Global Taxes for Global Priorities

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1. Introduction

Many crises threaten a globalizing world, including international financial instability, growing worldwide poverty, global warming, and epidemic diseases that know no boundaries. Solutions require intense international cooperation and stronger global institutions. Progress will especially demand large new financial resources – tens of billions of dollars to finance global public health, take steps towards environmental sustainability, and build programs to insure education and livelihoods for all.

Unprecedented wealth and productive capacity are available today, more than ever before in human history. Since 1950, gross world product has multiplied seven times and product per capita nearly three times, both in real terms. Yet the global economy organizes a vastly unequal division of the world's resources, promoting private consumption and accumulation over public well-being. Development aid funds have declined, urgent global projects have stalled for lack of money and worthy international organizations like the UN have fallen prey to budget caps and assessment shortfalls.

Bold and innovative steps are urgently needed to tap the world's wealth. Global taxes offer the most promising approach. International projects and organizations cannot depend solely on contributions from nation states, much less rely on private char-

ity or business "partnerships." They must develop independent revenue sources to fund public purposes at the global level.

Taxes amounting to just 1% of world GDP would raise over \$400 billion per year. Such a sum would meet many urgent needs while placing a very modest burden on the world's richest consumers.

Advocates have offered dozens of proposals for global taxes, but two have gained special attention: a tax on the carbon content of commercial fuels (often called a Carbon Tax), as a means to stop global warming, and a currency transaction tax (often referred to as a Tobin Tax), to reduce speculation and global economic instability.

Some day, an international political authority will levy global taxes, but at present a robust authority of this kind, with sufficient accountability and enforcement powers, does not exist. So initially, national governments must levy such taxes as part of an international tax agreement. Part of the funds levied will go towards global purposes, while part will be kept in the national treasury. Transition towards truly global taxation will await strengthened and democratized global institutions, sometime in the future, but today we must make a start along the road.

2. Background

Global taxes are not a new idea. Legal scholar James Lorimer referred to the idea in his 1884 book Ultimate Problems of International Jurisprudence. Many of the most famous economists of the earlier twentieth century likewise considered it, including Alfred Marshall, John Maynard Keynes, and James Meade.¹ Around the time of the United Nations' founding in 1945, economists and policy makers often spoke of the need for robust international economic policy to avoid the dangers of renewed depression and war. To them, global economic management and even global wealth redistribution seemed not only desirable but a logical necessity.²

In the 1950s and 1960s, global taxes receded from view, a casualty of the Cold War and fervent opposition from the United States government and many large companies. But in the 1970s the idea gained momentum again, among academics, NGOs and a few progressive governments, along with environmental concerns and the concept of a "global commons." Some economists proposed that taxes or fees on use of these resources could help manage and preserve the world's atmosphere, land and oceans.

The year 1972 proved a watershed. The UN Conference on the Human Environment recommended that the international community consider global taxes. In the same year, economist James Tobin first proposed his global tax on currency transactions, while the Club of Rome, in its famous *Limits of Growth* report, discussed global taxes to fund international organizations.³

¹ Frankman (1996).

In 1977 the Washington-based Brookings Institution convened a number of meetings on the subject and that same year a UN conference referred to global taxes as a possible source of revenues to combat desertification.⁴ Soon after, the United Nations Environment Programme (UNEP) published two major reports on global taxation⁵ and in 1980 the Brandt Commission issued an important, widely-read report that reviewed a number of global tax proposals. The Commission favored taxes on international trade, and its report concluded that "a system of universal and automatic contributions would help to establish the principle of global responsibility, and would be a step toward comanagement of the world economy."6

During the 1980s, nations actually established one global tax – a levy on deep seabed mining, incorporated in the UN Law of the Sea Convention. Scholars and policy advocates continued to discuss other forms of global taxes in international conferences and other forums. In 1992, Ruben Mendez of the United Nations Development Programme (UNDP) published a pioneering treatise on *International Public Finance*, giving prominence to tax proposals. Subsequently, a number of prestigious reform studies raised the issue as a step to strengthen global institutions.

² C. Wilfred Jenks, T.A. Sumberg, Jan Tinbergen, Gunnar Myrdal and many others shared these ideas.

³ Tobin's proposal was first made in his Eliot Janeway Lectures at Princeton. He elaborated on the idea

in a well-known later paper [Tobin (1978)]. For the Club of Rome report, see Meadows *et al* (1972).

⁴ See Steinberg *et al* (1978) and United Nations Conference on Desertification (1978).

⁵ See United Nations Environment Programme (1978) and (1980).

⁶ Independent Commission (1980).

⁷ The Convention was adopted in April 1982 and signed by 119 nations in December.

⁸ Tobin's ideas were picked up by other economists, including Larry Summers, later US Treasury Secretary, who wrote an article in 1989 favoring a tax on financial transactions. [Summers and Summers (1989)].

The Commission on Global Governance (1995) proposed a tax on currency transactions, a tax on multinational corporations, and "user fees" for the global commons, including taxes on international airline tickets, ocean maritime transport and ocean, non-coastal fishing.⁹ The Dag Hammarskjöld Foundation report on Renewing the United Nations System (1994), 10 the Independent Commission on Population and Quality of Life (1995),¹¹ the Global Commission to Fund the United Nations (1995)¹² and the South Centre report on UN reform (1996)¹³ also offered proposals and analysis on the subject. Even within the precincts of the International Monetary Fund, a serious working paper on currency transaction taxes emerged.¹⁴

Several governments, including Austria and the Netherlands, studied the issue and quietly supported it. Within the UN system, UNEP organized a conference and UNDP set up a research project on global taxes, which soon resulted in an influential volume on *The Tobin Tax* (1996). Secretary General Boutros Boutros-Ghali gave the subject a highly visible boost in a famous speech at Oxford University (1996) and the UN Economic and Social Council held a full debate on the subject (1996).

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Finance ministries in many rich countries continued to react negatively, however. Corporate executives also looked askance and conservatives in the United States Congress, led by Senator Jesse Helms, strongly objected.¹⁷ Many in Congress claimed global taxes threatened US sovereignty and they accused tax advocates of favoring authoritarian world government. In 1996 Congress considered a bill making payment of US dues to the United Nations conditional upon the UN abandoning efforts that "develop, advocate, promote or publicize proposals" that impose taxes or fees on US citizens. 19 The bill eventually was signed into law on November 26, 1997.²⁰

In a period of financial crisis for the United Nations, this threat immediately stifled discussion in UN forums. UNDP quietly ended its research into the issue. Secretary General Boutros Boutros-Ghali lost his bid for a second term (December, 1996), in part for this reason. The United States also blocked European proposals for environmental taxes at the talks on global climate change. The US eventually imposed a weak alternative – an emissions trading system – in the pathmark Kyoto Protocol, of December, 1997.

⁹ Commission on Global Governance (1995), 217-21.

¹⁰ Childers with Urquhart (1994), 154-156.

¹¹ D'Orville and Najman (1995). The report's preface states unequivocally "global problems demand global solutions and global resources." Chancellor Helmut Kohl of Germany, among many others, endorsed the study.

¹² Harlan Cleveland *et al* (1995). The report was first published in the journal *Futures* in March, 1995.

¹³ South Centre (1996), 88-92.

¹⁴ Spahn (1995).

¹⁵ Mahbub ul Haq *et al* (1996). The book emerged from a conference held on October 10, 1995 by the UNDP Office for Development Studies. ODS head Inge Kaul was a leader in this field. The UNEP conference was held in Nairobi in February 1995.

¹⁶ Speech delivered January 15, 1996. The ECOSOC debate took place on 11 July 1996.

¹⁷ Even in nations where parliaments and some members of government are favorable, Finance Ministries have been cool. Canada is a well-known case, but the same is true of Germany and France.

¹⁸ Conservative think tanks like the Heritage Foundation were particularly vocal on the matter.

¹⁹ See US Senate Bill 1519, 104th Congress, 2nd Session, 22 January, 1996. The item banning UN advocacy for global taxes was added just days after the Secretary General's Oxford speech.

The Foreign Operations, Export Financing, and Related Programs Appropriations Act of 1998, Public Law No. 105-118.

²¹ There are many theories about why the US so actively opposed Boutros-Ghali, but the furor in Congress in early 1996 over his Oxford speech on global taxes was certainly a significant factor.

But Washington, like the mythical King Canute, could not hold back the tide. Interest in the subject continued to grow in every country, including the United States itself, due to emerging awareness of AIDS, global warming, and other impacts of globalization on people's lives. Citizens increasingly understood that the agreements signed at the UN global conferences of the 1990s would remain meaningless without the large sums needed for implementation. ²²

Well-known NGOs, like Friends of the Earth and War on Want, took up the cause. Grassroots movements sprang up and soon found broad public support. Trade unions developed a growing interest, including the worldwide Public Services International. Scholars discussed it. Conferences proliferated. Parliamentarians held hearings. Even the influential U.S. journal *Foreign Affairs* gave it space. Increasingly, parliaments and political leaders endorsed the idea. ²⁶

In the run-up to the UN Financing for Development (FfD) world conference, the Zedillo Panel Report of 2001 gave global taxes unexpected attention. Commissioned by the UN Secretary General and written by an international group of eminent persons, the Report concluded that "there is a genuine need to establish, by international consensus, stable and contractual new sources of multilateral finance" – that is, global taxes.

While recognizing the strong opposition to this idea, the panel stated bluntly that the alternative, short-sighted option, leads the world towards a far more dangerous and unhappy future. The report goes on to consider two proposals. It views a tax on international currency transactions as interesting but possibly flawed. It recommends instead a tax on carbon emissions, which it says would be based on the "sound and fair principle of 'make polluters pay." Taking into account the cautious language of all such reports, one could say that the Zedillo Panel gave a solid endorsement to the idea of global taxes.

A *Technical Note* published about the same time by the UN Secretariat reviewed three of the most promising tax proposals.²⁸ Various side events and government reports have considered global taxes too, including an excellent report on "global public goods" by the Swedish Ministry of Foreign Affairs.²⁹

The time for concerted action has come. The international community cannot allow the United States government to hold the world hostage and block vitally-important progress. Like-minded governments and citizen groups must advance together towards the goal of global taxes. The UN has the authority and capacity to address this agenda, and so to pave the way for a just and sustainable global future.

²² A recent UN report estimates that the extra cost of meeting global development targets agreed by all governments would be at least \$50 billion per year. See Zedillo (2001). Environment, health and security goals would push the figure considerably higher.

²³ See below for a discussion of the Paris-based AT-TAC movement and other grassroots initiatives.

²⁴ Public Services International, the international secretariat of workers in the public sector, was one of the first high-profile unions to support the idea, giving it backing as early as the mid-1990s.

²⁵ Cooper (1998).

²⁶ See below esp. in the section on carbon taxes for more details.

²⁷ Zedillo (2001), 26-27.

²⁸ United Nations, General Assembly (2001). The three proposals reviewed were: currency transaction tax, carbon tax, and aviation fuel tax.

²⁹ Sagasti and Bezanson (2001), see esp. 42-45. Among the side-events, Global Policy Forum, WEED and the Heinrich Böll Foundation organized an International Roundtable in New York on May 5, 2001.

3. Major Proposals

Global taxes can have three parallel purposes: (1) policy steering, (2) revenue raising, and (3) income re-distribution. Tax proponents ordinarily give priority to one of these purposes over the other two. But we will consider the triad, because public support hinges on all three.

We will consider in detail the two major proposals – a carbon tax and a currency transaction tax – looking at the policy steering aspects, revenue raising potential, and redistribution impact of each, as well as their problems, prospects and progress.

Some of the most important tax proposals hope to create a *disincentive* – that is, to discourage harmful activities – as taxes on cigarettes and alcohol do. Taxes on carbon emissions and currency speculation are both of this type. Specialists refer to a "Pigovian" tax, after the economist A.C. Pigou who first theorized about it, pointing out that market prices do not reflect the true costs to society and the environment of these activities.

Such a tax has special features. If it succeeds very well in discouraging the unwanted activity, it will lose its effectiveness as a source of revenue. Further, it may produce its highest potential revenue at a relatively low percentage rate, creating a tradeoff between revenue and disincentive. As the rate rises, revenue is likely to fall because use of the taxed item will decline. The interaction between the tax rate and tax revenues will depend on what economists call demand elasticity: how quickly demand will decline as prices rise.

Demand for fuels like oil responds relatively quickly to price changes – when oil prices spiked in 1979-80, use declined significantly and world carbon emissions declined for

three years to a total 19% below the trend, before climbing again as oil prices fell. As increasing carbon tax rates would push final prices ever higher, demand would fall, though we don't know how far and how fast this would change. 31

Other proposals do not have this Pigovian steering function. They tax activities that are considered positive, such as email traffic and world trade. Unlike the Pigovian proposals, whose advocates hope the taxes will have a direct policy impact such as reduced global warming, these proposals typically seek to raise revenue and may aim at policy goals on the spending side – for example, they may seek funds for development, environmental protection, poverty eradication, or other programs of the United Nations.

Carbon Tax

Policy Goal: Combating Global Warming

Global warming, caused by human activity, brings potentially far-reaching climatic and ecological disruption. If not halted, these changes will result in rising sea levels, desertification and increases in the frequency and severity of storms, floods and drought. Such new climate conditions will lead to the

³⁰ Emissions fell from 5.329 billion tons in 1979 to 4.933 in 1983. Trend would have produced a rise to 6.087 billion. For the data series see Dunn (2001), 53. Most of this decline appears to have resulted from reduced oil use, since coal use increased. See *UN Energy Statistics Yearbooks*, various years.

³¹ European governments in particular have developed considerable experience with petroleum taxes that have been set at rates with a major price impact. High taxes on gasoline are believed to have contributed to higher European efficiency in energy use by comparison with the United States. For a discussion of demand elasticities see OECD (2001).

spread of disease, human displacement and even the disappearance of heavily-populated areas that will submerge below the rising oceans.³²

The authoritative Intergovernmental Panel on Climate Change (IPCC) believes that average temperatures across the world will climb by several degrees over the century. The Panel notes that already icecaps and glaciers are melting, sea levels are rising, and extreme weather events are occurring more frequently. The IPCC concludes that most recent warming is "attributable to human activities." It warns of "irreversible damage" "rising socio-economic and costs."33 UNEP estimates that negative effects of global warming could soar to a cost of \$300 billion per year.³⁴ Carbon dioxide, released from burning of hydrocarbon fuels like oil, coal and natural gas, is by far the most important "greenhouse gas" driving this process.³⁵

A tax on carbon content of these commercial fuels could combat global warming by reducing carbon dioxide emissions.³⁶ Authorities would levy such a tax in proportion to a fuel's carbon content. Companies extracting the fuels would pay the tax, passing it along to consumers as a price increase. The tax would fall most heavily on coal, the fuel with the most carbon content, while natural

gas would be taxed the least.³⁷ Since fuel use is sensitive to price, especially over time, higher prices would have considerable impact on consumption. The tax would be based on the "polluter pays" principle.

Depending on the tax rate, a carbon tax could substantially reduce the use of commercial carbon fuels and create price-incentives for transition to sustainable energy sources, such as wind, solar and geothermic power. If phased in over twenty years or more and coordinated with other public policy measures, the tax could promote a steady transition to sustainable energy alternatives.

Global energy use has shifted in recent decades towards more efficient, lower-carbon fuels. But from 1950 to 1999, world GNP increased so dramatically that carbon release grew from 1.6 to 6.3 billion tons per year. Scientists expect further emission increases in the decades ahead, unless nations adopt strong policies. An IPCC study projects 12 billion tons in 2020, doubling the present rate, in the absence of substantial new measures. 40

Since carbon dioxide *accumulates* in the atmosphere, and it has already reached a dangerous level, carbon release should be reduced dramatically, as quickly as possible. Slowing or ending the *growth* of emissions is not enough. A high carbon tax could take

³⁴ United Nations Environment Programme (2001)

³² Intergovernmental Panel on Climate Change (2001a).

³³ Ibid.

³⁵ Other greenhouse gasses include methane, nitrous oxide and chlorofluorocarbons, the latter having been reduced substantially by the Montreal Protocol of 1987 to protect the Ozone Layer.

³⁶ The tax applies only to "commercial" fuels, because fuels people collect and burn themselves, mainly wood, cannot be taxed. The tax would exempt non-fuel uses, such as petroleum used to produce pharmaceuticals and plastics.

³⁷ Cooper (1998). Coal has a carbon content of .30 tons per million BTU of energy output, oil .24 tons and natural gas .16 tons.

³⁸ See Wim C. Turkenburg, "Renewable Energy Technologies," in United Nations Development Programme (2000), 220-272. For hydrogen-powered fuel cells, a possible transitional technology, see www.fuelcells,org.

³⁹ Dunn (2001), 52-53. Carbon emissions have declined very slightly in the past three years, but the IPCC projects further growth unless reduction measures are in place.

⁴⁰ As cited in Cooper (2002), 2.

the emissions rate back down, especially if combined with eliminating subsidies for carbon fuels. High taxes will be required to reach deep emissions cuts and to promote a rapid shift to sustainable energy, even as worldwide energy demand and use increases.

Revenue Potential

A global carbon tax, levied at a rate that would substantially discourage carbon emissions, would produce very large revenue. There are many assumptions that enter revenue projections, notably the demand elasticities of carbon fuels and the time-lag that would allow alternative energy systems to come into widespread use.

A UN paper estimates that a tax amounting to \$21 per ton of carbon (the equivalent of 4.8 cents per gallon of gasoline) would yield \$125 billion annually. This tax rate would not be high enough to stop worldwide growth of carbon fuel, but it might be the beginning of a phased-in tax that would rise steadily over a period of years.

According to the IPCC, taxes of \$100 per ton of carbon could reduce emissions up to 5 billion tons by 2020. Taking into account projected increases in use, however, that reduction would still leave the world with slightly more emissions than at present!⁴³ A higher tax rate, perhaps \$200 per ton or more, is required to produce real reductions.

Taking a \$200 tax, and then assuming a hypothetical world-wide 50% decrease of carbon emissions from present levels, we could project revenue of \$630 billion per year after a 15 year phase-in period. This sum parallels a model by the Organisation for Economic Cooperation and Development (OECD) projecting carbon tax revenue of \$750 billion by 2020, or about 1.3 percent of gross world product in that year. Taxes raised in the US would represent about 20% of the world total.

Nations have separately levied carbon-type taxes for many years, especially taxes on gasoline. According to an OECD study, petroleum tax revenues in Germany in 1998 totaled about \$38 billion, while in Britain in 1995, similar levies on transportation fuel came to \$14 billion. This demonstrates the large revenue that a carbon tax can mobilize. And it shows that nations can move ahead with high-revenue joint carbon taxes without a universal global agreement.

A phased-in global carbon tax would probably produce its highest revenue in a stage when carbon fuel use remained high. Later, tax rates would rise and revenue eventually decline. Assuming a long phase-in time and continued residual use of carbon fuels, the tax would produce hundreds of billions of dollars in annual revenue over a period of several decades.

⁴⁴ The tax of \$200 per ton of carbon would then fall on 3 billion tons of carbon fuel content.

⁴¹ Reduction or elimination of subsidies must accompany the tax, since subsidies amount to an estimated \$150 billion per year, not including the transportation sector. [United Nations Development Programme (2000), 425]. The UK and Germany have reduced coal subsidies and seen their carbon emissions drop in the 1990s as a result [Dunn and Flavin (2002), 35]. ⁴² United Nations, General Assembly (2001), 3. Cooper (2002) estimates that \$23 is the cost of the first-round of Kyoto standards.

⁴³ Cooper (2002), 2

⁴⁵ Cooper (1998).

⁴⁶ OECD (2001). According to the OECD, the revenue from environmentally-related taxes as a share of GDP varied from about 1% in the United States, to 2% in France, Canada and Germany, 3% in the UK, 3.5% in Norway and the Netherlands, and as high as 5% in Denmark in 1994-98 [page 50].

Re-distribution

All taxes change the distribution of income and well-being. In a world of great poverty and huge income disparities, global taxes should aim to redistribute. Yet global tax advocates have not given enough attention to distributional issues, which include the initial levy, its policy steering aspect, and its spending results.⁴⁷

The *levy outcome* of a carbon tax can be mildly regressive by raising the costs of cooking fuel, heating fuel, and transportation fuel for poor people. Higher fuel costs for farm equipment (such as irrigation pumps and small tractors) can also put pressure on marginal farmers.

There have been many distribution studies in rich countries. These suggest that distribution effects of carbon/energy taxes have ranged from mildly regressive to mildly progressive, depending on local patterns of energy use. Countries that have adopted these taxes, such as Denmark, the Netherlands and Germany, have typically included exemptions or re-distributional subsidies that lessen the impact on the poorest families and make the overall burden of the taxes mildly progressive⁴⁸

Some critics also argue that poor countries depend more on inefficient energy systems which rich countries have already left be-

⁴⁷ Far-sighted advocates urge us to pay more attention to this question and warn that public attitudes towards existing (national) taxes of this kind show potential pitfalls. Anderson (2002) raises this concern

and demonstrates that in the case of Denmark the impact of the taxes has been mildly regressive.

hind, so that a tax of this kind would impose heavier transition costs on the economies least able to adapt. According to one set of projections from the mid-1990s, China by 2015 would be emitting as much greenhouse gases as the United States, and India would be emitting more than Japan.⁴⁹

China has confounded standard assumptions, though, by rapidly decreasing its carbon emissions after 1996, including a major shift away from coal, even while achieving rapid economic growth.⁵⁰ This shows that poor countries can make major changes at an early stage of their industrial development and need not follow the European/US path of energy use.⁵¹

Distributional effects in the global economy are far more complex than distribution within a single country. Cold-weather regions are more likely to be negatively affected than warm-weather ones, thinlypopulated than thickly-populated, and so on. The world's poorest two billion people scarcely use commercial fuels at all⁵² and most poor countries import all or most of their commercial fuel. So carbon fuel use and income from fuel-extraction vary greatly from one country to another. Saudi prince, a US coal miner, and an investor in Toyota would probably lose income from falling demand for carbon fuels. Gas producers would benefit in the short run at the expense of oil producers and especially coal producers.

To insure a more progressive levy outcome, a carbon tax could be raised on a multi-tier basis, with higher rates for rich countries

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⁴⁸ OECD (2001), 82. Studies suggest that weather may be a major factor. Warm-climate countries show more progressivity, while cold-climate countries show more regressivity. The poor must heat their homes, but they don't use air conditioners. See also Anderson (2002) for the distributional effects in Denmark.

⁴⁹ Cooper (2002), 3.

⁵⁰ China closed an estimated 50,000 coal mines from 1997 to early 2000 [United Nations Development Programme (2000), 425].

⁵¹ Dunn and Flavin (2002), 35.

⁵² United Nations Development Programme (2000), 419.

and lower rates for poor countries. Studies are needed to insure both effectiveness and fairness of the tax and to win the greatest public support for the tax plan.

The policy outcomes suggest a more strongly progressive effect of the tax, especially in the long term. By mitigating global warming, the tax would protect the poor who are especially exposed to negative effects such as disease, drought, storms, and flooding. Peasants living in flood-prone Bangladesh would certainly be great beneficiaries. Citizens of small island nations, threatened by the rise of sea levels, would benefit immeasurably. The IPCC has concluded unequivocally that "The impacts of climate change will fall disproportionately upon developing countries and poor persons within countries and thereby exacerbate inequities in health status and access to adequate food, clean water and other resources." 53

Other policy dimensions of distribution arise. As a carbon tax is imposed, prices of solar and wind generators of electricity would likely decline due to intensified research and longer production runs. could bring help bring affordable energy to poor people in remote villages and raise their standards of living. Carbon taxes would lessen urban sprawl and so reduce pressure on the land of poor farmers. Carbon taxes could also lower health costs, by reducing, among other things, particulate pollution (the OECD report, in discussing distributional effects, notes that poor people are nearly always more exposed to the bad effects of emissions).⁵⁴

The *spending outcomes* promise important re-distributional effects as well. Assuming

⁵³ Intergovernmental Panel on Climate Change (2001b), 88. The issue of distribution is raised in ch. 5, 87-90. ⁵⁴ *Ibid*.

that the nations collecting the tax would agree to forward a substantial portion like 50% to a global fund, strongly redistributive effects could result. Such a fund could target support for low-income households. The fund could also help to better distribute world energy resources by helping poor communities obtain low cost solar panels and wind generators.

Considering all three aspects of the tax (levy, policy, spending), on a global basis, the tax promises to be progressive in its overall effect. Advocates must devote more attention and study to the distributional issue, however, to insure that progressive effects will be maximized and harmful regressive effects in local cases reliably overcome.

Problems and Likely Opposition

Some opponents argue that the Kyoto regime of emissions trading takes care of carbon emissions, making the idea of a carbon tax obsolete. This is not true. Emissions trading is a seriously flawed concept, that gives advantages to the biggest polluter countries and the big energy companies.⁵⁵ At best it will have only a limited capacity to reduce worldwide greenhouse gas emissions. A carbon tax is a fairer, more efficient policy tool that would speed progress towards Kyoto and Rio goals.

By raising prices of commercial hydrocarbon fuels, the carbon tax theoretically might boost use of wood as an energy source, along with increases in demand for nuclear and hydroelectric energy, as substitutes for taxed fuels. Though wood is a carbon fuel, authorities cannot tax most of its use, be-

⁵⁵ Emissions trading favors the status quo by giving out trading permits based on current emissions levels. An initial issuing price of the permits is the only occasion when public revenues can be raised. See Baumert (1998a), Cooper (1996), Cooper (2002).

cause consumers tend to harvest and use it directly for their own needs. Nuclear power and hydro-electricity are not carbon emission sources at all. A shift towards these three energy forms would put pressure on forests, raise the danger of radioactivity and dam more of the world's wild rivers. But other offsetting factors would likely enter the equation.

Carbon taxes would promote development of cheaper sustainable energy sources. Electricity prices from wind mills and solar thermal generators are now beginning to be competitive with carbon-fuel generated power. They may already be cheaper than some nuclear generated energy prices and may eventually be cheaper than hydroelectric. Frobably, then, falling prices for sustainable energy will undercut substitution effects from these unsustainable energy sources and steadily *lower* their use.

Some critics argue that carbon taxes would be difficult to collect, but few tax experts take this argument seriously. Tax authorities would levy carbon taxes directly on the sale of carbon fuels, thus collection of carbon taxes would be as easy as value-added taxes or sales taxes. Because VAT taxes are already in widespread use, and because sellers almost everywhere use computerized systems, adding this collection item would not impose much difficulty or extra cost. European experience suggests a collection

⁵⁶ Flavin (2000), 56. Flavin cites estimates from the US Department of Energy that wind power now costs 4-6 cents per kilowatt hour, about the same as new gas- and coal-fired plants. In Flavin (2001a) the author claims that some wind power electricity was produced in 2000 in the western United States at half the price of electrical power from ordinary fuels. Photovoltaic power is more expensive than wind, but falling in price, while solar thermal electricity is now close to market prices. For broad cost comparisons, see United Nations Development Programme (2000).

cost of well under $1\%^{57}$ and a UN paper affirms that in most cases "administrative and compliance costs of the extra taxation would be negligible."

The carbon tax's main problem is not technical but political – the staunch opposition of a number of enormously powerful global industries, notably transportation equipment manufacturers like General Motors and Ford, petroleum producers like ExxonMobil and Royal Dutch Shell, and energy producers like Enron and Dynergy, all closely tied to the carbon-energy system. Among the largest companies in the world, they have great political influence, particularly over two key players: the United States and Britain.⁵⁹

These companies sell mass-consumption products, however, so they are vulnerable to consumer attitudes and pressures. BP's advertising campaign, which insists that the company is looking "Beyond Petroleum," reflects corporate awareness of this looming challenge and offers hope that mass campaigns and consumer pressure can blunt corporate opposition. A Greenpeace campaign against Shell in Europe provides a glimpse of this strategy, which may have caused Shell and some other companies to soften (though not abandon) their opposition to environmental policies.

Oil and gas producing nations also oppose this tax, which they see as a threat to their production revenues. Russia, Britain, Norway, Mexico, Nigeria, Indonesia, Iran and the United States are all producers with a big

⁵⁷ See OECD (2001) for a discussion of tax administration issues and costs.

⁵⁸ United Nations, General Assembly (2001) 3-4, quote: 4.

⁵⁹ Enron is no longer a force, after its collapse in late 2001, but public inquiries have shown how intensely it lobbied for a carbon-friendly energy policy and against global agreements like Kyoto.

stake in the carbon energy system. But rents, taxes and other revenues from fuel extraction do not always better the lives of ordinary citizens. Further, most of the world's nations lack domestic coal, oil and gas. They have plenty of sun and wind, though, for sustainable power generation. They would clearly benefit from a shift in the global energy system and they might eventually prove to be strong supporters of a carbon tax proposal.

Progress

The European Union has been interested in coordinated energy policies, including taxes on petroleum and even carbon taxes. For this reason, EU negotiators favored a taxbased regime at Kyoto, rather than the emisultimately sions-trading system that emerged. Because the EU is already relatively energy efficient, globally-agreed carbon taxes would be less of a burden than in the US.⁶⁰ In fact six European states, five of them EU members - Denmark, Finland, Germany, the Netherlands, Norway and Sweden, - have already levied energy/carbon taxes at the national level. The EU is some distance from implementing its own carbon tax, but its members, including even Britain, favor energy taxes as a path towards energy efficiency and environmental stewardship.

No mass campaign has emerged to promote a carbon tax, but the broad-based environment movement has shown considerable interest in this idea, lobbied for it and produced policy papers and proposals. Friends of the Earth, War on Want, and the Wuppertal Institute, among others, have actively promoted it. Networks of environmental groups have pressed for it at global conferences. A regular series of Global Conferences on Environmental Taxation have em-

⁶⁰ Baumert (1998a).

emerged.⁶¹ The OECD, UNEP, UNDP, and the Commission on Sustainable Development have all made or commissioned studies.⁶² Many scholars and environmental scientists have supported the idea, one of the most prominent being Richard Cooper, Boas Professor of International Economics at Harvard University, whose essay advocating a carbon tax appeared during 1998 in *Foreign Affairs*, an influential US foreign policy journal.⁶³

The UN Zedillo Panel, whose members from a range of countries included Robert Rubin, former US Secretary of the Treasury, endorsed the carbon tax, saying that it had "promise" and that governments should give it serious consideration.

Public awareness of global warming is growing steadily. Political leaders are moving towards serious action. Pressure in favor of the carbon tax will continue to mount. Governments should see the World Summit for Sustainable Development in Johannesburg (August-September 2002) as an important opportunity for action. A political bloc is forming that will steadily overcome opponents and implement the tax.

Currency Transaction Tax

Policy Goal: Reducing Currency Speculation and Financial Instability

Every business day, traders at banks around the world exchange more than \$1 trillion in currencies. Less than 20% of these transac-

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⁶¹ The Annual Global Conference on Environmental Taxation which brings scholars together from many countries. First held in Cleveland (USA) in 2000, it was held in Vancouver (Canada) in 2001 and will be held in Woodstock, Vermont (USA) in 2002.

⁶² See, for example, OECD (1997) and OECD (2001).

⁶³ Cooper (1998).

tions are necessary to cover international trade and travel, long-term investment and financial liquidity. The remainder covers various kinds of speculation on currency price changes. This speculation often results in currency runs, financial crises, collapse of economies and hardship to millions of people, as well as dangerous instability in the whole world financial system. ⁶⁴

Currency speculation often drives down the price of local currencies, precipitating financial crises such as those in Mexico (1994), East Asia (1997-98), Russia (1998), Brazil (1999), Turkey (2000) and Argentina (2001). This has caused broad instability in the global economy and harmed millions of people, where local economies suffered deep declines. Central Banks could not defend their own currencies during these speculative attacks, because speculators could mobilize enormous loans for short-term, highprofit moves in the markets.

Even the speculators could lose in this highstakes gambling game, however. Baring Brothers, one of the most venerable London firms, collapsed in February 1995 after a single trader in its Singapore office took risky positions that ran up \$1 billion in losses. The USA-based Long Term Capital Management hedge fund lost on an even larger scale in computer-driven currency trading schemes, and the whole firm suddenly collapsed with tens of billions in paper losses in October 1998. Last-minute intervention by the US Federal Reserve Bank, which organized a bailout by creditors,

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barely prevented a serious international financial crisis.⁶⁷

Nearly two decades earlier, in 1972, Professor James Tobin of Yale, later a Nobel laureate, first anticipated the dangers of open currency markets and proposed a small tax on currency trades in order, as he said, to "throw sand in the wheels" of the markets, slow down speculation, promote long-term investing, and give governments more autonomy in their monetary policy. After the demise of the Bretton Woods currency-system in the early 1970s, new market conditions and very high profits from currency trading pushed volumes steadily upwards – from a turnover of \$16 trillion per year in 1970 to nearly \$30 trillion in 1983.

As financial companies adopted computer-driven trading systems in the 1990s, the pace of trading grew still faster, because complex programs required huge trading volume to realize profits on small-margin trades. By 1992, annual trading had grown to \$148 trillion. In that year, speculation by George Soros' Quantum Fund forced the devaluation of the British pound, while making a profit of more than \$5 billion in just a few

⁶⁴ Only 2% of the volume covers the needs of trade. Most transactions are unnecessary and damaging, in the view of Tobin and many other experts. Wahl and Waldow (2001), 5, estimate that 80% of the trading volume is accounted for by arbitrage and speculation. Annualized daily volume was over \$1.5 trillion in 1998 and in 2001 about \$1.3 trillion.

⁶⁵ See Hayward (1999).

⁶⁶ A Daiwa Bank branch in New York suffered \$1.1 billion in trading losses, also revealed in 1995.

⁶⁷ Dunbar (2000). LTCM's positions were leveraged at 25-times the firm's capitalization. When the firm collapsed, its exposure in the markets was about \$1 trillion, of which \$750 billion in interest rate swaps. [Tsatsaronis (2000), 67]. More recently, in February 2002, a trader at a Baltimore (US) affiliate of the Allied Irish Banks ran up \$750 million in currency trading losses before being discovered.

⁶⁸ Tobin (1974). The idea had its origin Keynes' *General Theory* (1936), which discussed slowing down domestic markets through a transaction tax to encourage long-term investment values. See 1964 edition, 159-60.

⁶⁹ Governments deregulated their financial sector, lifted exchange controls and allowed currencies to "float." International Monetary Fund (IMF) loan conditions imposed reforms of this type on many poor countries, with weak and undeveloped financial systems and shaky currencies.

days.⁷⁰ By 1998, feverish speculation by computer-driven investors had pushed the level of transactions to \$373 trillion.⁷¹

Since then, trading has fallen to about \$322 trillion by 2001, due to the introduction of the Euro, banking concentration and other factors. To Growth will probably resume, though. Even if future growth slows, overall volume will remain dangerously high and prone to speculative runs and damaging volatility.

A Currency Transaction Tax (CTT or "Tobin Tax" as it is often called) could lower trading volume, speculation and volatility by imposing a small tax of less than 1% on each trade. Such a tax would not slow world trade in goods and services or long-term investments, but it would reduce much of the arbitrage trading that seeks profits from very small differences in currency prices. Some think that a tax as low as 0.1% could substantially reduce arbitrage activity.

Paul-Bernd Spahn⁷⁴ contributed an important new element to the proposal in 1996 by suggesting that the tax should include a second, much-higher rate that would come into force whenever signs of major speculation arise – when price movement exceeds a preestablished limit. This second-tier tax would act like stock market "circuit-breakers" that

stop trading when sudden large price movements occur. This tier would discourage speculative currency runs, for which a low rate would not be sufficient disincentive.

The two-tier tax would favor long-term investments and loans, discouraging short-term activity and sudden, destabilizing price changes. Rapid, irrational "herd behavior" by speculators could no longer do serious damage. The tax would provide stability to the global financial system and promote conditions more favorable for development.

Revenue Potential

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Taxes on currency transactions could raise large revenue, even if they lowered transactions by 50% or more. Researchers have estimated revenue based on various assumptions such as different tax rates and different impacts on trading levels. Estimates also make different assumptions about how many transactions would escape taxation (through use of new financial instruments, tax havens, etc.). A tax of 0.2%, with a hypothetical 50% reduction in transactions from the current level of about \$300 trillion would result in annual revenue of about \$300 billion. A tax of just 0.05% with a 50% tax-induced reduction of transactions and participation by the U.S. and the U.K. (further 50% reduction) would still produce a hefty \$38 billion.⁷⁵

Eventually currency transactions may diminish as the dollar and the euro gain wider use and national currencies decline. In the meantime, the CTT will prove a very large source

⁷⁰ Tsatsaronis (2001), 66.

⁷¹ Wahl and Waldow (2001), 5, citing the *1998 Annual Report* of the Bank for International settlements. ⁷² Galati (2001). One factor, the pullback of hedge funds after the meltdown of Long Term Capital Management, resulted from huge losses in Russia for Quantum, Tiger and others. For hedge funds see Tsatsaronis (2001).

⁷³ Tobin initially proposed 0.5% but some advocates now favor rates as low as 0.1% [the rate would be doubled by a "round-trip" speculative transaction].

⁷⁴ Spahn is a professor of economics at Frankfurt University and an IMF consultant. See Spahn (1995) as well as his later papers Spahn (1996) and (2002).

⁷⁵ A number of different revenue figures have been projected, based on different assumptions. Spahn (2002) estimates a tax levied throughout the EU and Switzerland (including the UK), at the rate of 0.1%, to yield 17-20 billion euros or about \$16 billion, while the UN study [United Nations, General Assembly (2001)] estimates a universal tax at the 0.1% rate yielding \$132 billion.

of revenue, yielding tens of billions annually for global public purposes.

Re-distribution

The *levy outcome* of a currency transaction tax would yield far more progressive results than the carbon tax, because the CTT directly affects mostly financial companies. Travelers and workers sending remittances would pay an extremely small sum towards the tax, a sum that would be more than offset by falling currency exchange transaction costs as banks wire themselves together across the globe. While non-financial firms can be expected to pass along some of the tax's effect in the form of higher prices, it appears that only very slight additional costs would be borne by poor persons.

The *policy outcome* of the CTT would be strongly redistributive, since the tax would dampen speculation and avoid financial and economic instability that impose such a heavy cost on ordinary people in affected countries.

The *spending outcome* has a problematic aspect anticipated by Tobin, since currency exchange transactions are concentrated in just a few countries. Britain accounts for 32% of all global currency trades, the United States ranks second at 18%, Japan third at 8% and Singapore fourth at 7%. The US, Japan and the European Union together account for about 75% of global trades, with Switzerland, Hong Kong and Singapore accounting for another 15%.

A tax entirely kept by these governments would not promote *global* re-distribution, though it would promote re-distribution within their borders. An effective plan for a global CTT should incorporate national contributions to a global fund that would redistribute tax revenue away from Britain and

the other financial center countries in favor of projects in low-income nations. If 25-50% of the revenue would benefit citizens of poor nations, the result would be strongly progressive on a global basis.

Overall, then, this tax promises progressive re-distributional effects in all three of its outcomes.

Problems and Opposition

Critics sometimes insist that tax authorities would find it difficult to collect a CTT, especially because traders would invent means to avoid it through (1) creation of nontaxable instruments, such as special derivatives, and (2) use of tax-free havens such as offshore centers to shelter their trades. Rodney Schmidt and other proponents of the tax have made convincing proposals that would block these and other avoidance schemes, by, among other things, (1) taxing inter-bank or "wholesale" transactions in the major vehicle currencies at the point of settlement and (2) imposing a penalty tax on transactions with jurisdictions not imposing the tax. The literature on this subject is very substantial.⁷⁶

Because the tax could be levied by making small changes in computer program at a few major financial institutions, the cost of setting up and administering the tax would be small and compliance easy to monitor. A UN paper concludes that this tax would be "administratively inexpensive" and that its "compliance costs would be low."

⁷⁶ See Mahbub ul Haq *et al* (1996), 109-158 and particularly Schmidt (1999).

⁷⁷ Wahl and Waldow (2001), 9-10, discusses feasibility, calling attention to the increasingly centralized interbank payments system, using such vehicles as Target (Germany), Fedwire (US) and CHAPS (UK) as well as the international SWIFT system.

⁷⁸ United Nations, General Assembly (2001), 5.

Could the tax be levied in the absence of the United States and the UK, where opposition seems most intractable? Some believe that only a universal tax would be possible, but many advocates think that a group of countries could introduce the tax, just as stock transfer taxes were unilaterally introduced some years ago. Because the European Union and Japan-Singapore-Hong Kong together represent about 75% of global transactions, advocates hope that this zone could begin with a joint tax, which many other countries would join. More modestly, the German Development Ministry has published a report proposing a currency tax within the EU and Switzerland. 79

The tax faces strong opposition from financial institutions, especially those most actively engaged in currency trading. These institutions make very large profits each year through their currency desk operations - perhaps as much as \$150 billion according to Wahl and Waldow⁸⁰ – including both the lower-margin arbitrage profits and the higher-margin profits from speculative The bankers fear much of transactions. these profits would disappear under such a tax, if it were to be universal. Since these financial institutions are among the world's most powerful companies, they can mobilize great political resources in opposition. Many of these companies depend on mass consumer markets, though, so pressure from consumer campaigns might lessen their opposition, tilting the balance towards tax proponents

Progress

Though Tobin first proposed the idea thirty years ago, it has only recently gained worldwide attention. A large and growing

⁷⁹ Spahn (2002).

NGO movement has propelled the proposal forward, eliciting increasing support from political leaders, parliamentarians, trade unionists, journalists and intellectuals.

NGO initiatives sprang up almost simultaneously within a short period.⁸¹ ATTAC, a mass membership campaign, has now grown faster than even optimistic advocates expected. Affiliates have sprung up in 26 countries and ATTAC now boasts thousands of members and it wields noticeable political influence. Other organizations with strong programs and leadership roles on CTTs include the Halifax Initiative (Canada), the Tobin Tax Initiative (US), War on Want (UK), International Cooperation for Development and Solidarity (Europe), 11.11.11 (Belgium), WEED (Germany), AFRODAD (Africa) and Focus on the Global South (Thailand).⁸²

The NGO alliance includes a large presence of trade unions and church groups. The World Council of Churches endorsed the currency transaction tax at its world assembly in 1998. The German and US trade union confederations and the International Confederation of Free Trade Unions now support the tax, as do Public Services International and the International Metalworkers' Confederation.

As the movement has picked up steam and gained mass backing, politicians and public figures have expressed growing interest. Jacques Delors, former President of the European Commission has commented favorably, as has Gareth Evans, former For-

⁸⁰Wahl and Waldow (2001), 13, assume an average profit of 0.005% on turnover of \$300 trillion

⁸¹ Global Policy Forum's web information program on the Tobin Tax in the spring of 1998 coincided with the foundation of the Tobin Tax Initiative (US) and ATTAC (France).

⁸² Hundreds of NGOs have endorsed the CTT, including Mani Tese, Third World Network, Oxfam Great Britain, Earth Action, Christian Aid, EURO-DAD, WILPF, and the World Federalists.

eign Minister of Australia; and Barber Conable, former President of the World Bank.⁸³ President François Mitterrand of France promoted it at the World Summit for Social Development in 1995.

More recently, the Finnish and Belgian governments have backed it. The President of Brazil and the Prime Minister of India have given it their blessing. The German government has shown an interest and the Swedish Central Bank has said it may be necessary. Even the UK Chancellor of the Exchequer has said his government has an "open mind" on the matter. And George Soros, the man who made billions by speculating against currencies, has now come out in favor. 87

French Prime Minister Lionel Jospin announced in a television speech on August 2001 that his government supports the CTT. A cartoon in a Paris satirical weekly showed Jospin's rival, the French president, saying contentedly "Chirac rhymes with ATTAC!" **

More than 800 parliamentarians from five continents have signed an international appeal favoring the tax. In March, 1999, the Canadian parliament voted overwhelmingly for a CTT motion.⁸⁹ In November 2001, the French National Assembly passed a law

questions and draft bills call for the tax or for a study of its feasibility. The UK House of Commons has held several debates on the matter and a six-party coalition of backbenchers pressed the government for action. In the European Parliament, a draft resolution favoring a CTT missed a majority by only six votes in early 2000. Even members of the US congress have introduced a supportive bill.

adopting the tax in principal. 90 In a number

of other European countries, parliamentary

Governments are clearly getting serious about the possibility of this tax. It has moved into the realm of expert ministry studies and preparatory investigations. The Finance Ministries of France and Finland published studies in 2000 and the UK Treasury is doing its own investigation (2001-02). In early 2002, the German Development Ministry published an important report by Paul-Bernd Spahn on the CTT and the European Commission issued a major study on globalization that referred at length to the potential of a currency tax.

Though many powerful forces still stand opposed to taxing currency transactions, the movement is gaining ground. Those that formerly opposed it unconditionally, like the IMF and the Bank for International Settlements, now grudgingly admit that it may have merits. A softening position by the UK Treasury shows how far we have come. Each new currency crisis adds momentum and a sense of urgency. Soon, perhaps, a serious move towards adoption may get under way.

⁸³ Ul Haq, *et al*, p. i.

⁸⁴ ATTAC (2001).

⁸⁵ For the Swedish Central Bank statement see Reuters (2002)

⁸⁶ Brown (2001). The UK government remains officially opposed to a CTT, but Development Secretary Clare Short favors the idea and Chancellor of the Exchequer Gordon Brown appears to be cautiously considering it. See *Financial Times* (2001) and Barnes (2002).

⁸⁷ Islam (2001).

⁸⁸ Le Canard Enchainé, November 7, 2001.

⁸⁹ The vote was 164-83. Finance Minister Paul Martin voted in favor.

⁹⁰ Galut (2001).

⁹¹ Barnes (2002).

⁹² The vote took place on January 20.

⁹³ Rep. Peter DeFazio and Sen. Paul Wellstone introduced on April 11, 2000 their "Concurrent Resolution on Taxing Cross-Border Currency Transactions to Deter Excessive Speculation" (H. Con. Res. 301).

⁹⁴ Spahn (2002) and European Commission (2002).

4. Other Proposals

Aviation Fuel Taxes

Although airplane travel currently accounts for only about 3% of global carbon emissions, it is the fastest growing source of emissions. The Intergovernmental Panel on Climate Change (IPCC) expects airplane travel to account for 15% of all carbon emissions in 2050. Currently, aviation fuel used in international flights is exempted from fuel taxes under an international convention, putting other less polluting forms of transportation like sea and rail at a disadvantage. 96

A number of studies by the Organization for Economic Cooperation and Development (OECD), the International Civil Aviation Organization (ICAO) and the IPCC have examined taxes on aviation fuel as a means to mitigate global warming and other negative effects on the atmosphere including the ozone layer. They have concluded that a tax on aviation fuel would make passenger and freight charges somewhat more expensive, though a 25% fuel tax, if entirely passed along to customers would only add only about 5% to user costs and reduce demand by 5-10%. Such increased fuel costs would, however, create a powerful incentive to airlines to use fuel-efficient engines and more efficient aircraft design. Higher fuel prices would also increase incentives for a more efficient air traffic control system and other factors affecting airline emissions.⁹⁷

95 ENDS Environmental Daily (1999).

The EU has actively discussed an aviation fuel tax, beginning with the Dutch Presidency of 1997. Dutch transport minister Annemarie Jorritsma suggested that the European Union introduce an aviation fuel tax unilaterally. In December 2000, the European Parliament's Economic Monetary Affairs Committee confirmed its support for a recommendation to allow the Member States to impose a tax on domestic and intra EU flights. The Committee also urged the Commission to pursue negotiations through the International Civil Aviation Organization with a view to amending the 1944 Chicago Convention, which allows an exemption from taxes on air fuel.⁹⁸ Australia and the US oppose a worldwide levy on aviation fuel, but many other countries have expressed interest.

ICAO data shows fuel costs to be somewhat less than 20% of total airline turnover, which in 1998 was close to \$300 billion per year. This would suggest a fuel cost of about \$50 billion per year. A 1998 study cited by the IPCC found that a tax of 25% would halve the rate of growth of fuel use, while not having substantial impact on passenger demand. Such a tax would produce revenues of \$12.5 billion per year.

This tax would generate only modest revenue compared to the carbon tax, but such may be its attraction. It would certainly generate far less opposition and might be a low-profile precedent for later, more ambitious tax plans. The decline of air travel in the wake of September 11, 2001, increased existing industry difficulties world wide. Until the finances of the industry improve,

⁹⁸ European Report (2000).

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⁹⁶ ENDS Environmental Daily (1998). Aircraft fuel is exempted from tax under the international Chicago Convention of 1944, setting up the International Civil Aviation Organization.

⁹⁷ Intergovernmental Panel on Climate Change (2001a). This study of *Aviation and the Global Atmosphere* contains a very useful survey of the field.

⁹⁹ Intergovernmental Panel on Climate Change (2001a).

governments are unlikely to agree to a new tax on aviation fuel. But projections of rapid growth and consolidation of the industry suggest that it will soon again emerge as highly profitable, at which time, a tax may again seem promising.

Email/Internet Taxes

An email or internet tax, sometimes known as a "bit tax," seeks to introduce a tax on the amount of data sent through the internet. A person sending 100 emails a day, each containing a 10-kilobyte document, would pay a tax of just 1 cent, according to one proposal.

This tax does not seek to discourage use of email (though it would to some degree). Rather, its proponents hope to raise funds that would be spent to narrow the "digital divide" between rich and poor. Revenues would help make email and web access available in poor communities and low-income countries.

The UNDP *Human Development Report* 1999 mentioned such a tax. ¹⁰⁰ UNDP estimated that globally in 1996, such a tax would have yielded \$70 billion. ¹⁰¹ Since internet users now frequently send data-rich photos and large documents, transfer rates are far higher than in 1996 and the number of internet users has grown enormously. For these reasons, a tax should be set at a rate well below the one UNDP first proposed. Still, it could produce a large revenue and impact users only modestly.

¹⁰⁰ United Nations Development Programme (1999),66.

In 1998, the United States persuaded the OECD countries to impose a moratorium on internet taxation, but the idea continues to stir interest and on February 12, 2002, EU finance ministers approved *sales* taxes on internet transactions. ¹⁰² New technology and changing politics may bring this proposal swiftly forward.

Tax on World Trade

The Brandt Commission proposed this tax two decades ago, seeking to raise revenues on the value of world trade. William Evan, Professor Emeritus at the Wharton School of Business, revived the idea in an article published in 1997 in the *New York Times*. ¹⁰³ Like the email tax, this tax does not seek to discourage the activity it taxes. Rather, it hopes to raise international revenue based on the idea that international trade and prosperity relies on international institutions working for peace and general well being.

With volume of world trade at \$7.3 trillion in 1998, a tax of 0.5% on the value of all trade activity in both goods and services would result in \$37 billion of total annual revenue.

Tax on Use of the Oceans and Earth's Atmosphere/International Air Transport Tax

Environmental advocates favor taxes that impose costs on the use of the "global commons." These taxes could reduce the negative impact of heavy human use of the oceans and the atmosphere and create funds for research and preservation of these precious resources. Such taxes could levy international air traffic, international maritime traffic, and possibly also the military use of the oceans and atmosphere, since military

¹⁰¹ *Ibid.* The Report brought a sharp rebuke from the United States government in the form of a letter to UNDP Administrator Mark Malloch Brown. Malloch Brown felt compelled to reply that "UNDP does not advocate and will never advocate the establishment of this or any other kind of global tax." See Bureau of International Organization Affairs (1999) and Winfield (1999).

¹⁰² Associated Press (2002). See also Glasner (2001).

¹⁰³ Evan made his proposal specifically to fund the UN regular budget. See Evan (1997).

use causes considerable damage and pollution.

Advocates have most often proposed a tax on international air tickets and airfreight charges. All the major studies have raised this idea and a recent UN paper included it among the three most promising proposals. 104 Such a tax is already in force at the national level. Governments and airport authorities commonly levy charges that airlines pass along in ticket prices or airfreight bills. Such charges amounted to \$6.7 billion in the United States alone in 1998. One estimate based on 1989 data, suggested that a 1% tax could yield revenue of \$1 billion. 105 The Air Transport Action Group reports total 1998 world airline industry revenues at \$307 billion (including both domestic and international flights), of which international revenues were somewhat over half.

According to our calculations, a tax of 1% on all air transport revenues would yield about \$3 billion while a tax on international fights alone would yield approximately \$1.2 billion. A UN study arrives at a somewhat smaller revenue conclusion, estimating that 1% tax on all international passenger tickets and airfreight charges would yield \$2.2 billion, of which \$800 million on passenger tickets alone. 107

Tax on the International Arms Trade

Disarmament advocates have long proposed a tax on the international arms trade, in hopes of reducing its volume and raising revenues to promote disarmament and other peaceful purposes from this deadly merchandise. Proposals for this tax have come

¹⁰⁴ General Assembly. United Nations (2001), 2-3.

from various sources over the years including the government of Saudi Arabia, UNEP, the UN Committee for Development Planning, the Brandt Commission and the UNDP *Human Development Report*. The international arms trade, only a very small fraction of overall world trade, totaled approximately \$25-30 billion in the period 1990-2000, if we take the trade in "major conventional weapons" as the benchmark. A tax of 5% on this trade would yield about \$1.2 billion, assuming a small trade reduction due to the effects of the tax.

The United Nations Register of Conventional Arms, decided in 1991 by the General Assembly, gathers information on the arms trade that could plausibly be used as a basis for such a tax levy, though information would have to be gathered on a mandatory basis and with sales value as well as volume.

Fines for Ocean Dumping

Oil tankers flush out their tanks with seawater, polluting the oceans with great amounts of oil each year. Cruise liners dump polluting refuse into pristine seas. Coastal cities dump garbage at sea. These and many other forms of dumping are causing growing pollution of the world's oceans, accelerating the decline of fish stocks, causing the death of coral reefs and leading to many other serious problems. 110

Advocates have proposed fines, to be imposed on those who dump – very severe fines that would make dumping extremely expensive, even if only sporadically discovered. When set at high rates, the total revenues collected from this source would still

¹⁰⁵ d'Orville (1995), 51.

¹⁰⁶ See www.atag.org/ECO/default.htm

¹⁰⁷ General Assembly, United Nations (2001), 2.

¹⁰⁸ Mendez (1992), 229. See UNDP (1994), 56 and d'Orville and Najman (1995), 47-48.

¹⁰⁹ Stockholm International Peace Research Institute (projects.sipri.se/armstrade/facts_and_figures.html) ¹¹⁰ Independent World Commission on the Oceans (1998).

probably not be large. If each year international authorities imposed five thousand fines of \$100,000 each, the total revenue would reach \$500 million. This proposal would require a complex global monitoring process that would itself be expensive, reducing net revenue from the tax to a modest level, though doubtless also making progress against the plague of dumping and ocean pollution.

Other Proposals

Advocates have advanced many other proposals for global taxes. These include: a tax (or fee) for commercial deep-sea fishing; a "parking fee" for earth-orbiting satellites, a fee for the use of the electronic spectrum (for radio/television/mobile phones/etc.), a tax on the profits of transnational corporations, and a tax on international advertising.

5. Common Issues and Themes

While global tax proposals include many widely different ideas, they share certain common themes. In what follows, we address some of the most important issues, to explore the problems and potential of global taxes as a policy tool.

Organization and Oversight

Harmonization & Sovereignty

Global taxes can only gain legal standing through a treaty agreement between nation states, in an "internationally-harmonized tax regime." Each participating nation will raise the taxes through its own taxing authority, based on a globally agreed tax rate and taxing policy plan. Each will then pass an agreed portion of the revenue along to an international organization for spending at the global level. This arrangement does not require fundamental changes in international law and so it avoids a direct challenge to state sovereignty that a global taxing authority would pose. States can keep jealous control over their taxing powers.

A treaty body that supervises a tax will assume authority that is partly in competition with the authority of national legislatures and tax authorities, but it will remain subject to the will of participating governments.

Accountability and Oversight

Though nation states will initially collect and decide (through inter-governmental consultation) on the spending of global taxes, new citizen pressures for global oversight will emerge. Citizens in diverse nations will want robust institutions (not just traditional diplomacy) to oversee tax policy, decide on spending priorities and, most importantly, provide accountability. These citizens will ask for a more representative system, more democratic global political institutions, on the principle of "no taxation without representation."

Critics of global taxes often focus on the kind of institution that would supervise and spend the funds at the global level. US Congressional critics warn that the institution(s) would be bureaucratic, corrupt, and authoritarian. These concerns are exaggerated but they are not entirely unreasonable. A successful global tax system must provide assurances that monies will be efficiently administered, well protected from dishonesty, carefully accounted-for, responsive to public feedback, and disbursed with care in the very best traditions of public service.

We should oppose any plan that would put the monies in the hands of the International Monetary Fund, the World Bank, or some other secretive agency unduly influenced by Washington. A strong accountability plan must guard against creating a Frankenstein monster that we would later sadly regret.

Administrative Costs, Enforcement Issues

The cost of raising revenue and the difficulty of enforcement vary greatly from one tax to another. Authorities find income taxes complex and expensive to administer and increasingly difficult to enforce, while sales or value-added-taxes are simpler and far cheaper (though less progressive).

The main global tax proposals meet the criteria of cost-effectiveness and ease of enforcement. Many experts believe that a currency transaction tax would be extremely simple and cost-effective, because it would be levied through a computer program in-

stalled in a relatively small number of banks and financial institutions. A carbon tax would be more complex because it would involve more different transactions and more varied reporting. But levied on the initial sale of just three basic fuels (coal, petroleum, natural gas), tax authorities should find it relatively simple, as it would be similar to the sales taxes that nearly every tax authority imposes. Aviation fuel taxes, a levy on airline tickets, and a tax on seabed mining would similarly appear to be simple and cost-effective. More complex and costly proposals, such as email taxes and fines for ocean dumping, have understandably attracted less support.

A system of collection based on national tax authorities would run into problems in states beset by national crisis, war, or a collapsing central authority. States like the Democratic Republic of Congo, Angola, Sierra Leone, Somalia, Sudan, and Afghanistan would doubtless not be able to collect taxes as part of a global tax regime. No tax regime manages a perfect collection record, however, and these weak-points would arise in places where generally only very small amounts of tax would be owed. A well-developed tax regime could, in any case, provide international assistance in cases (for example, oil taxes levied in Angola) where national authorities would be weak and major revenue leakage possible.

Must Global Taxes be Universal?

In light of strong opposition from the United States and to a considerable extent from Britain as well, global taxes will not at first include all nations. Global taxes would function better if levied universally, though, minimizing avoidance and the "free rider" effect.

Non-participant countries may offer tax-avoidance opportunities. Some experts fear that currency traders would migrate to tax-free locations, including offshore centers, to escape the CTT, or that energy buyers would favor markets in tax-free jurisdictions to avoid the carbon tax. Well-designed tax plans can minimize these problems, though, as experts like Schmidt have shown.

There remains the "free rider" effect, that offers tax-related benefits to the non-participant nation at no cost to its citizens. US citizens, for example, would benefit from reduced global warming created by a global carbon tax regime that the U.S. government did not join and that its citizens did not pay for. Still, U.S. buyers of French wines, German automobiles, and British raincoats would all indirectly pay for the taxes. In a globalizing world, no rider can be absolutely "free."

Global taxes must include as many nations as possible. But experts believe that avoidance and free-rider problems would not wreck the tax regime or even greatly disadvantage the participants. In the case of a global but non-universal carbon tax, participant nations would promote their own economic efficiency, convert towards a renewable energy system, improve their land-use and build new industries of the future like solar cells and hydrogen-powered motors. They would act with a future prospect, in contrast to non-participant nations that would mortgage their future in favor of a few years' profligate energy consumption.

Within international law, very few treaties, conventions and bodies embrace all nations. The International Criminal Court and the Kyoto Protocol are important initiatives that will go forward without the participation of the United States and some other significant parties. Global taxes are likely to follow a

similar path. Advocates now recognize this and develop proposals based on non-universal options. On the carbon tax, a recent Swedish study comments optimistically: "the absence of universal agreement would not make the operations impossible or necessarily unacceptable for those otherwise willing to take part."

Non-participant states may eventually join the tax regimes, for a variety of reasons. They may come to see advantages or shift when pressured by their own citizens. Tax regimes may be set up with mild penalties for non-participants. Non-participants may also be lured into joining because they would want to take part in the goal-setting, oversight and benefits of the resulting global funds.

Tied Revenues vs. a Common Pool

Global tax proposals often suggest uses for the resulting revenues, like an environmental protection fund, debt reduction, or a universal education fund. Some proposals go further and propose that revenues be tied (or earmarked) for a specific purpose. Such tied revenues may build public support for a tax proposal and reassure skeptics that revenues will not eventually be spent on unanticipated and unwanted projects, like colonization of Mars or global military forces.

A "common pool" approach to revenues, which many tax experts favor, separates taxes (as a source of revenue) from spending programs. At the national level this has many advantages and avoids tax-driven projects like the gasoline taxes in the United States that automatically build more highways. But at the global level, in the absence of a common pool budget and parliamentary institutions, the advantages of tied revenues may outweigh the disadvantages. Tax pro-

posals should thus consider a package of spending projects that can inspire the public and guarantee financial support for positive policy goals.

Policy Aspects

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Multiple Purposes

As we have seen, global taxes (like national taxes) may have three simultaneous purposes: (1) revenue-raising, (2) policy steering, and (3) income redistribution. Global tax proposals must consider the relations and tradeoffs between these purposes. Clearly, no tax can meet all three purposes equally well, but proponents must carefully develop projections, to discover the interplay of factors and the best policy and political results.

The carbon tax best illustrates this issue. Conflict may arise between those who favor maximum revenue (for whom a low tax rate is optimal) and those who favor sharp reductions in carbon emissions (who favor high tax rates). Those concerned most with income redistribution may favor low rates and strong redistributive spending programs.

Advocates must understand very well the tradeoffs and likely distribution of benefits. With different constituencies favoring or opposing different aspects of the taxes, they offer an especially complex political landscape. The tax on currency transactions appears to satisfy all three criteria the best, which is why it attracts the broadest-based support. Currency transaction turnover is so large that the a tax might diminish trading by as much as 75% while still raising an enormous amount of revenue and creating substantial opportunities for global redistribution.

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¹¹¹ Sagasti (2001), 44.

Re-distribution

The global economic system is highly unequal and very disadvantageous to poor countries and poor people. More than half the world's population lives in serious poverty and income disparities have been steadily growing wider. In such a setting, global taxes would be inconscionable if they did not result in strongly progressive redistribution.

National tax systems in rich countries tend to re-distribute income and the European Union re-distributes from richer to poorer regions. But the international system, though it has a much steeper level of inequality, has presently no system of re-distribution other than Official Development Assistance, which amounts to only about 0.1% of global GDP.

Fortunately, most proposed global taxes appear to be progressively re-distributive, especially when policy steering and revenue spending are considered. The taxes themselves levy commodities or services that mainly the richer inhabitants of the globe consume. This is especially true of the currency transaction tax. It is true for taxes on air fuels and taxes on air tickets. Taxes on carbon-based energy would also mainly impact the energy hungry consumers of the global North, with their automobiles, air conditioners and home appliances. Taxes of the airwaves would raise the cost of cellphone users, while bit-taxes would raise the costs of email. All these items of consumption are rare among the world's poorest billions.

The most strongly redistributive global tax would probably be a tax on consumption, assuming that taxes on income or wealth would be too difficult to administer. This could be a global sales or VAT tax. It

would recognize that consumption is a privilege that uses global resources, some small part of which should be returned to global purposes, including development and redistribution. A few advocates have proposed consumption taxes on luxury goods while others prefer general consumption taxes. Global consumption taxes might not find sufficient political support at present, but they are a promising idea that may find support in the future.

For progressive redistribution to succeed most completely, an international agreement must include firm obligations for contributions from participant tax authorities to a global fund. At first this may be only a modest percentage of the total revenue, but over time it must rise to half or more. Spending of this global fund must favor the poorest citizens. Funds should thus be targeted at poverty eradication, including health care, housing, provision of clean water and waste treatment, education for all, and similar programs. To make sure that the funds would not disappear into corruption and waste, oversight authorities at the national, regional and global levels must keep careful watch.

Revenue Neutrality?

Some advocates of new taxes favor an approach that is "revenue neutral" – that is, the new levies should be adopted while at the same time diminishing other taxes, so that no new net revenues are raised. This position treats taxes as inherently unpopular and likely to weaken the vigor of private markets. Plans for environmental taxes in the European Union are proceeding on this basis, which proposes to make natural resources more costly and labor cheaper by shifting taxes between the two.

Global taxes could theoretically be revenue neutral, by harmonizing national tax *reductions* that would offset the new globally-negotiated levies. Harmonization, in short, can work both ways. But national tax authorities will presumably not be willing to give up national revenue for global projects. For this reason, global taxes are unlikely to be revenue neutral.

To succeed, global taxes must address new needs and fund global public purposes. This means that they will reduce private incomes, especially in rich countries, if only very slightly. The affected public must see a strong benefit, for which personal income will be traded for global public well being.

Complementing Existing Fund Sources

Like the proponents of revenue neutrality, some experts propose that global taxes should substitute for existing national funding for Official Development Assistance or for assessments and contributions to international organizations like the UN. This swap might leave resources for these purposes at the same level or even less than before. Such a scheme would offer savings for national budgets, but it would scarcely generate major new global resources. As such, it would be contrary to the spirit of the new tax idea. Funds generated by global taxes should be available to finance new programs, not substitute for monies that would be withdrawn back into national treasuries.

Complementary funds would enable total global public resources to grow quite rapidly in an early phase of the tax regime. Eventually, of course, if the flow of global taxes reached a high level, the old system of contributions and assessments might be phased out over a period of years. But initially, the old and the new must exist side-by-side.

Official Development Assistance (ODA) in 2000, according to OECD data, amounted to \$53.7 billion, while in that same year, the UN Regular Budget was about \$1.1 billion. The total UN system budget for 1997, the last year for which complete data is available, was \$10.3 billion. The sums required to provide environmental protection, schooling for all, safe drinking water and other vital goals amount to further tens of billions of dollars per year. The potential revenue of some tax proposals, though quite substantial, is certainly not enough in an early phase to meet these many needs. We will need complementary national fund contributions if the full promise of the taxes is to be realized.

Global Public Goods

The concept of "global public goods," which has recently attracted increasing attention, 112 offers a theoretical support for global taxes. It provides a clear framework for understanding that markets do not and cannot provide many important things we need. Private markets may be efficient producers of toothpaste and washing machines. But markets cannot produce public goods like fire departments, lighthouses, public parks, and clean air. These public goods can only be produced and enjoyed collectively.

Citizens with money to spend can buy market commodities, but they may prefer to have public goods, which are not on offer in the store. Public goods can only be created through a political process, assembling the needs and wishes of thousands, millions or even billions of people. Public goods emphasize public, democratic citizen action. The idea of *global* public goods shifts the concept to the global level, implying an even larger field of political action, collective thinking and solidarity. Global public goods

 $^{^{112}}$ Mendez (1995b), Kaul $\it et~al$ (1999), Sagasti (2001), Haugen (2001).

would include a sustainable global environment, a far better global public health system, and better maintenance of world peace. In a sense, it is a transformational line of thought. To pay for these "goods," citizens must agree to tax themselves and they must create responsive political institutions that will fulfill their collective aspiration.

Living with Uncertainty in Tax Planning

Global taxes attempt to change the world for the better. Advocates must approach such an ambitious project with a mixture of enthusiasm and humility, because there are very many unknowns. Even the most careful and responsible planning can have unintended consequences. Gunnar Myrdal, the Swedish Nobel laureate warned that "Taxation is a most flexible and effective but also a dangerous instrument of social reform. One has to know precisely what one is doing lest the results diverge greatly from one's intentions."

Inaction in the face of global problems may have greater and more serious consequences, such as global climate change. But a tax regime that will impact six billion people, across some two hundred nations, even if very carefully planned, is bound to have unanticipated and partially negative results. For this reason, it would be wise to begin global taxes at a low rate and to phase them in gradually. It also would be advisable to create feedback mechanisms that would swiftly introduce modifications and provide resources to help vulnerable people who may be harmed. Such a flexible plan will be stronger, more responsible and more likely to inspire public confidence.

Strategic Issues

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Starting Small?

Taxes producing large revenue are likely to stir up major opposition from those who will lose income, such as financial institutions opposing CTTs or oil companies opposing carbon taxes. These institutions are extremely influential and they have a clear vision of how their interests would be damaged. Global tax schemes that take aim at such huge concentrations of power must be prepared for difficult political struggles and a high possibility of failure.

By contrast, a first global tax might be a small measure that sets important precedents while evoking few powerful opponents because it produces only small amounts of revenue and has only very modest policy steering and re-distributional effects. CTTs and carbon taxes set at a very low level might meet this requirement. International excise taxes would be an interesting, lowtarget alternative - for example, a tax on A global tobacco tax tobacco products. would complement the anti-tobacco campaign of the World Health Organization, advocates could promote it as a health tax and it would add a small additional increment to nearly-universal national taxes already imposed on these products.

The first global tax established was the tax on seabed mining in the form of royalties payable to the International "Seabed Authority. Doubtless it was adopted as part of the Law of the Sea because at the time there was no seabed mining to tax! Nor has there been any since, resulting in zero revenue. With this in mind, global tax advocates might consider a next step that aims above zero, but not in the stratosphere. When nations and citizens find they are comfortable with this tax, steps towards more ambitious or

¹¹³ Mendez (1992), 213-14.

high-revenue taxes may find a smoother course to adoption.

On the other hand, broad public campaigns depend for their success on large visions and bold approaches. The two most prominent proposals are clearly not modest ones, and still they appear to have the best chance for success. So starting big may be better than starting small. But even the big proposals may succeed best if they begin with a small rate and phase in over several years, beginning modestly (though boldly) the great transition.

A planned phase-in, beginning with a low rate, can help to avoid errors and ease transitions. This is particularly important with the carbon tax, which will cause large shifts in energy investments, research programs, transportation systems and the built environment – shifts that can only occur over many years. A phase-in with increments known far in advance can avoid backlash, promote effective forward planning and smooth the whole transition process.

An Adjustment Fund

Though global taxes will have many very positive results, they may also have negative effects for certain groups of people, some of whom may be poor and vulnerable. For this reason, advocates should propose an adjustment fund to help out those most vulnerable and least able to adapt.

Let us imagine the case of a small farmer who uses a simple tractor, powered by a gasoline or diesel engine. A carbon tax might increase costs so much that the farmer's crop sales could no longer cover expenses, forcing the family into poverty. An adjustment fund might offer loans for new and more fuel-efficient tractors, sustainable energy motors and other farm pur-

poses such as solar-panels for heating the barn. An adjustment fund might also help poor people insulate their homes and develop alternative cooking devices powered by solar energy.

The adjustment fund would combine money with expertise to help millions of people (and governments, too) cope with the changing energy markets and their impact on human life. An adjustment fund would also serve as a gesture of good faith towards the hundreds of millions (or even billions) of poor people for whom even small change carries very serious economic risk.

Assembling Political Blocs and Advocacy Campaigns

As global taxes come closer to political reality, advocates must begin to think about assembling political blocs or coalitions to press forward towards enactment. We already can see the outlines of such coalitions.

In the case of the carbon tax, the coalition includes environmental groups, small island states and other coastal nations threatened by rising ocean levels, advocates of the UN and global institutions, intellectuals, sustainable energy industries, and insurance companies. This forms already a very substantial alliance. The CTT has managed to attract broad publics with a concern about globalization and the ills of the global financial system. The CTT also appeals to trade unions, countries negatively affected by currency speculation, economists, UN advocates, and others.

Tied revenues provide a means to enlarge coalitions by offering benefits to targeted constituencies. Suppose that a carbon tax revenue would be earmarked for sustainable development purposes, including clean water and energy access for all. Beneficiaries might be very numerous and they might provide key elements of a broadening support bloc to press for the tax adoption.

The time has come to build unstoppable worldwide campaigns, because coordinated international public pressure yields results. In the case of the CTT, a campaign is already under way. Many national and regional NGO groups have coordinated their efforts globally since March 1999 and the positive results are clearly visible. The carbon tax now needs a campaign of its own. Both must strategize very broadly. Coalition building implies careful thought about logical allies on a world scale. The campaign for an International Criminal Court provides interesting precedents of wide NGO coalitions and nation-specific campaigns.

As the process moves forward, we will see the earliest steps in a new global political process. Global citizenship will at last take form, not as a dream or ideal, but as a real process involving common political tasks across national borders, to create a common future.

5. Conclusion

In a globalizing world, the United Nations and other international agencies must find substantial new funding to address emerging crises and promote global public purposes. Taxes can raise tens or even hundreds of billions of dollars annually for projects to protect the environment, measures for public health, programs to overcome poverty, and initiatives to prevent wars and civil conflicts.

Global taxes can have powerful policy steering effects. A carbon tax can reduce carbon dioxide emissions, slowing the dangerous effects of global warming. A currency transaction tax can throw "sand in the gears" of the currency trading system, reducing volatility and speculation that can harm millions of people. Other taxes can diminish pollution of the oceans or reduce the arms trade.

Global taxes can also help overcome the world's growing inequality by systematically redistributing revenue, helping the world's poorest people escape from poverty. Such redistribution would follow the pattern of income redistribution that national tax systems introduced nearly a century ago.

A tax amounting to just 1% of global GDP could address many of the most serious international problems and create a much more healthy, humane world for succeeding generations, while placing only a modest burden on consumers in rich countries.

As recently as the mid-1990's, global taxes seemed a distant hope – bedeviled by technical concerns, opposed by powerful interests and blocked by an intractable United States government. But today the political balance has shifted. NGOs have built a worldwide mass movement and put

global taxes on the political agenda. Politicians and governments in Europe and in major countries of the global South such as Brazil and India now back a currency transaction tax. Implementation seems a lively possibility.

Much remains to be solved, though, before governments agree to an effective international tax program. Advocates must consider how best to phase in the taxes, how to assure broad re-distribution, how to promote democratic accountability and oversight of the funds, and how to balance the demands of state sovereignty and global action. Difficult as these challenges may seem, they can and will be overcome.

Though the global tax movement has made great gains, its future is still not assured. We need bold leadership and imaginative strategy to bring global taxes – and the better world they promise – finally to reality.

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Center for Economic and Policy Research http://www.cepr.net/globalization/speculatio n/index.htm

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