 71-73; OECD (2010), p. 20.

<sup>34.</sup> IMF (2011), p. 6 and *passim*.

<sup>35.</sup> UNDP (2012), p. 19.

About US\$4 per ton in the spring of 2013: see "The Collapse of the Carbon Market," *Financial Times*, May 23, 2013; and "Worry Over Scarcer Credits Propels US Carbon Market RGGI", *Financial Times*, June 9, 2013. See also *The Economist* (2013a).

<sup>37.</sup> WHO (2011), p. 4.

<sup>38.</sup> Ibid.

<sup>39.</sup> WHO (2011), pp. 12, 21, 34 and passim. The G20+ is made of the governments of Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, India, Indonesia, Ireland, Italy, Japan, Latvia, Lithuania, Malta, Mexico, the Netherlands, Norway, Poland, Portugal, Romania, the Republic of Korea, Russia, Saudi Arabia, Slovakia, Slovenia, South Africa, Spain, Sweden, Turkey, the United Kingdom, and the United States. (WHO 2011, p. 24)

<sup>40.</sup> UNDP (2012), p. 20.

<sup>41.</sup> *Ibid.*, p. 20.

<sup>42.</sup> IMF (2012).

<sup>43.</sup> UNDP (2012), p. 39.

<sup>44.</sup> OECD (2010), par. 41.

Why New International Taxes for Development Are Inefficient

#### **CHAPTER 2**

## Are IFD Taxes Efficient? A Standard Public Finance Approach

The wide heterogeneity of IFD taxes makes an economic evaluation of them difficult. Each tax, current or proposed, would require a specific analysis that would constitute a research project of its own. In this short paper, we can only hope to provide general indications of how the IFD taxes and their main features meet economic evaluation criteria.

### 2.1 Market Failure and Specific Criteria for "Good" Taxes

What are the criteria that economists use to evaluate a tax? In the standard theory of public finance, the raising of taxes is justified by the necessity of financing public expenditures, which are themselves required to correct "market failures." A market failure is a situation where markets—that is, the free and voluntary interaction of individuals—do not correctly transmit participants' preferences and demand, even when the cost of satisfying them is taken into account. The insufficient production of "public goods" is one sort of market failure. A public good is a good or service that everybody wants but for which it is impossible to charge consumers. The impossibility for private enterprise to charge the price of a public good comes from a simple fact: by the very definition of a public good, everybody gets it for free if anybody gets it and, thus, everybody will try to evade payment (i.e., to be a free rider), hoping that his neighbor will finance it. National defence is a standard example of a public good. The concept of market failures, like the concept of public goods, has been subjected to constant extensions, but it should suffice here to understand that, in standard public finance

analysis, taxes are ultimately used to correct such failures. 45

In line with the standard public finance approach, IFD is said by its defenders "to address market failures" and to be "linked to the idea of global public goods" and "aimed at correcting the negative effects of globalization."46 For the purpose of the present chapter, let us accept that IFD activities are meant to correct market failures and offer public goods (even if this requires a very wide definition of these concepts). Even so, taxes presumably still need to meet more specific criteria: they must be "good" taxes in the sense that they carry the lowest possible costs, that they are the best among all possible taxes in the case at hand. The question, then, becomes: Do IFD taxes meet the standard public finance criteria for good taxes? In other words, are they the best taxes that can be levied to finance the public expenditures they finance? The present chapter addresses this question.

Do IFD taxes meet the standard public finance criteria for good taxes? In other words, are they the best taxes that can be levied to finance the public expenditures they finance?

Joseph Stiglitz, winner of the 2001 Nobel Prize in economics, lists five criteria for a good tax system: efficiency, administrative costs, flexibility, political responsibility (or accountability), and fairness.<sup>47</sup> We can use these standard public

<sup>45.</sup> Any economics textbook explains these concepts. Stiglitz (1988) provides the standard public finance perspective. For a simple but detailed and critical explanation, see Lemieux (2008), pp. 259-305.

<sup>46.</sup> See UNDP (2012), p. 7. The "negative effects of globalization" is an example of the vast extension that some want to give to the concepts of market failure and public goods.

<sup>47.</sup> Stiglitz (1988), pp. 385-410. Professor Stiglitz is recognized as an economist who does not object to taxes and big government; thus, by using the criteria he proposes, we avoid being prejudiced in the other direction. A third edition of Stiglitz's book has been published (Stiglitz, 2000), but does not materially differ from the one we use with regard to the criteria of a good tax.

finance criteria to evaluate specific taxes, like IFD taxes. More precisely, the requirements are the following:

- 1) Efficiency In the economic sense, efficiency refers to the capacity of individuals to maximize their utility (or satisfaction) by making choices based on the real costs of things. Hence a tax is inefficient to the extent that it introduces distortions in these choices. Most taxes create distortions and generate a special cost that is called a deadweight loss or excess burden. The easiest way to understand this is to consider the case of an indirect tax on a specific good, called an "excise tax." By increasing the price of the good, the tax reduces its consumption (technically, its "quantity demanded"), and the consumer loses part of the utility he previously obtained. This loss in welfare is the excess burden of the tax. The excess burden of a tax is its net cost, that is, what the consumer loses in excess of what is transferred to the public treasury. If the expenditures made with the tax revenues create more benefits than the deadweight loss (plus the other costs of the tax), the total package (tax plus expenditure) will have been efficient. Yet, the less inefficient the tax is in itself—that is, the lower its excess burden—the better it is. Moreover, if a tax corrects a distortion created by market failures (pollution, for example), it increases welfare by itself. Such taxes are called "Pigovian taxes," following the late British economist Arthur Cecil Pigou.<sup>48</sup> But note that a Pigovian tax still needs to be the most efficient one available, the one that is best at correcting the market failure involved.
- 2) Administrative costs Collecting and enforcing a tax imposes a real cost upon government, in terms of resources used:

labour, computers, buildings, etc. Another form of cost to be included is the compliance cost to individuals and companies, which includes time, the hiring of accountants, and the keeping of records. The less generally accepted a tax is, the higher the cost of collection and enforcement. Also, the more complex a tax, the higher the compliance costs.

- 3) Flexibility According to Stiglitz, a tax should be flexible in the sense that either its rate or rates should move automatically with the business cycle (lower rates in recession time, like with the income tax when incomes decline), or changing the rates with changing circumstances should not be too difficult politically.
- 4) Political responsibility (accountability) The accountability criterion has two related aspects. First, taxes should not be hidden, as taxpayers should know what they are paying. Second, a government should be accountable to its citizens for the taxes it levies.
- 5) Fairness Again according to standard public finance theory, a tax should be fair or contribute to the fairness of the tax system in which it is imbedded. This is obviously the most subjective criterion of a good tax, as it depends on conflicting philosophical theories of fairness and justice. Traditional public finance usually assumes that a tax that treats all individuals equally is a good tax.<sup>49</sup>

A rapid analysis will show that each of the main IFD taxes (current and proposed) violate some or all of these criteria (see Chart 4 for a summary of the analysis).

<sup>48.</sup> See Pigou (1932).

<sup>49.</sup> Of course, defining what equal treatment is and which are the taxpayers' characteristics according to which the tax should be equal gets us back to philosophical issues.

Qualitative Eva	luation of Current	Chart or Proposed IFD		ndard Criteria fo	or Good Taxes
	Solidarity Levy on Airline Tickets	Financial Transaction Taxes (FTTs)	Carbon Taxes	Solidarity Tobacco Contribution	SDR Allocations
Efficiency	generally poor Gillen <i>et al.</i> (2002), IMF (2011)	probably poor Matheson (2011) The Economist (2013b)	average IMF (2011) Coto-Millán et al. (2005)	probably poor See references in text	probably poor Cooper (2011) as discussed in text
Administrative costs	low to average Cour des comptes (2010)	average to high Bronolo (2011)	average to high IMF (2011)	probably high	low
Flexibility	poor	poor	poor	poor	uncertain
Political responsibility (accountability)	mostly poor	mostly poor	mostly poor	mostly poor	poor
Fairness and tax incidence	good Cour des comptes (2010)	probably poor in the long run Matheson (2011)	poor except with elaborate compensation arrangements IMF (2011)	poor	probably poor

Source: See text. The criteria are borrowed from Stiglitz (1988), pp. 385-410.

#### 2.2 Efficiency

First, let us apply the efficiency criteria. A tax can be called efficient if its excess burden is as small as possible for the required revenues to be raised. We can measure the extent of the excess burden if we know the price elasticity of demandfor the good or service in question.<sup>50</sup> Here, we need to understand that, other things being equal, the lower the price elasticity of demand of a good, the smaller will be the excess burden imposed by a tax on this good.

Price elasticity of demand, or "price elasticity" for short, is a technical concept that describes responsiveness to price changes. Demand is more

elastic if quantity demanded changes more in response to price changes; it is less elastic (or more inelastic) if quantity demanded is less sensitive to price changes. If, for example, a price increase of 10% brings a 15% drop in quantity demanded, we say that the elasticity of demand is 1.5—for the proportional change in quantity demanded is one and a half times the change in price. To take another example, if the resulting drop in quantity demanded is only 3%, the elasticity of demand would be 0.3—for the proportional change in quantity demanded is 30% of the change in price.<sup>51</sup> The convention is

For a technical discussion of elasticities, see IMF (2011), pp. 23-26. Other elasticities are used in scientific literature, such as supply elasticity.

<sup>51.</sup> Technically, the coefficient of elasticity has a negative sign, for there is an inverse relation between a price change and the resulting change in quantity demanded. Properly speaking, then, the coefficients we used as examples should be written as -1.5 and -0.3. We will neglect the negative signs for purposes of simplicity. (They will appear in Chart 6, though, which is reproduced from an econometric evaluation.)

to call demand "elastic" when its elasticity is larger than one, "inelastic" when it is lower than one, and of "unit elasticity" when it is exactly one. The reason why a smaller excess burden results from a more inelastic demand is that quantity demanded changes less (consumers react less), which means less distortion of consumer behaviour and thus a smaller loss of consumer welfare. If a tax does little to change your quantity demanded, you will pay a lot of tax (which is mainly a transfer to the public treasury) but you will keep more of the benefits that you obtained before from this consumption activity. Inversely, if your demand is more elastic, you will change your consumption a lot, and lose much of your previous gains as a consumer. It is important to note that long-term elasticities are higher than short-term ones because, as time passes, people adapt and change their behaviour more easily; thus, excess burdens normally increase with time.

Efficiency in the sense we are considering here (i.e., in the standard public finance way) favours broad-based taxes such as value-added taxes on all consumption goods as opposed to taxes on specific goods. This is because a broad-based tax does not discriminate against certain goods and therefore makes it more difficult for consumers to change their behaviour by switching to substitutes. For given tax revenues, a broad-based tax thus carries a smaller excess burden than a specific tax.

It can be verified that most IFD taxes are likely to carry a high excess burden and can thus be judged inefficient. They consequently also raise relatively less government revenue compared to more efficient taxes for a given rate. Contrary to broadbased taxes, IFD taxes have a narrow tax base (the main exception being inflation created by SDRs) and are thus discriminatory and distortionary. We can see this by analyzing each tax separately from an efficiency perspective.

Contrary to broad-based taxes,
IFD taxes have a narrow tax base
and are thus discriminatory
and distortionary.

#### Air ticket tax

Let us begin with the air ticket tax. Econometric estimations show that demand for many types of air passenger transport is elastic, as reported in Chart 5. The most elastic demand is for short-haul leisure trips: a 10% increase in prices causes a 15.2% drop in quantity demanded (median elasticity). Faced with a higher price, consumers substitute other means of transportation, or simply avoid some trips. Other leisure trips are also elastic. The same can be said of long-haul domestic business trips. 52 Most air travel (perhaps as much as 80%) is for leisure.<sup>53</sup> A tax on passengers, to the extent that it is partly added to the ticket price, will result in a price increase, which will decrease the quantity of air travel demanded, thereby creating an excess burden. We thus have good reason to question the economic efficiency of taxes on the elastic submarkets for passenger air transport. (Demand for other business trips is generally less elastic, which means that the excess burden will be lower, not that it will disappear.) A low tax of course means that the price impact and the excess burden will be lower, not nonexistent.

As we have seen, the airline tax accounts for a large part of IFD revenues. However, it is small compared to total tax revenues. In France, for example, it amounts to only 0.03% of total government tax revenues (excluding social contributions). The Cour des comptes (the French government's auditor) writes that the receipts from the tax have been lower than originally anticipated,<sup>54</sup> and this may have something to do with a larger elasticity of demand (and thus higher excess burden) than was assumed. The auditor assumed that demand was less elastic in the business market,<sup>55</sup> but the data in Chart 5 suggest otherwise for long-haul domestic business trips.

#### Financial transaction taxes (FTTs)

A similar analysis can be applied to FTTs. As FTTs come in many varieties, target different

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<sup>52.</sup> Gillen *et al.* (2002). See also Oum *et al.* (1992).

<sup>53.</sup> IMF (2011), p. 17.

<sup>54.</sup> Cour des comptes (2010), p. iii.

<sup>55.</sup> Ibid., p. 2.

Chart 5 Econometric Estimates of the Elasticity of Demand for Passenger Air Transport							
Type of trip Median estimate Range of estimates							
Long-haul international business	0.27	0.20 to 0.48					
Long-haul international leisure	1.04	0.56 to 1.70					
Long-haul domestic business	1.15	0.84 to 1.43					
Long-haul domestic leisure	1.10	0.79 to 1.23					
Short-haul business	Short-haul business 0.70 0.60 to 0.78						
Short-haul leisure	1.52	1.29 to 1.74					

Sources: Gillen et al. (2002); IMF (2011).

financial instruments, and are charged to intermediaries (as opposed to final individual users of savings and investment vehicles), estimating their excess burden is difficult. Yet, they have been much debated, and are generally thought to be inefficient taxes. An FTT increases transaction costs—the cost of trading-for any financial instrument to which it applies. Even with low rates (like the one proposed for IFD), an FTT can end up increasing transaction costs significantly because it is paid each time a financial instrument is traded.<sup>56</sup> If the price of trading increases, the number of transactions decreases. Looked at from another point of view, an FTT increases the cost of capital, which means that less capital will be demanded. If a company issues shares, investors will want to buy fewer of them because they will have to pay a tax to trade them. This distortion creates an excess burden, as some financial transactions that would otherwise have been made, and would have benefited all parties concerned, are not made. The extent of this excess burden depends on the elasticity of demand—in this case, on the elasticity of demand with respect to financial transaction costs.

Even with low rates (like the one proposed for IFD), an FTT can end up increasing transaction costs significantly because it is paid each time a financial instrument is traded.

Chart 6 gives some econometric estimates of the elasticity of trading with respect to transaction costs for different financial instruments. In the UK, for example, the long-term elasticity of trading shares with respect to financial transaction costs has been estimated at 1.7, which means that a 0.1% tax on stock trading will reduce trades by 0.17%. As we can see in the chart, many of the estimated elasticities are close to one or even higher, meaning that financial trading is quite sensitive to transaction costs. In the case of transactions that are repeated often—certain repo transactions, for example—the increase in transaction costs could reach 22% per year,57 which would obviously lead to a large drop in the volume of transactions. The excess burden of FTTs would not be insignificant.

This excess burden would show up in numerous ways. An FTT could distort financial activity away from the shares of smaller firms (which are riskier and thus less likely to justify high financial transaction costs), as apparently happened in France, where a limited FTT was introduced in 2012.<sup>58</sup> An FTT would decrease market liquidity, as shares would be traded less often. It would shift some financial activities to any remaining country without such a tax, like the United States, this substitution being one source of high excess burden. Some transactions, such as overnight securities repurchases (repos), might have to be excluded, lest their market collapse, rendering the tax even more discriminatory and distortionary.

56. The Economist (2013c).

<sup>57.</sup> The Economist (2013f).

<sup>58.</sup> The Economist (2013b)

Because of these problems, the governments of many countries have repealed or reduced their transaction taxes on shares trading over the past few decades.<sup>59</sup> The Swedish government repealed its own FTT in 1991, after 60% of trading in the most actively traded shares had moved to London.<sup>60</sup> After an extensive review of the literature, an IMF analyst, Thorton Matheson, concludes that FTTs are not a desirable form of taxation.<sup>61</sup> It is strange that the idea is now being recycled for IFD.

In Chart 4, we say that the efficiency of FTTs is probably poor in order to be fair to Stiglitz, who himself favours such a tax.<sup>62</sup> But he has argued for it because, in his opinion, it would curb unnecessary short-term speculation, not because it does not carry an excess burden. The IMF analysis by Matheson, reported in the preceding paragraph, seems more convincing than Stiglitz's. The revenues of the planned European FTT are not likely to be earmarked for IFD anyway, as the UNDP has admitted.<sup>63</sup>

#### Carbon taxes

Assuming that the benefits of carbon reduction outweigh the deadweight loss caused by efficient carbon taxes, the relative efficiency of carbon taxes depends on their type. As mentioned before, carbon taxes come in two varieties: specific taxes per ton of CO<sub>2</sub> emitted; and emission trading systems, also called "cap-and-trade." Both methods can be likened to Pigovian taxes, for they have the same effect: They add an extra cost to the production of each unit of the "bad" being taxed, and thus reduce output. Pigovian taxes are specifically designed to change behaviour so as to avoid an existing deadweight loss, such as the one created by pollution when people do not take into consideration the real costs of their actions. IFD taxes, on the contrary, are designed to raise revenue. Some proponents of carbon taxes wish for a tax that would be both a revenue-raiser and a Pigovian tax, thus eliminating the excess burden of raising revenues. If revenues can be raised by reducing a "bad," no inefficiency is involved.

This might work if the proposal was to earmark for IFD some revenues from a cap-and-trade system, like the German government actually does within the European Emissions Trading System. Economists generally admit that a cap-and-trade system is more efficient than specific Pigovian taxes, for it lets the market compute the optimal amount of the tax: the state only has to fix the cap, and the market calculates carbon prices. However, the government of Germany remains an exception in using the Emissions Trading System as an IFD mechanism, and few other governments are likely to follow suit. The international cooperation required to create an international cap-and-trade system would be even more difficult to achieve.

More likely to be adopted is the World Bank's and IMF's proposal for a specific tax on the carbon produced by international aviation and maritime fuel. Not being broad-based, such a tax would be discriminatory: It would hit international passengers (again) and internationally-shipped goods. The IMF estimates that a US\$25 tax per tonne of CO<sub>2</sub> would lead to a 2%-4% price increase on air tickets, and a 0.2%-0.3% price increase on seaborne imports.<sup>65</sup> Since the elasticity of demand for maritime transport (which carries mainly goods) is lower than for air passenger transport,<sup>66</sup> we should therefore expect a smaller excess burden in maritime shipping.

This result must be qualified by three factors. First, the excess burden in airline passenger transport would be relatively high (given the high elasticity of demand in many sub-markets). Second, the excess burden in maritime shipping would still be nonnegligible, as 90% of world trade (measured by tonnekilometer) is carried by ship.<sup>67</sup> Third, if the carbon tax is really set at US\$25/ton, which is much higher than the implicit tax imposed by the EU Emissions

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<sup>59.</sup> Matheson (2011), p. 9.

<sup>60.</sup> The Economist (2013c).

<sup>61.</sup> Matheson (2011).

<sup>62.</sup> Stiglitz (1989).

<sup>63.</sup> UNDP (2012), p. 18.

It should be noted however that determining the optimal cap is not necessarily less arbitrary than finding the optimal tax.

<sup>65.</sup> IMF (2011), p. 7.

<sup>66.</sup> Coto-Millán et al. (2005), p. 369, and passim.

<sup>67.</sup> IMF (2011), p. 16.

Chart 6 Estimated Elasticities of Trading Volume with Respect to Transaction Costs					
Source	Country	Market	Elasticity		
Baltagi et al. (2006)	China	Stock market	-1		
	China	Stock market	-0.5		
Chou and Wang (2006)	Taiwan	Futures market	-1		
	Taiwan	Futures market	-0.6 to -0.8		
Ericsson and Lindgren (1992)	Multinational	Stock market	-1.2 to -1.5		
Hu (1998)	Multinational	Stock market	0		
Jackson and O'Donnell (1985)	UK	Stock market	-0.5(-1.7)*		
Lindgren and Westlund (1990)	Sweden	Stock market	-0.9 to -1.4		
Schmidt (2007)	Multinational	Foreign exchange	-0.4		
Wang et al. (1997)	United States	S&P 500 Index Futures (CME)	-2		
	United States	T-Bond futures (CBT)	-1.2		
	United States	DM Futures (CME)	-2.7		
	United States	Wheat futures (CBT)	-0.1		
	United States	Soybean futures (CBT)	-0.2		
	United States	Copper futures (COMEX)	-2.3		
	United States	Gold futures (Comex)	-2.6		
Wang and Yau (2000)	United States	S&P 500 Index Futures (CME)	-0.8 (-1.23)*		
	United States	DM Futures (CME)	-1.3 (2.1)		
	United States	Silver futures (CME)	-0.9 (1.6)		
	United States	Gold futures (CME)	-1.3 (1.9)		

<sup>\*</sup>Long-run elasticities in parentheses

Source: Reproduced from Matheson (2011), p. 17.

Trading System on other industries, it would remain discriminatory compared to the latter.

In view of standard economic theory, the proposed IFD carbon taxes might be less inefficient than the other taxes reviewed thus far.

Some argue that a carbon tax on international aviation and maritime fuel would not be discriminatory because it would actually correct current tax preferences: these fuels are not subject to excise taxes when used for international shipping; moreover, in most countries, no VATs or general sales taxes are charged on international air

tickets.<sup>68</sup> However, the exoneration of international transport fuel may be justified by the fact that exports are not subject to indirect taxes, and that taxing international fuel would amount to taxing exported goods and services including tourism. Also, airlines arriving at or departing from European airports are already required to obtain Emissions Trading System allowances—although it could be countered that most of the allowances are still given for free and are thus more akin to a subsidy than a tax.<sup>69</sup>

<sup>68.</sup> Ibid., pp. 5 and 15.

<sup>69.</sup> See http://ec.europa.eu/clima/policies/transport/aviation/allowances/index\_en.htm. By virtue of the Coase theorem, an Emissions Trading System is still more efficient than a specific tax, though – see Coase (1960) and Lemieux (2008), pp. 264-281.

The picture is thus mixed. Some factors point in one direction by suggesting a higher excess burden from carbon taxes, while some push the other way. It seems reasonable to conclude that, in view of standard economic theory, the proposed IFD carbon taxes might be less inefficient than the other taxes reviewed thus far, which explains their "average" mark for efficiency in Chart 4.

#### Tobacco tax

At first sight, another tax on tobacco would seem to meet the efficiency criterion of standard public finance. Tobacco has a low elasticity of demand (estimated at around 0.4 in the short run). Thus, an excise tax on tobacco reduces quantity demanded relatively little and thus causes a small excess burden. If specific taxes (as opposed to more efficient broader-based taxes) are to be levied, tobacco and other "sinful" products seem to qualify as good candidates.

This argument, however, does not take into account a few important considerations. First, demand for tobacco is more elastic in the long run (on the order of 0.75),72 generating a higher deadweight loss as time passes. With time, more smokers adjust to the higher prices generated by taxes, and either quit smoking or reduce their consumption. Recall that the excess burden comes from the fact that consumers consume less of something that they would prefer to consume more of, and that carries a production cost lower than the value they attach to the good. Opponents of smoking have developed complicated and sophisticated counter-claims to the standard economic argument that consumer sovereignty should apply to tobacco as well as to other goods, but these counter-claims are ultimately unconvincing. For example, far from being badly informed about the health risks of tobacco, smokers overestimate, not underestimate, the health risks of smoking; and they already pay Moreover, the argument for a new tobacco tax on top of the current ones assumes that black markets will not undermine its collection. There is already a lot of tobacco smuggling and counterfeiting: The WHO estimates an average rate of illegal cigarettes of 11.5% in G20+ countries, 74 but the rate in some countries, including Canada, is much higher. 75 It may be that the point on the Laffer curve has been reached at which higher tobacco tax rates will lead to a higher drop in the quantity demanded of legal cigarettes so that total tax revenues will in fact decrease. At any rate, they would raise little new revenue.

For all these reasons, adding a new tobacco tax on top of the existing ones would likely be inefficient.

#### **Special Drawing Rights allocations**

The inflationary impact of new SDRs allocated to the governments of developing countries would depend on the actual amounts of new allocations and on the reactions of central banks in the US, the Eurozone and the UK (countries whose currencies serves as international reserve currencies). As Harvard Professor Richard Cooper argues,76 the new SDRs could have no impact if these central banks decided to sterilize the new money by decreasing their own money supply. In this case, the new SDRs would amount to a subsidy from the US, the Eurozone and the UK to the developing countries receiving the new SDRs, and a hidden tax on the residents of the subsidizing countries. If we cannot count on central banks to sterilize the new SRD money, inflation would be generated, the amount of which would depend on the amount of new SDRs created. Although not usually analyzed in terms of deadweight loss, inflation has a similar

much more in taxes than what their tobacco-related diseases cost other taxpayers.<sup>73</sup>

<sup>70.</sup> Becker et al. (1994); WHO (2011), p. 26.

Of course, to call them "sinful" is to apply a moral judgment; from an economic viewpoint, they are ordinary products to the individuals who enjoy them.

<sup>72.</sup> Becker et al. (1994).

Viscusi (1990). A summary of the different arguments and references can be found in Lemieux (2000, 2001).

<sup>74.</sup> WHO (2011), p. 34.

<sup>75.</sup> It was recently estimated at 30.5% in Quebec; see Lemieux (2007), p. 9.

<sup>76.</sup> Cooper (2011).

effect by falsifying price signals and distorting the allocation of resources.<sup>77</sup> So either SDR allocations are small and do little to help developing countries; or else they are substantial and they are likely to generate inflation. In any case, whether they are sterilized or not, new SDR allocations would represent a tax. The efficiency of this tax would probably be poor.

#### 2.3 Administrative Costs

Secondly, how do the main IFD taxes fare with regard to the administrative cost criterion? The administrative costs of a tax (collection, enforcement, and compliance) are virtually impossible to measure, if only because it is impossible to apportion the overhead cost of the whole tax and enforcement system among specific taxes. Taxpayers' compliance costs are also difficult to measure. We can however make some qualitative points.

The administrative costs of a tax (collection, enforcement, and compliance) are virtually impossible to measure, if only because it is impossible to apportion the overhead cost of the whole tax and enforcement system among specific taxes.

At least for the French government, the administrative costs of the airline tax appear to be low, if only because it was simply an addition to an existing civil aviation tax. However, it is worth noting that the French auditor added that "a tax created ex nihilo would have been much more costly, which may explain why many countries hesitate to adopt such a tax." According to the French government, the compliance cost for the airlines is "marginal." One large airline evaluates its administration cost at 0.5% of the tax collected, but the proportion is probably larger for smaller airlines. Hence our

evaluation of the administrative cost of this tax as "low to average" in Chart 4.

The administrative costs of an FTT depend largely on which financial instruments it would apply to. The extreme case would be if, in order to minimize distortions, it were applied to all financial transactions, including derivatives and foreign exchange transactions. The complexity of financial transactions and the diversity of intermediaries raise administrative and enforcement challenges. A study by the IMF's John Brondolo prudently concluded that FTTs were administratively feasible but required "a targeted enforcement program backed by an appropriate penalty regime." In light of Brondolo's assessment, it is reasonable to rate the administrative costs of FTTs as between average and high.

Carbon taxes would likely carry higher administrative costs than FTTs, especially if they did not take the form of a well-oiled and ideal capand-trade system. An IMF study documents that carbon taxes are expensive to establish and, often, to collect.81 This is especially true of excise taxes on maritime shipping, as ships have a wide choice of where to buy their fuel. Moreover, any carbon tax on shipping would impose costs on tourism and other exports (as well as imports) of developing countries. In order to counter these costs, the IMF proposes complex transfers to the governments of harmed countries, which would greatly complicate an already complex tax and increase its administrative costs. Consequently, we are conservative in saying that the administrative costs of such taxes would be average to high even if the IMF itself does not seem deterred by the problems it points out.

Although, to our knowledge, no estimate exists for the cost of collecting and enforcing current tobacco taxes, it is probably quite high given the continuous encroachment of black markets in smuggled and counterfeit tobacco products. An additional IFD levy on top of current taxes would probably see the cost of enforcement rise sharply at least in developed countries (and all this for little increase in revenue, if any).

<sup>77.</sup> Lemieux (2013), pp. 133-135 and 140-141.

<sup>78.</sup> Cour des comptes (2010), p. 6.

<sup>79.</sup> Ibid., p. 7.

<sup>80.</sup> Brondolo (2011), p. 45.

<sup>81.</sup> IMF (2011).

Creating money is administratively easy, so the administrative cost of SDR allocations would be low (even if, as we saw, their economic cost may not be). This is the only IFD tax (among the main actual or projected ones) that would certainly carry low administrative costs.

#### 2.4 Flexibility

Third, consider the flexibility criterion for a good tax. In the first sense that Stiglitz gives to "flexibility," IFD taxes are certainly not the most flexible taxes with regard to the business cycle; like any indirect tax, their rates do not vary with the cycle. Indeed, they may hit particularly hard at the bottom of the business cycle.82 As for Stiglitz's more general flexibility criterion—that changing the tax rates should not be too politically difficult when economic circumstances change—it is not satisfied by IFD taxes either. Any internationallyagreed-upon tax is more difficult to change than a purely national one. The only exception might be the rate of issuance of new SDRs, assuming that an international bureaucracy was granted the power to make these decisions alone. This is why Chart 4 ranks the flexibility of IFD taxes as poor, except for SDR allocations.

## Any internationally-agreed-upon tax is more difficult to change than a purely national one.

### 2.5 Political Responsibility and Accountability: Transparency

The fourth requirement for a good tax proposed by Joseph Stiglitz is the political responsibility or accountability criterion. This criterion can be interpreted as requiring that an easily-identifiable government be accountable for the tax. Some might want such a government to be a national government, but this is not saying much because national governments can always choose to delegate their power to supra-national authorities: the EU is only the most notable example. A narrower example is the International Oil Pollution Compensation (IOPC) Funds, which directly collect money from private companies, but enforcement remains at the national level, and any national government could choose to transfer the money itself.83 As for current IFD taxes (the airline ticket tax, and the portion of Emissions Trading System revenues that the German government transfers to environmental protection in developing countries), delegation is even more restricted: Not only are the taxes established by national laws, but they are collected by national agencies, enforced by the national governments involved, and typically considered official development assistance when they are actually transferred to international agencies.84 However we define the "sovereign" state, IFD taxes thus appear acceptable.

Exactly what "political responsibility" or "accountability" means is not always clear, however. Indeed, Stiglitz himself extends the concept when he states that it is "desirable for the government not to try to take advantage of uninformed citizens." This requires, at a minimum, that the tax be visible by the individuals who actually support it and, at a higher level of transparency, that they know what it will be used for. IFD taxes meet this criterion poorly.

## Most IFD taxes, current and planned, are hidden and complicated.

Most IFD taxes, current and planned, are hidden and complicated. The airline tax is buried in the price of airline tickets (together with another airport tax in France), so the taxpayer is likely to be unaware that he is paying it. He will be even less aware of what the tax is supposed to finance. There is no relation between the service the taxpayer is receiving (airline travel) and what the tax is

<sup>82.</sup> Note however that the main arguments against IFD taxes are structural, not cyclical. IFD taxes have been under discussion over more than one complete economic cycle, and a major one (the air ticket tax) was actually introduced at the peak of the last cycle. These taxes will continue to be discussed irrespective of the economic outlook.

<sup>83.</sup> IMF (2011), p. 22.

UNDP (2012). On the French air ticket tax, see Cour des comptes (2010).

<sup>85.</sup> Stiglitz (1988), p. 397.

supposed to pay for (health programs in developing countries), making the whole process as obscure as it can be.

Much the same can also be said for the proposed solidarity tobacco contribution. FTTs and carbon taxes may also end up hidden in the price consumers pay for goods and services—in the price of goods shipped by sea, for instance. It is true however that in the case of carbon taxes, there is a relation between what they tax and the services they are deemed to render (environmental protection) to the extent of course that the tax revenues would not serve to pay for other sorts of development activities. As for SDR issuance, it would be among the most obscure of taxes.

For these reasons, we consider that IFD's success in meeting the political responsibility criterion is "mostly poor" in virtually all cases, as indicated in Chart 4. The qualifier "mostly" recognizes that an easily-identifiable government remains responsible for them, even if most taxpayers do not know that these taxes exist or what they serve to finance. SDR issuance especially would be deeply hidden and clearly constitute a poor tax in view of the political responsibility criterion.

#### 2.6 Fairness and Tax Incidence

The fifth criterion of a good tax according to standard public finance is fairness. As already suggested, one problem is determining what fairness or equal treatment means. The implicit notion of fairness in official discussions of IFD taxes seems to be concomitant with progressivity of taxation and redistribution from rich to poor. As this implicit notion also dominates standard public finance discussions, we may adopt it for the purpose of evaluating IFD taxes.

The problem, however, is to find out who actually pays a tax or, in economic terms, to calculate its incidence. Ultimately, all taxes are paid by physical individuals, whether they be consumers, workers or shareholders. The theory of tax incidence shows that a tax is often not paid, or at least not fully paid, by the individuals or entities against whom it is assessed.

For example, indirect taxes on goods are normally shared between suppliers and consumers, whether they are nominally charged to the buyer or to the seller. To see this, suppose a tax is levied against suppliers. Since their marginal cost has increased, they will reduce their quantity supplied. Quantity demanded is now higher than quantity supplied, and the price will be bid up by customers, which is just another way of saying that suppliers will realize that they can charge more. As the price increases, customers end up effectively paying part of the tax. The exact shares paid by suppliers and consumers depend on the elasticity of demand and the elasticity of supply. The suppliers are normally shared to the suppliers and consumers depend on the elasticity of demand and the elasticity of supply.

And this is only the first part of the story. If consumers hit by a tax can import the good from other countries (legally or illegally), they will, in a second step, reduce their domestic purchases, eventually leading to lower wages in the relevant domestic industry. Because of these shifts, it often happens that salaried employees end up supporting most domestic taxes, including corporate taxes; they are the least mobile factor of production, and so the tax buck stops there.<sup>88</sup>

Considered in this light, IFD taxes may very well be regressive. Despite UNITAID's undocumented claim that the FTT would be paid by the rich,89 Thornton Matheson, an economist with the IMF, persuasively argues that it would, in the long run, fall on employees or consumers as investors would reduce their investments in financial firms (so that the rate of return in the industry would remain the same).90 Carbon taxes don't fare well either on the progressivity-regressivity criterion, as they would ultimately be paid either by the consumers of goods produced with carbon-related inputs or by the workers producing these goods. In fact, the IMF admits that carbon taxes would need complicated compensation arrangements in order not to harm poor workers in developing countries (in their

Musgrave (1959), pp. 287-311; Stiglitz (1988), pp. 411-436. A good, short description of the problem of tax incidence can be found in IMF (2011), p. 23.

<sup>87.</sup> The elasticity of supply is analogous to the elasticity of demand; it is defined as the proportional change in quantity supplied that results from a change in price.

<sup>88.</sup> See Geloso (2010) and the references cited therein.

<sup>89.</sup> UNITAID (2011), p. 10.

<sup>90.</sup> Matheson (2011), pp. 23-26.

tourist industry, for example).<sup>91</sup> As for tobacco taxes, we do observe that they are in large part shifted to smokers. Since smokers have statistically lower incomes than non-smokers, a new IFD "solidary tobacco contribution" would likely be a regressive tax, and thus unfair according to the prevailing vision.<sup>92</sup> The incidence of the inflation generated by the creation of SDRs is difficult to estimate, but it is likely that it would also violate the standard criterion of fairness, as ordinary people are among the main victims of inflation.

Among current and proposed IFD taxes, only the air transport levy, assuming it hits mainly business and first-class customers (because of its higher rates for these customers), would seem to fare well according to the standard fairness criterion. Thus, IFD taxes generally appear to be unfair according to standard public finance (see Chart 4).

Among current and proposed

IFD taxes, only the air transport levy,
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standard fairness criterion.

### 2.7 Serious Questions about IFD Taxes

What general conclusion can be drawn about IFD taxes from a standard public finance viewpoint? As they represent a package of heterogeneous measures, their evaluation is not easy. Our analysis suggests (see the summary in Chart 4) that their economic efficiency is generally poor (except perhaps for carbon taxes); that their administrative costs tend to be significant (except for the current airline tax and the proposed issuance of SDRs); that their flexibility is poor; that their political accountability is mostly poor; and that their fairness, especially when tax incidence is

taken into consideration, is poor (except perhaps for the current airline tax). IFD taxes are obviously bad taxes from the viewpoint of standard public finance.

<sup>91.</sup> IMF (2011).

<sup>92.</sup> See Gravelle (2007).

#### **CHAPTER 3**

### Are IFD Taxes Efficient? A Public Choice Approach

Why are bad taxes like the IFD variety proposed and adopted at all? If we cannot answer this question, our analysis is incomplete and insufficient.

In truth, our analysis this far ignores many features of the real world. If market failures exist, it is equally true that we observe government failures, and the latter should also be taken into account in evaluating tax policy.93 Governments are not perfect. Over the past half-century, a new school of economic analysis called the "Public Choice" school has analyzed public policy in this light.94 Public Choice analysis start from a simple hypothesis: State actors, whether bureaucrats (civil servants), politicians or voters, are just ordinary individuals who mainly pursue their own interest in the public as well as in the private sphere. This strand of analysis helps us look at "politics without romance,"95 as James Buchanan (laureate of the 1986 Nobel Prize in economics) put it, and provides an alternative to the standard public finance approach for evaluating public policy.96

#### 3.1 Tax Exploitation

One sort of government failure lies in the danger of exploitation, including tax exploitation, of one class of citizens by another.<sup>97</sup> The term "solidarity" can easily serve as a smokescreen for

tax exploitation. In practice, the most politically powerful groups are the ones that will monopolize such "solidarity" to their own benefits. These favoured groups sometimes represent the poor, but not always, as the analysis of tax incidence suggests.

With the possible exception of carbon taxes, IFD taxes can easily be exploitative because there is no relation between what the individual pays for and what he thinks he is getting.

With the possible exception of carbon taxes, IFD taxes can easily be exploitative because there is no relation between what the individual pays for and what he thinks he is getting. The "solidarity levy on air tickets," the FTT, the "solidarity tobacco contribution," and SDRs are used (or would be used) to pay for health and development in foreign countries, but they are buried in the prices of totally different goods. By the very design of IFD taxes, the link between the tax and what the taxpayer gets is broken. This broken link is not a bug of IFD taxes, it is a feature. Carbon taxes may be considered an exception if they contribute to protecting the environment for the benefit of the taxpayers who ultimately pay them (that is, the consumers who buy final products or the workers who support part of the taxes), but note that these taxpayers have no practical way of figuring out what they pay and what they get.

IFD taxes are hidden redistributive taxes. They are meant to transfer money from Peter to Paul. Peter may be a rich man in a developed country and Paul a poor man in a developing country, but it may also happen that Peter is a poor man in a rich country and Paul is a rich man in a poor country. Our analysis of the "fairness" of IFD taxes has revealed that IFD taxes are not necessarily paid by the rich. Hence the danger that people in developing countries, through politicking at the UN and in other international organizations, could exploit taxpayers in developed countries. IFD taxes may also serve to redistribute income within developed countries if they favour some domestic

<sup>93.</sup> Tullock et al. (2002); Shughart (1999), pp. 171-173, and passim.

<sup>94.</sup> See Tullock *et al.* (2002), and Lemieux (2004).

<sup>95.</sup> Buchanan (2003).

<sup>96.</sup> On the differences between the orthodox and the Public Choice approach to public finance, see Buchanan and Musgrave (1999). On p. 245, Buchanan summarizes his definition of efficiency: "[I]f I observe someone with apples and somebody else with oranges, I don't want to try to say a particular allocation of oranges and apples in a final position is better than in the other allocation. If I observe them trading without defrauding each other, whatever emerges, emerges, and that is the way I define what is efficient."

<sup>97.</sup> On tax exploitation, see Brennan and Buchanan (1980).

firms (railroad or truck shipping companies, for example) over domestic competitors (air carriers).

#### 3.2 Rent-Seeking

Rent-seeking, a related sort of government failure, is the process whereby individuals and organizations will try (through lobbying and political activities) to obtain money or other privileges from a government that has the power to grant them. New sources of financing increase this power, ceteris paribus. Special interests engaged in rent-seeking subvert government from its purported task of protecting the public interest and realizing economic efficiency. Because it uses up resources that could have been devoted to productive economic activities instead, and because it results in distortions through taxes, subsidies and regulations, rent-seeking reduces GDP and incomes. Along these lines, a voluminous economic literature on rent-seeking has sprung up over the last four decades or so.98

Private companies engage in rent-seeking. Tariffs and other forms of protection from foreign competitors represent one form of rent-seeking. An example is the complex system of foreign trade control, licensing, and subsidies that characterized India until recently and greatly retarded that country's development. 99 An example closer to our topic in this chapter lies in the field of carbon taxes: The IMF notes that the most efficient capand-trade system might be open to lobbies trying to get free allowances, which is one reason why the international organization favours specific carbon taxes. 100

Rent-seeking also occurs within governments, as shown by the modern theory of bureaucracy. Assuming that government bureaucrats are ordinary individuals, they will try to further their own interests by obtaining the highest remuneration or the best perks they can get. If

bureaucrats did not put their own interests at the top of their priorities, they would not form, or try to form, trade unions, but at any rate, they can pursue their interests without them. A bureaucrat is more likely to get good working conditions and have bright career prospects if the bureau he works for has a large budget and carries out prestigious missions. Bureaucrats will therefore try to increase the size of their bureau and to extend the latter's missions. They can do this by persuading political decision makers that they need more money to accomplish their mandates, which is relatively easy to do because they have the inside information to determine what is really needed to manage the programs adopted by politicians.<sup>101</sup>

Bureaucrats' misaligned incentives can be analyzed with another tool in the economist's toolbox: principal-agent theory. Politicians, i.e., the principals, want to attain certain objectives, but their agents, the numerous layers of bureaucrats who implement the programs, have their own personal and career objectives. These agents' personal objectives do not coincide with the principals' will, and to make matters worse, their performance is more difficult to monitor and control in government organizations than in private firms submitted to competition and the test of the market. Principal-agent theory concludes that the official objectives of development bureaus will often not be pursued efficiently. 102

The behaviour of bureaucrats is important to understand because between the politicians in donor countries and the recipient poor in developing countries stand a number of bureaucratic agencies, both national and international. Many bureaucrats may sincerely want to alleviate poverty, but their first priority is their own professional survival and success. If the modern theory of bureaucracy is correct, it is in the interest of a recipient agency to divert as much of the donor's money as possible to its own remuneration and perks; and it is in the donor agency's interest not to object too strenuously to such inefficiencies because, after all,

<sup>98.</sup> See Buchanan et al. (1980).

<sup>99.</sup> Kimenyi and Tollison (1999), pp. 210-211.

<sup>100.</sup> IMF (2011), pp. 48-49.

<sup>101.</sup> Nate (1999); Moe (1997); Wintrobe (1997).

<sup>102.</sup> See, for example, Gibson et al. (2005), pp. 43-44.

the bureaucrats on the donor side earn a living by giving money (other people's money). Bureaucrats in donor agencies need to make donations as much as recipient agencies need to put their hands on them—a double moral hazard problem.<sup>103</sup>

Economist Ronald Nate argues that the favourable treatment of bureaucrats is amplified in non-democratic countries because the rulers have more need for the bureaucracy's support and because corruption is more likely to develop.<sup>104</sup> Note, however, that nothing corrupt or illegal needs to occur: Bureaucrats automatically spend on their own bureaucratic goals some of the money given to them for development projects.

All these bureaus, whether in donor countries, in recipient countries, or at the international level, are thus motivated to "move the money" more than to actually further sustainable development. The Philippines's National Irrigation Administration, for example, gets at least 40% of its operating budget from capital money financed mainly by international development loans, and the resulting lack of maintenance constantly calls for new capital expenditures, which are repeatedly supplied by the same international donors. The international agencies on the supply side of development aid also pursue bureaucratic goals. Well-known development economist William Easterly observes:

U.N. agencies working on development issues do not have a stellar record; they often appear to spend most of their energies on large international summits that accomplish little besides preparing for further summits. Nor should nongovernmental organizations be automatically assumed to be superior to official aid agencies. 106

It is no surprise that these bureaus, both on the giving and on the receiving end, are after innovative ways to raise and spend money. It is no surprise that many of these bureaus are strong proponents of new IFD taxes.

## The limited analysis that is available suggests that IFD bureaucracies are subject to perverse incentives.

The limited analysis that is available suggests that IFD bureaucracies are subject to perverse incentives. A partial audit of the agencies that benefit from the French airline tax was carried out in 2010 by the auditor of the French government, the "Cour des comptes." The Cour des comptes audited the two direct beneficiaries of the French air ticket tax, UNITAID (which receives about 90% of the proceeds) and IFFIm (which gets the rest). As IFFIm is more or less controlled by GAVI, the Cour des comptes also conducted a partial audit of GAVI.

The auditors made many relevant observations. They noted large increases in IFFIm's operating costs of 16% in 2007, 19% in 2008, and 92% in 2009 as well as large remuneration costs. 109 Chart 7 shows an average remuneration of €160,000 per employee (in 2009), which reached €199,000 when training, representation and travel costs were included. These costs, said the French auditor, are "cause for concern." The auditors also noted that GAVI's Geneva and Washington offices are relatively "comfortable" compared to the office facilities of government bureaucrats in donor countries, "not to mention those of government bureaucrats in recipient countries."111 The auditor mentioned that UNITAID had organized major conferences in Geneva, Boston, Dakar, and Nairobi, but that the costs of the "very numerous meetings and conferences" were not available.112

The reason why rent-seeking (whether from private companies, business associations, trade unions, or government bureaucrats) works is what economists call the logic of collective action. <sup>113</sup> Small interest groups with concentrated benefits win the rent-seeking game by imposing diffuse costs on larger groups. The potential beneficiaries

<sup>103.</sup> Araral (2009), p. 127 and passim.

<sup>104.</sup> Nate (1999), pp. 160-163.

<sup>105.</sup> Araral (2009).

<sup>106</sup> Easterly (2003), p. 38.

<sup>107.</sup> Literally the "Audit Court" in English.

<sup>108.</sup> Cour des comptes (2010), p. i.

<sup>109.</sup> *Ibid.*, pp. 71-73.

<sup>110.</sup> *Ibid.*, p. 72.

<sup>111.</sup> Ibid., p. 74.

<sup>112.</sup> Ibid., p. 27.

<sup>113.</sup> The seminal work is Olson (1965).

Chart 7 GAVI's Remuneration Costs and Average Remuneration in Full-Time Equivalent						
	2006	2007	2008	2009	2010	
Regular personnel	54	85	90	103	124	
Contractuals	0	0	8.5	4.5	0	
Remuneration (US\$ million)	7.72	13.09	18.7	20.7		
Average cost per employee (\$)						
Remuneration	143,000	154,000	190,000	160,000	160,000	
Training, staffing	12,000	8,000	8,000	10,000	7,000	
Travel and representation	39,000	34,000	7,000	28,000	28,000	
Total average cost per employee (US\$)	194,000	197,000	205,000	199,000		

<sup>\*</sup>Forecast

Source: Cour des comptes (2010), p. 73.

are more motivated to engage in collective action than the victims. This is why farmers, when they are numerous, as they are in developing countries, are exploited by the small urban establishment, while the small minority of farmers in developed countries exploits the large majority of taxpayer-customers through subsidies and protection measures. 114 Robert Bates, a professor of economics at Duke University, has argued that the governments of developing African countries act as agents for the concentrated interests of the urban minority and organized labour, and work against the diffuse interests of the rural majority. 115

Similarly, most IFD taxes (tobacco taxes being the main exception) levy (or would levy) a small amount of money from a large number of people who will, therefore, not be motivated to resist, while the direct recipients are a small number of bureaucrats in national or international bureaucracies. UNITAID describes the air ticket levy as a "painless addition to the cost of a ticket." Similarly, an FTT or a carbon tax would add little to the expenses of the ultimate taxpayer, that is, the worker whose salary would be slightly lower or the consumer who would pay slightly higher prices. A little inflation generated by new SDRs would only take small individual amounts from a vast multitude.

Fifteen years ago, Professor Charles Rowley claimed that "[a]n estimated \$15 billion—more than the total annual aid received by African countries—flees Africa each year, wealth that has been illegally acquired and transferred by African elites, many of whom pay lip service to socialism." Rent-seeking may not always be so obvious, it may not always be illegal, but it is always a costly problem.

# The typical IFD tax is designed as a way for governments to raise more money without meeting taxpayer resistance.

Politicians' incentives are often no better than those of bureaucrats. Governments seeking development aid form powerful lobbies in international organizations. Donor governments often act out of motives that trump compassion, such as prestige, influence, or strategic power. The French government wants increased visibility in UNITAID and more influence over IFFIm and GAVI.<sup>118</sup> And governments are forever seeking new ways to raise new revenues, a push that is exacerbated by the high level of public debt around the world.

<sup>114.</sup> Lemieux (2008), pp. 364-366

<sup>115.</sup> Bates (1998), especially pp. 331-358.

At http://www.unitaid.eu/en/resources-2/events/9uncategorised?start=75.

<sup>117.</sup> Rowley (1999), p. 251.

<sup>118.</sup> Assemblée nationale (2011), pp. 21-22; Cour des comptes (2010), p. 115 and passim.

### 3.3 Hidden and Inefficient Taxes: Transparency Again

We are now in a position to extend our previous discussion of transparency. In Chapter 2, we saw that IFD taxes (the current ones and most of the major ones under consideration) were hidden and non-transparent. The government failures reviewed in the present chapter explain why. The typical IFD tax is designed as a way for governments to raise more money without meeting taxpayer resistance. This lack of transparency is not a bug, but once again, an integral feature of IFD taxes.

Consider the general picture. Politicians in donor countries extend their international influence (and thus, often, their influence at home) by giving money to other governments and to international organizations. Politicians in recipient countries have an interest in supplementing their budgets with cheap international money. The bureaucrats manning donor and recipient agencies have the same interests. All the incentives seem to point in the same direction. More generally, politicians are always after more money with which to woo voters or satisfy special interests. The problem is to raise the money without meeting taxpayer resistance. Hence the tendency to impose taxes that will fly under the radar.

Now consider the advantages of (current and proposed) IFD taxes. Not only are they often easy to hide, but they are generally levied in small amounts spread over a large number of taxpayers (or ultimate taxpayers). Given the logic of collective action, no individual taxpayer is going to spend much time or other resources fighting a tax that costs him little; on the other hand, the bureaucrats and foreign governments who benefit will expend much effort lobbying for it.

At least one IFD tax is even partly hidden from legislators. Although the French air ticket tax is paid into the account of the Agence française de développement, its proceeds are not accounted for as normal receipts but are hidden in an annex of the government's budget documents. One IFD tax that we have not reviewed may provide an

even better example of a well-hidden tax: future government commitments, and thus future taxes, against which IFFIm issues bonds on capital markets, are specifically designed not to be recorded in national public debt accounts. It was, says the Cour des comptes, a "political choice of France and the other governments that designed or adopted" this method. The French auditor criticized such creative accounting.

Not only are IFD taxes not transparent, but the international development agencies that benefit from them are not paragons of transparency either. UNITAID is formally audited by the WHO, of which it is a part; the WHO gives this mandate to India's Auditor general who, as of mid-2010, still had to carry out a single formal audit.121 He finally did produce audited statements in April 2012, but only going back to 2008.122 International organizations do not normally open their books to any other than their own auditors, which makes independent inquiry difficult. Both the WHO and UNICEF, which benefit from a large part of UNITAID's money, refused the Cour des comptes access to their internal audits. 123 The French auditor, who was thus unable to carry out a full audit, raised questions, and made recommendations, about the lack of transparency of international organizations that benefit directly or indirectly from the French airline ticket tax. On the audit issue, the Cour des comptes admits that no further bureaucratic layers should be added to what are already very bureaucratic organizations—which raises other questions about these organizations. A subsequent report by a committee of the French National Assembly states that the auditing procedures at UNITAID, IFFIm and GAVI are not satisfactory.<sup>124</sup>

International agencies are not subject to access-to-information laws like those of donor countries. However, it should be noted that this is due to international rules accepted by the donor governments themselves and transcribed into their own national laws. In Canada, for example,

<sup>120.</sup> Ibid., pp. 91-92 and 124.

<sup>121.</sup> Ibid., pp. 26 and 29.

<sup>122.</sup> UNITAID (2012a).

<sup>123.</sup> Cour des comptes (2010), p. 29.

<sup>124. &</sup>quot;Les audits internes et externes des structures Unitaid et du groupe Iffim GAVI laissent à désirer." Assemblée nationale (2011), p. 18.

<sup>119.</sup> Cour des comptes (2010), p. 7.

section 13 of the federal Access to Information Act specifically excludes information that international agencies consider confidential:

13. (1) Subject to subsection (2), the head of a government institution shall refuse to disclose any record requested under this Act that contains information that was obtained in confidence from

- (a) the government of a foreign state or an institution thereof;
- (b) an international organization of states or an institution thereof...<sup>125</sup>

As Bertin Martens, an economist with the European Commission and an expert on development aid, puts it diplomatically, international bureaucracies "may be somewhat shielded against direct political pressure from their member states." He notes that they "can also play-off member states with different objectives against each other and build majority coalitions in the Board to advance the agency's interests." The UNDP, one of the main agencies agitating for IFD taxes, is run by a decision council where both donor states and recipient states are represented, the latter in larger number than the former. It would be unwise to expect it to recommend savings in international development aid.

Shielded from ordinary democratic controls and captured by their internal bureaucracies, international agencies often become vectors of special interest agendas. The case of the WHO is interesting in this regard. For at least two decades, starting long before the IFD push for a so-called "solidarity" tobacco tax, the WHO and other international bureaucracies have used all possible (and, we would say, impossible) arguments, from externalities to religion, 128 against consumers of

tobacco. Its current activism for an IFD tobacco tax can be seen as just another battle in the same fight.

IFD taxes appear to be more a consequence of government failure—rent-seeking by bureaucrats and political games—than an efficient way of raising money to correct market failures.

Bertin Martens is pessimistic about the prospect of making international assistance agencies more transparent and accountable. Any attempt at evaluating them is itself subject to political manipulation, there is no market feedback mechanism, and the incentives of development bureaucracies are not conducive to efficiency.<sup>129</sup> Why should they be trusted with new IFD taxes?

In general, we can conclude that IFD taxes appear to be more a consequence of government failure—rent-seeking by bureaucrats and political games—than an efficient way of raising money to correct market failures.

<sup>125.</sup> Access to Information Act (RS.C., 1985, c. A-1), at http://laws-lois.justice.gc.ca/eng/acts/A-1/page-6.html#h-10.

<sup>126.</sup> Martens et al. (2002), p. 14.

<sup>127.</sup> Ibid., p. 15.

<sup>128.</sup> On the WHO's use of religious arguments against tobacco, see for example WHO (1999) and El Awa (2004).

<sup>129.</sup> Martens et al. (2002), pp. 14-15, 156-158, 176, and passim.

#### **CHAPTER 4**

### Does Development Aid Actually Promote Development?

IFD taxes are predicated on three hypotheses. The first is that they can raise development money in ways that are economically efficient and acceptable to the citizenry of donor countries. A second, less demanding hypothesis is that IFD taxes will at least increase the resources devoted to development aid. The third hypothesis is that development aid actually promotes development. We have seen that the first hypothesis is doubtful. We will now show that the second and third are very doubtful too.

## 4.1 Development Aid and Development Resources: The Fungibility of Money

Is it not true that IFD taxes (current and proposed) actually raise money for good causes? This is not as obvious as it might appear at first glance. The problem is the fungibility of money, that is, whether IFD taxes actually increase the net resources devoted to international development projects, or just substitute for what would otherwise be ordinary development assistance.

Fungibility is the property of a good of which different units are easily substitutable. Cars, for example, are not fungible, at least from an ownership viewpoint: if a friend borrows your car, it matters very much whether he returns the same car or some other car. Money, in the sense of cash, is fungible: if your friend borrows one dollar from you, it does not matter whether he returns the same dollar bill or some other. If you give a friend one dollar to buy a toothbrush for you, it does not matter whether he makes the purchase with this exact dollar bill or another one he had in his pocket. Moreover—and

this gets us closer to our topic—your friend could use another dollar he had put aside for the express purpose of buying a toothbrush for you, and use the one you gave him to buy chocolate for himself instead. It is because money is fungible that a gift or a subsidy can be used for a different purpose than that for which it was granted, and that the substitution is difficult to identify.

Development aid is fungible because the recipient government can use part of it to cover projects or activities it would have carried out anyway, and use the rest for some other purposes. 130 These other purposes can be the survival or thriving of recipient bureaus, 131 which as we saw is a typical goal of bureaucrats. In other words, official earmarking is only a label and does not change the consequences of fungible money: Earmarked money can effectively be spent on something else. For example, according to econometric estimates by Howard Pack and Janet Rothenberg Pack, development aid in the Dominican Republic between 1968 and 1986 was totally diverted away from its stated purposes and toward debt repayment and deficit reduction.<sup>132</sup> The Philippines irrigation case mentioned above is of the same sort. Thus we cannot be sure that an activity financed by IFD taxes in a developing country does not replace an expenditure that the recipient government would have otherwise made from its own resources.

#### The UNDP is well aware of the issue:

In reality, earmarking may be, at best, only partially effective. For earmarking to have some effect on the composition of government expenditure in the beneficiary country, the earmarked aid should not be fully fungible. If it is fully fungible—i.e. a government can offset donor spending by reducing its own expenditure on the same purpose—earmarking may not succeed in increasing the amount of money that goes into the specific purpose for which the money is earmarked.<sup>133</sup>

<sup>130.</sup> See Devarajan and Swaroop (1998).

<sup>131.</sup> Araral (2009).

<sup>132.</sup> Pack and Pack (1993).

<sup>133.</sup> UNDP (2012), p. 31. See also Adugna (2009).

Money is also fungible in the donor government's hands. A new donation can partly or totally replace what the government would have given in another form. We may therefore wonder if funds raised through IFD taxes really serve their official purpose or just replace what donor governments would have given anyway. The UNDP recognizes the problem in relation to IFD:

There are also risks that donors will reduce their future investments in traditional ODA [official development assistance] as a consequence. 134

An indication that the fungibility of money may be at work within donor governments is that the money collected through IFD taxes in both France and Germany has been treated as official development assistance.<sup>135</sup> A good illustration that the fungibility of money also plays on the receiving side is found in India: Between 2006 and 2009, this country received 6% of UNITAID's benefits,<sup>136</sup> while the Indian government had its own space program and is planning to set up its own international development agency.<sup>137</sup> The UN suggests that, despite some estimates of IFD's impact being measured in billions of dollars, "probably only a few hundred million dollars have been added annually."<sup>138</sup>

# We may wonder if funds raised through IFD taxes really serve their official purpose or just replace what donor governments would have given anyway.

Thus, it is far from clear that IFD taxes significantly increase the pool of international development resources.

### 4.2 Evidence on the Impact of Development Aid

This brings us to the third hypothesis. Is international aid effective in promoting economic development and thus long-term solutions to poverty? The 1960s, 1970s and 1980s witnessed a "long and inconclusive" debate among economists on the efficiency of development aid, 139 which remained supported by conventional wisdom. As time passed, more and more doubts were raised. In 1972, economist Peter Bauer started arguing that "foreign aid is clearly not necessary for economic development, as is obvious from the very existence of developed countries. ... Nor is foreign aid a sufficient condition." Much more economic research has since been done that has contributed to a changing consensus.

Casual observation is rather unfavourable to the efficiency of development aid. Consider Africa. Chart 8 shows how, from the 1970s until the 1990s, economic growth in Africa fell as development aid shot up. "International donors spent \$300 billion in aid for sub-Saharan Africa between 1981 and 2001," *The Economist* wrote in 2005. "Yet in the same period the number of Africans living on \$1 a day nearly doubled from 164m to 313m." Over the course of the 1980s and 1990s, real income per person in Africa shrank by nearly 10%. <sup>142</sup>

Some economists, notably at the World Bank, produced evidence that development assistance is useful but only when combined with policies conducive to economic growth by the recipient states. However, William Easterly (who was long an economist with the World Bank) and his co-researchers showed that the impact of aid even with good domestic policies becomes statistically

<sup>134.</sup> UNDP (2012), p. 38.

<sup>135</sup> Ibid., p. 22.

<sup>136.</sup> Cour des comptes (2010), p. 37.

The Economist (2011). See also "A Global Shift in Foreign Aid, Starting in India," New York Times, November 15, 2012, at http://india.blogs. nytimes.com/2012/11/15/a-global-shift-in-foreign-aid-starting-in-india/.

<sup>138.</sup> UN (2012), p. 3.

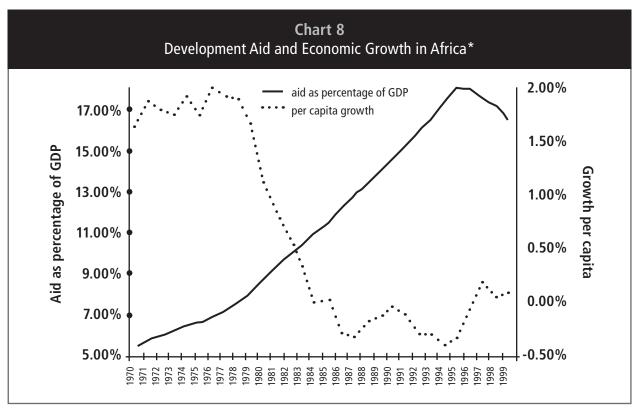
<sup>139.</sup> Easterly (2003), p. 26.

<sup>140.</sup> Bauer (1978), p. 97. Bauer also argued against simplistic redistribution arguments: "[M]aking the rich poor," he wrote, "does not make the poor rich." (Ibid., p. 120)

<sup>141.</sup> The Economist (2005)

<sup>142.</sup> The Economist (2013d).

<sup>143.</sup> Burnside and Dollar (2000).



\*Aid is given as a percentage of recipient countries' GDP. Rates of per capita GDP growth are 10-year moving averages.

Source: Easterly (2003), p. 35.

insignificant when only a few parameters of the analysis are modified.<sup>144</sup>

There is no correlation between development assistance and economic growth even when the recipient governments carry out good public policies. Consider Chart 9, in which the horizontal axis gives a measure of international aid combined with good domestic policies, the vertical axis measures growth of GDP per capita, and each data point is shown by an IMF country code and an accompanying number referring to the successive 4-year averages used (over the 1970-1997 period). The wide scatter of points shows that there is no correlation between economic growth and development aid even when the latter is combined with good domestic policies.

We can see this in another way: Between 1980 and 2002, the 10 developing countries with the highest rates of per capita economic growth (median growth rate of 3.8%) got 0.23% of their

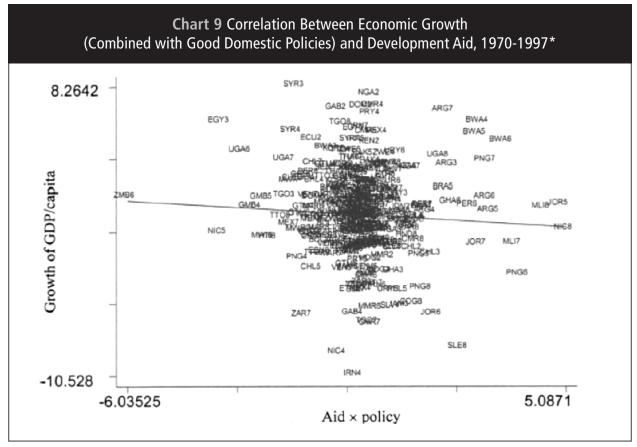
GDP in aid, while the 10 with the lowest rates of economic growth (-1.9%) received 10.9% of their GDP in aid. 145 One could object that such statistics reflect the fact that slow-growing countries receive more aid precisely because they have poor prospects—that is, one could argue that the causality works the other way. But sophisticated econometric research that tries to measure the direction of causality dispels this objection. Raghuram Rajan of the University of Chicago and Arvind Subramanian of the Peterson Institute for International Economics studied a sample of some 80 developing countries over the period 1960-2000, and concluded that "there is no robust positive relationship between aid and growth," and that "it is difficult to discern any systematic effect of aid on growth."146

According to Easterly, "the idea that 'aid buys growth' is an integral part of the founding myth

<sup>144.</sup> Easterly (2003); Easterly et al. (2004).

<sup>145.</sup> Easterly (2006), pp. 346-347.

<sup>146.</sup> Rajan and Subramanian (2008), p. 660. Note that fungibility may have exerted an influence on this sort of result.



\*Development aid (combined with good domestic policies) is measured on the horizontal axis, GDP growth on the vertical axis.

Source: Easterly et al. (2004), p. 778.

and ongoing mission of the aid bureaucracies"<sup>147</sup>—which brings us back to the conclusions of the previous chapter.

There is no correlation between development assistance and economic growth even when the recipient governments carry out good public policies.

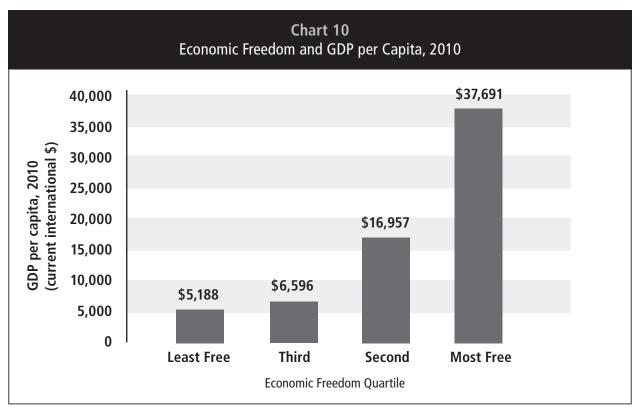
## 4.3 Institutions and Economic Freedom

The fundamental reason why development aid is often inefficient is the misalignment of incentives: Both bureaucrats and politicians face incentives that are not conducive to economic growth. Moreover, instead of promoting good incentives and institutions (social, economic, and political institutions), development aid has often undermined them. In a scientific article entitled "The Curse of Aid," three economists (including one from the World Bank) argue that development aid can be a curse when it reinforces politicians' rent-seeking and thus prevents development. These experts, Simeon Djankov et al., studied 108 countries that received development aid over many decades, and found a negative correlation between the share of development aid in GDP and the evolution of democratic institutions.<sup>148</sup> In the same vein, The Economist notes that foreign assistance in the 1960s poured money into grand projects that failed, and encouraged bad government.149

<sup>147.</sup> Easterly (2003), p. 34.

<sup>148.</sup> Djankov et al. (2008).

<sup>149.</sup> The Economist (2011).



Source: Gwartney, Lawson, and Hall (2012), p. 23.

When we look at data across countries, we find a clear positive correlation between economic freedom on the one hand and, on the other hand, the level and growth of income.

Economic freedom, one institution that appears essential for economic development and growth, is generally less respected in poor countries. This is arguably the main reason why they are poor.<sup>150</sup> When we look at data across countries, we find a clear positive correlation between economic freedom on the one hand and, on the other hand, the level and growth of income. Consider Chart 10: The residents of the countries with the lowest degree of economic freedom (measured by the Fraser Institute index of economic freedom<sup>151</sup>) have a per capita GDP (or income) of US\$5,188, while the freest ones enjoy an average per capita income of US\$37,691. Chart 11, which uses a different

index,<sup>152</sup> shows a similarly high correlation. Moreover, as can be seen in Chart 12, the annual rate of economic growth (that is, of per capita GDP growth) increases from the least economically free countries (1.58% per year) to the freest ones (3.56% per year).

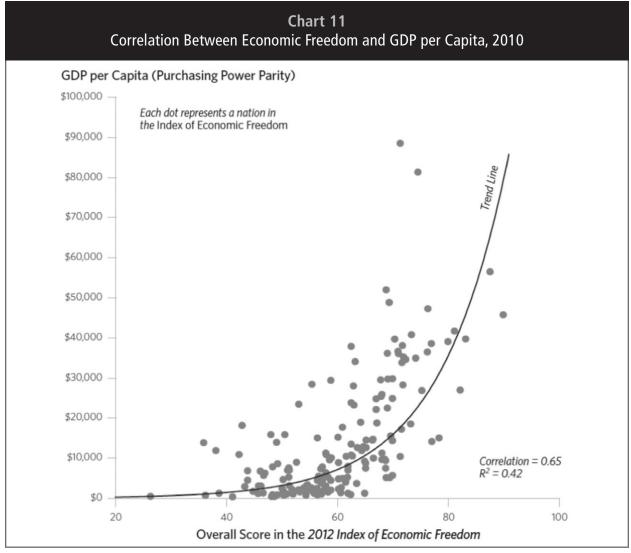
Development aid does not necessarily work in favour of economic freedom. Axel Dreher of Heidelberg University and Kai Gehring of the University of Göttingen find that the evidence is unclear. Multilateral aid (from international organizations) is associated with some increase in economic freedom, while bilateral aid (from national governments) seems associated with a decrease in the quality of governance. If there is a positive relationship, it developed after the Cold War, when the aid paradigm moved away from strategic considerations and economic planning, and more toward economic freedom. A parallel trend is the promotion of trade and capital flows by international aid agencies after the 1980s.<sup>153</sup>

<sup>150.</sup> Gwartney and Holcombe (1999).

<sup>151.</sup> Gwartney et al. (2012), p. 23.

<sup>152.</sup> Miller et al. (2012).

<sup>153.</sup> Dreher and Gehring (2012).



Source: Miller et al. (2012), p. 3.

Free international trade is an important component of economic freedom. It is also a *sine qua non* condition for the development of poor countries. Governments of rich countries are often not eager to liberalize trade with poor countries, especially in agricultural products. When, in 2002, George W. Bush was promising a large increase in American development assistance, he was also taking steps to hamper trade with poor countries. Aid is past, trade is future, Indian Foreign Minister Salman Khurshid recently said.

Other private activities related to trade play an important role in the take-off of developing countries. Direct and portfolio investment into developing countries is more than twice the size of official development assistance. <sup>157</sup> The Economist notes that private assistance from the Gates Foundation—however ill-advised its recommendations regarding IFD taxes may be—"is as important as [that of] many donor governments (and much more innovative)." Remittances from immigrants in rich countries correspond to more than half of official development assistance (excluding debt relief) in the 48 least developed countries. <sup>159</sup>

The experience of many countries illustrates the fact that economic freedom is more efficient

<sup>154.</sup> Easterly (2002), pp. 229-231.

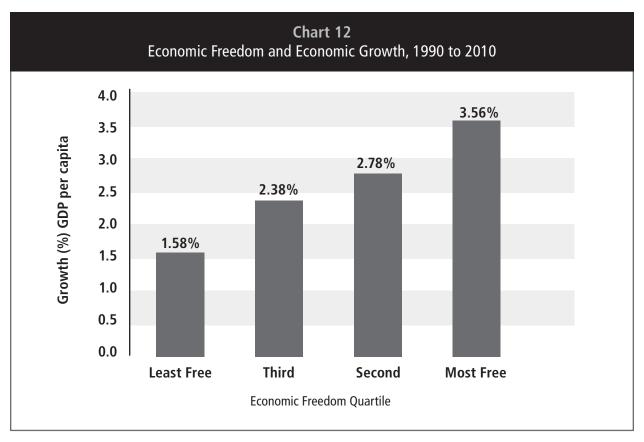
<sup>155.</sup> The Economist (2002a, 2002b).

<sup>156. &</sup>quot;A Global Shift in Foreign Aid, Starting in India", New York Times, November 15, 2012, at http://india.blogs.nytimes.com/2012/11/15/a-global-shift-in-foreign-aid-starting-in-india/.

<sup>157.</sup> OECD (2012), p. 269. See also Picciotto (2009).

<sup>158.</sup> The Economist (2011)

<sup>159.</sup> The Economist (2012).



Source: Gwartney, Lawson, and Hall (2012), p. 23.

than development assistance. While official development assistance has not increased as a proportion of GDP since 1960,<sup>160</sup> many poor countries have developed. The progress of the so-called Asian Tigers (Hong Kong, South Korea, Singapore, and Taiwan) has been especially striking. China is another example although, of course, economic freedom still has a long way to go in that country.<sup>161</sup> Like Hong Kong, China only received trivial amounts of aid over the years.<sup>162</sup>

Similarly, the current growth of Africa seems largely due to international trade and foreign direct investment. "Africa's retreat from socialist economic models," observes *The Economist*, "has generally made everyone better off." Foreign direct investment in Africa has gone from \$15 billion in 2002 to \$46 billion in 2012. The same magazine reports that the continent now has three

mobile phones for every four people, the same as India. <sup>164</sup> In Kenya, where the technology sector has been liberalized, one third of the country's GDP flows through the cellphones of Safaricom (a local phone operator in competition with many others) and its money-transfer service. <sup>165</sup> Real income per capita in Africa has jumped by more than 30% over the past 10 years, after shrinking by nearly 10% during the previous two decades. <sup>166</sup>

This chapter has reviewed the evidence regarding the five decades of development aid failure, and the reasons that explain it. Added to the fungibility of subsidies, a general misalignment of incentives has made development aid ineffective if not downright harmful. The importance of good institutions, including economic freedom and international trade, was neglected if not countered by development aid.

<sup>160.</sup> OECD (2012), p. 266.

<sup>161.</sup> See Coase and Wang (2012).

<sup>162.</sup> Easterly (2003), p. 32.

<sup>163.</sup> The Economist (2013d).

<sup>164.</sup> Ibid.

<sup>165.</sup> The Economist (2013e).

<sup>166.</sup> The Economist (2013d).

# the epitome of inefficient development aid.

The current UN development strategy magnifies the errors of the past. "[O]ur goal," claims the secretary general of the organization, "must be a single, coherent global agenda," which he derives from the Millennium Development Goals, from which IFD sprang. Such a coherent global agenda assumes unanimity among citizens plus an ideal state. Ricardo Hausmann, director of the Center for International Development at Harvard University, writes:

The MDG framework is a top-down design akin to the Encyclopaedia Britannica. It should be superseded by a self-organizing alternative akin to Wikipedia. ... This is not unlike the debate between central planning and self-organization in the economy.<sup>168</sup>

IFD taxes must be considered in view of what we know about the poor performance of development aid. They are not only subject to the same problems, but are in many ways the epitome of inefficient development aid. The money they raise is fungible, so we have no way of knowing if

they actually serve to increase the total amount of development aid—assuming that aid is useful. And they do not address the crucial issue of economic freedom in recipient countries.

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<sup>167.</sup> UN (2013).

<sup>168.</sup> Hausmann (2013).

### CONCLUSION

IFD taxes provide a unique window for studying how a bad idea can evolve, from the 2000 UN Assembly to the creation of the solidarity levy on airline tickets and the current profusion of proposals for similar taxes.

Our analysis shows that IFD taxes combine nearly all the possible faults a tax can have. With only a small number of specific exceptions, IFD taxes are inefficient, carry high administrative costs, are inflexible, are hidden from taxpayers, and are of very questionable fairness. They are opaque and break the link between what the taxpayer pays for and what the taxpayer gets. They are the product of, and will further fuel, rent-seeking by government bureaucrats. They lend themselves to inefficient coalition politics at the international level. It is difficult to resist the conclusion that they are more of a money grab by politicians and bureaucrats than anything else. Because of the fungibility of money, they may not even result in a net increase in development assistance. They partake in the paradigmatic failure of development aid over the past five decades.

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## About the authors



#### YOURI CHASSIN

YOURI CHASSIN is an economist and research coordinator at the Montreal Economic Institute. He holds a master's degree in economics from the Université de Montréal and spent a term in Mexico City during his studies. Before joining the MEI, he was an economic analyst at the Quebec Employers Council (CPQ) and an economist at the Center for Interuniversity Research and Analysis on Organizations (CIRANO), where he worked in particular on the book *Le Québec économique 2009*. His interest in public policy issues goes back to his university days during which he collaborated with the Quebec Federation of University Students (FEUQ), with the Conseil permanent de la jeunesse and with Force Jeunesse.

He is the author of several studies on public finance, education and taxation. He is frequently invited to take part in conferences and debates, and to comment on economic affairs in the media. He recently spoke at the Manning Networking Conference where he presented sensible ideas on reforming Equalization, and he appeared before the House of Commons Standing Committee on Natural Resources on the topic of market diversification in the energy sector.



#### PIERRE LEMIEUX

PIERRE LEMIEUX is an economist who has published many books on economic and political issues. In addition to his many academic articles, he has signed several articles in the international financial press and has also chaired several international academic seminars. He holds an M.A. in philosophy from the Université de Sherbrooke and an M.A. in economics from the University of Toronto. He is affiliated with the Department of Management Sciences of the Université du Québec en Outaouais.



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