



Discussion Paper

STC

THE SOLIDARITY TOBACCO CONTRIBUTION

A new international health-financing concept prepared by the World Health Organization

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SECTION 1 - INTRODUCTION

A new approach to generate more than US\$ 5.5 billion per year for international health

The Solidarity Tobacco Contribution (STC) is a novel approach developed by the World Health Organization (WHO)¹ in response to the recommendation made by the High-Level Taskforce on Innovative Financing for Health Systems² to "expand the mandatory solidarity levy on airline tickets and explore the technical viability of other solidarity levies on tobacco and currency transactions." The Taskforce report noted that traditional official development assistance (ODA) is not sufficient for the world community to reach international health-development goals. The emergence of new health challenges exacerbates the required-funding gap.

This paper assesses the technical viability of the STC and concludes that, based on a set of Member State decisions, it could generate significant additional international health funding for developing countries in excess of US\$ 5.5 billion per year.

What is the STC and how does it work?

The STC concept relies on participating countries' decisions to add a small "microlevy" as part of their larger national tobacco tax increases and thus relies on their existing tobacco tax systems. Member States could decide whether to **voluntarily** contribute funds for international purposes.

As countries decide on the use of their tobacco-tax-related revenues, they allocate such revenues either for general revenue purposes or, as 28 countries have done, use a proportion for health-related purposes. To advance the goal of reducing tobacco consumption, WHO has recommended that Member States increase their national excise taxes on tobacco products gradually until they represent at least 70 percent of the retail price — an action that would require many low- and middle-income countries to increase their tobacco excise taxes significantly. High-income countries tend to be closer to this tax yardstick but could still increase tobacco taxes further to generate more revenue and reduce tobacco consumption.³

Voluntary contributions from the STC are not meant to replace tobacco tax policies that are intended to curb tobacco use or to artificially limit the tax increases required

¹ The WHO Noncommunicable Diseases and Mental Health Cluster, the WHO Department for the Tobacco Free Initiative and the WHO Programme for Partnerships prepared the STC Concept.

² The High-Level Taskforce on Innovative International Financing for Health Systems completed its work in 2009 and was chaired by United Kingdom Prime Minister Gordon Brown and World Bank President Robert Zoellick (https://www.internationalhealthpartnership.net/en/taskforce/about). See pages 14–15 of the final report.

³WHO report on the global tobacco epidemic, Geneva, World Health Organization, 011. http://www.who.int/tobacco/global_report/2011/en/index.html.

nationally. The STC would therefore not replace broader government taxes on tobacco products intended to curb tobacco use but would be *in addition* to them.

For decades, a key principle underlying the provision of international aid for health has been solidarity, whereby richer countries assist developing countries. The spread of some diseases across countries also requires collective action based on solidarity to address global public health needs. To further support global solidarity and strengthen health-development investments, Member States could decide to contribute a part of their tobacco tax revenues for international purposes. WHO recommends that in addition to the Taskforce recommendations, given the nature of tobacco taxes and the significant public health burden resulting from tobacco use, such a contribution for international use be dedicated for health. It could also be useful to involve the views of countries that would potentially receive funds based on their health priorities.

WHO further explored what different levels of revenue increments derived from the addition of a small "micro-levy" as part of larger national tobacco tax increases could yield to generate revenue for international purposes. This approach is further described below. Should a group of Member States decide to voluntarily contribute funds for international use, they would then need to decide upon the specific purposes for which the funds will be used and, based on this decision, what mechanism(s) should be used to disburse them. An STC used for international health purposes is not intended to substitute for countries' ODA commitments. Existing aid mechanisms rely on pooling contributions to maximize efficiency of fund disbursement against agreed priorities and to countries – principles supported by the Paris Declaration/Accra Action Agenda, which calls for greater harmonization and alignment of aid instruments.

In determining which channels to use, Member States and stakeholders will need to decide upon whether to use existing mechanisms that can accommodate the STC contributors' preferences for use of the funds and disbursement modalities or to create new mechanisms tailored to the STC specifically. The decision points are discussed in Section 2 below.

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SECTION 2 - THE STC RATIONALE

Health is underfunded in low- and middle-income countries, and it is recognized globally that more needs to be done in this area, particularly to help achieve the health-related Millennium Development Goals (MDGs): Goal 4 (children's health), Goal 5 (women's health) and Goal 6 (halt AIDS, tuberculosis and other infectious diseases).

The Taskforce on Innovative International Financing for Health Systems, which operated from September 2008 to September 2009 and was co-chaired by United Kingdom Prime Minister Gordon Brown and World Bank President Robert Zoellick, focused on finding innovative financing mechanisms to strengthen health systems in the poorest countries in the world.

The Taskforce explored different options for innovative financing to help achieve the health-related MDGs. One recommendation was to "expand the mandatory solidarity levy on airline tickets and explore the technical viability of other solidarity levies on tobacco and currency transactions." The Taskforce recognized that such levies "can generate clear benefits in terms of resource flows, low transaction costs and sustainability" and that solidarity levies can be implemented by a country but coordinated internationally. The Taskforce used the example of the levy on airline tickets as a precedent for this approach.

WHO followed up on the implementation of the Taskforce's recommendation by developing an assessment of the potential use, implementation and governance of a voluntary contribution for international health - the STC - derived from a small incremental amount added to broader national tobacco tax increases for tobacco products. Following the Taskforce report, the goal of predictable and sustainable health financing, such as an STC, is to reduce inequities in access to health care in low- and middle-income countries.

Article 6, *Price and tax measures to reduce the demand for tobacco*, of the WHO Framework Convention on Tobacco Control (FCTC) states that "that price and tax measures are an effective and important means of reducing tobacco consumption" and that Parties should "adopt or maintain, as appropriate, measures which may include...tax policies and, where appropriate, price policies, on tobacco products so as to contribute to the health objectives aimed at reducing tobacco consumption. (Article 6 of the WHO FCTC does not address revenue generation.) Raising national tobacco taxes is also supported by extensive academic literature as well as in health and development recommendations from WHO, the World Bank and ECOSOC.

Article 26 of the WHO FCTC expressly relates to the generation of funds "for the development and strengthening of multisectoral comprehensive tobacco control programmes" of developing countries. Furthermore, a study developed by the WHO Secretariat in accordance with Article 26.5(c) of the treaty and submitted to the Conference of the Parties (COP) to the WHO FCTC in 2006 indicated that tobacco taxation is a sustainable, stable means to generate funds for tobacco control and other public health initiatives. The COP gave "full support to the prioritization of resource mobilization for tobacco control at the national and international levels".⁴

Tobacco excise taxes are currently implemented in 161 out of 182 Member States⁵ and thus represent an existing base to which additional incremental increases can be added. The benefit is twofold: it reduces consumption of tobacco and it raises revenue.

Moreover, should Member States decide to add a "micro-levy" to support the STC, it would be complementary to broader government taxes on tobacco products intended to curb tobacco use (by making it more expensive), rather than replacing them. Those taxes are consistent with the WHO recommendation on tobacco taxation to increase excise taxes so that they represent 70 percent of the retail price of tobacco products.

Governments are thus encouraged to take complementary actions to achieve two objectives:

- Objective 1: Implement WHO recommendations concerning increasing taxes on tobacco products to reduce national tobacco consumption and encourage the use of revenue to support health nationally. These are the key objectives of the WHO FCTC.
- Objective 2: Consider the STC concept and decide to dedicate a small and voluntary increment within Objective 1 for international health financing purposes.

Concerning international assistance for health, for decades, a key principle underlying provision of such assistance has been solidarity, whereby richer countries assist developing countries. The spread of some diseases across countries also requires collective action based on solidarity to address global public health needs. To further support global solidarity and strengthen health-development investments, Member States could decide to contribute a part of their tobacco tax revenues for international purposes.

⁴ COP decision FCTC/COP1(13), available in full text in document COP1/8 at http://apps.who.int/gb/fctc/PDF/cop1/FCTC COP1 DIV8-en.pdf and A/FCTC/COP1/4, Review of existing and potential sources and mechanisms of assistance, page 36.

⁵ Data from the WHO Global Tobacco Control Report 2011.

The STC further supports the goals of the 2010 World Health Report on Health Financing⁶ to create opportunities for countries to raise additional funds for health and to increase the efficiency of those funds, i.e., "more money for health as well as more health for the money". Further, the World Health Report indicated that global solidarity levies, given their low transactions costs, can be implemented very quickly if the political will exists to do so. In addition, the 2010 MDG Summit and the 2011 G-20 are reviewing new innovative financing mechanisms.

Lessons for the STC from existing innovative financing systems:

Innovative financing, particularly for health, has today become a necessity, not an option. Within a short time span (5 to 10 years), innovative financing mechanisms have already achieved significant results and health outcomes. Examples include the Airline Solidarity Levy (UNITAID), the IFFIm and its support for the Global Alliance for Vaccines and Immunizations (GAVI) and several funding sources for the Global Fund to Fight AIDS, TB and Malaria (e.g. Product Red), and the Advance Market Commitment.

The STC builds upon and learns from existing innovative financing mechanisms, and it should be consistent with the principles of innovative financing⁷, i.e., it should be:

- Sustainable, as it will be based on legal instruments and use of existing tax collection systems, similar to the Air Solidarity Levy
- Predictable (particularly at a global level) over time, hence allowing for balanced investment decisions
- Additional to existing ODA, not a substitute
- Transparent concerning allocation decisions and in management (see Section 2 for various options)
- Based on voluntary commitments by Member States to implement
- o Based on **country ownership** and national priorities concerning health needs.

Moreover, the STC concept is supported by the broader movement of innovative financing for health:

- Innovative financing is now firmly recognized as an important way, together with non-state sources of financing, to increase financing for development and for health in particular.
- o Innovative financing is a key component for the French G-8/G-20 Presidencies (2011).
- o The MDG Summit Outcome Document broadly supports a number of health sector actions (including tobacco control) to achieve the MDGs, as well as

⁶ World Health Report 2010, *Health systems financing: The path to universal coverage*, World Health Organization, 2010. http://www.who.int/whr/2010/en/index.html.

⁷ These are generally referenced in the Leading Group on Innovative Financing for Development, an informal group of more than 65 countries, global health initiatives, multilateral organizations, NGOs and foundations that have convened since 2006 to share best practices and promote innovative financing.

- innovative financing for health. The MDG Summit Outcome Document identified a strong target focus for the next five years and opportunities for multisector work.
- Innovative financing stakeholders have gained experience with these modalities and are committed to contributing to their success.

The evolution of the STC is similar to that of other innovative financing initiatives (e.g., the Air Solidarity Levy model, the Global Fund at its inception, national examples). Like these other novel mechanisms, and given today's challenging times for international health financing, the STC will require high-level political support from a group of interested pathfinding Member States that are prepared to launch a pilot. ⁸

Key Decision Points for Member States/Stakeholders and Implications

Considering the above rationale, Member States that have decided to voluntarily contribute to an STC for international purposes will need to make a series of decisions, as noted below.

A first decision is whether the Member State will *voluntarily* contribute a proportion of its tobacco tax revenue for international health purposes. Member States and stakeholders will then need to consider a number of key questions and decisions, summarized in Table 1 below.

- 1. The specific purpose and scope for an STC contribution. Among the specific-purpose questions is whether tobacco control activities will be supported. A consideration for Member States is whether potential recipients and others will be involved in decisions on potential uses.
- 2. Whether to pool funds internationally. Apart from traditional ODA channels, some form of pooled fund is often used for international health initiatives. This allows for greater efficiency in fund management, greater predictability and sustainability, and it can minimize risks of substitution for other international aid and ODA commitments.
- 3. Whether to use an existing fund management/disbursement mechanism or create a new one. This decision involves whether to use existing mechanisms that can accommodate the STC contributors' preferences for use of the funds and disbursement modalities or to create a new mechanism tailored to the STC. If an existing mechanism cannot accommodate the STC contributors' needs, they could decide to create a new one. Balancing time, costs and fit for purpose considerations with minimizing transaction costs to countries (both contributing and recipient) needs to be considered. Additional analysis is presented below.

⁸ Examples include the Air Solidarity Levy, the International Finance Facility for Immunization, and the Advance Market Commitment for a Pneumococcal Vaccine.

4. Whether and what type of governance is required. If governance is required, best practice suggests means to maximize streamlined decision-making while minimizing transaction costs related to governance. Where appropriate, using existing institutions/mechanisms may alleviate this issue — although there may be questions as to whether an existing mechanism's governance can accommodate new funders and mandates.

With a degree of clarity on purpose and channel, Member States can consider more specific issues:

- 5. Eligibility of country applicants. Criteria must be determined for funding categories and for judging applicants. Participating stakeholders will need to determine which types of countries could be eligible for funds made available internationally notably low- and middle-income countries health conditions, etc. The level of national decision-making and use of national plans in guiding investment decisions must be assessed, along with types of relationships with other implementing agencies.
- 6. Dedicated staff within the implementing mechanism. Managing the STC would require dedicated staff to administer calls for proposals, prepare the governance, monitor/evaluate funded projects and maintain effective communication with stakeholders/resource mobilization. For comparison, the Stop TB Global Drug Facility team is composed of 27 staff, UNITAID has 48 staff, and GFATM has the largest staff, 800. Staff and operating costs would be funded by the respective facility.
- 7. Securing STC-related normative and technical support work. As is the case for GAVI and the GFATM, countries require technical support in relation to funds being available. Given the nature of health-related work, WHO plays a unique role. The implementing mechanism for the STC should adopt a policy of using WHO norms and guidance. How WHO and other technical partners would be funded to deliver technical support remains to be discussed.

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Tobacco tax revenue(from existing or higher excise rates) Use for national Use for international purposes purposes General budget (not Earmarked to health General health Targeted health **Targeted spending** explicitly allocated to (including targeted expenditure spending for MDGs for tobacco control any budget line) for tobacco control) **Existing** New mechanism mechanism to to channel funds channel funds

Table 1: Key Decision Points for Countries Concerning the STC

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SECTION 3 - GENERATING STC FUNDS

Revenue Generation and Economic Assessment of the STC

Contextually, the STC is part of broader national tobacco tax increases, which provide the benefit of reducing tobacco consumption. Tobacco taxation is the most effective and cost-effective policy for reducing consumption, and it should be considered as a priority policy to implement. As noted above, Member States are strongly encouraged to work towards gradually reaching the WHO recommendation on tobacco taxation, where excise taxes contribute 70 percent of the retail price of tobacco products.

Key statement:

WHO assessed the potential revenue that could be generated from an additional "micro-levy" as part of broader national excise taxes per pack of cigarettes among the 43 "G-20+" countries: the 19 G-20 countries, 22 member states of the European Union that are not members of the G-20 (data for Luxembourg were not available), as well as Chile and Norway. The results were that an STC could generate between US\$ 5.5 billion and US\$ 16.0 billion in extra excise tax revenues annually, depending on the chosen scenario.

WHO assessed three possible scenarios for their revenue-generation potential, taking into account levels of additional tax, income level of the country and rates at which a portion of the tax is externalized for international health use (see **Annex 1** – **STC Economic Feasibility**).

For illustrative purposes, WHO estimates that if all G-20+ Countries were to devote an additional small amount to existing or new tobacco taxation (US\$ 0.05 for high-income countries, US\$ 0.03 for upper middle-income countries and US\$ 0.01 for lower-middle-income countries) for each cigarette pack sold ⁹, **US\$ 5.47 billion** could be generated each year. **Annex 1 specifically analyzes the ramifications of this lower level of STC tax increase.** In this scenario, the cost impact on cigarette producers and consumers would be minimal (including on the poor) and would not create incentives for illicit trade activities. Nevertheless, any increase in retail prices makes tobacco products less affordable and less likely to be consumed, particularly among the young and the poor populations.

⁹ WHO estimates here that a specific excise tax amount of US\$0.05, \$0.03 or US\$ 0.01 per pack is introduced on top of the existing tobacco excise tax rate applicable in the country. This does not necessarily imply an increase of the price or the tax burden by the same amount. For example, in countries where an ad valorem tax is already imposed, the introduction of this specific excise tax could have a multiplier effect on the tax burden and would increase it and the price by more than US\$ 0.05, US\$ 0.03 or US\$ 0.01 per pack. This would also mean an increase in tax revenues greater than the simple attribution of the STC amounts. However, the estimated revenue of US\$ 5.47 billion is the amount generated by the direct attribution of the STC fund to global health.

WHO assessed two additional scenarios to determine how much a higher-level STC micro-contribution could yield in revenue. If twice the amount were to be devoted, i.e., US\$ 0.10 for high-income countries, \$US 0.06 for upper-middle-income countries and \$US 0.02 for lower-middle-income countries per pack of cigarettes sold, US\$ 10.8 billion could be generated by the STC each year. And if rates were further increased by 50%, i.e., US\$ 0.15 for high-income countries, US\$ 0.09 for upper-middle-income countries and US\$ 0.03 for lower-middle-income countries per pack of cigarettes sold, US\$ 16 billion could be generated by the STC each year.

Analysis of an STC increase of US\$ 0.05/US\$ 0.03/US\$ 0.01 per pack of cigarettes

The model, as presented in Annex 1, accounts for effects of STC-induced tax and price increases on consumption reduction, effects of price elasticity and net possible revenues.

The STC revenue impact model in Annex 1 was estimated assuming that a specific "micro-levy" of US\$ 0.05 (or US\$ 0.03 or US\$ 0.01) was added to existing taxes on a pack of the most sold brand of cigarettes in the country. As explained in footnote 9 the introduction of the "micro-levy" could lead to an increase in the tax burden and price greater than that introduced by the STC.

Three different rates of STC were considered (refer to Annex 1 for the full scope of analysis):

High-income (HI) G-20+ ¹⁰: the dedication of an additional US\$ 0.05 STC per pack of cigarettes could generate US\$ 3.1 billion each year.

Upper-middle-income (UMI) G-20+ ¹¹: the dedication of an additional US\$ 0.03 STC per pack of cigarettes would generate about US\$ 1.2 billion of additional excise revenues.

Lower-middle-income (LMI) G-20+ ¹²: the dedication of an additional US\$ 0.01 STC per pack of cigarettes would generate about US\$ 1.2 billion of additional excise revenues.

Depending on the rate at which new countries would join the STC, future proceeds could actually marginally decrease if the desired effect of tobacco control materialized, with a decrease in smokers and therefore in proceeds.

¹⁰ High-income G-20+: Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Malta, Netherlands, Norway, Portugal, Saudi Arabia, Republic of Korea, Slovakia, Slovenia, Spain, Sweden, United Kingdom and United States.

¹¹ Upper-middle-income G-20+: Argentina, Brazil, Bulgaria, Chile, Latvia, Lithuania, Mexico, Poland, Romania, Russia, South Africa and Turkey.

¹² Lower-middle-income G-20+: China, India and Indonesia

Direct health and economic impacts of the STC

WHO explored the health impact and economic feasibility of implementing the STC surcharge per pack of cigarettes by examining its impact on retail prices, affordability, resulting consumption levels and associated revenues. The WHO findings show that:

- Based on 2009 smoking prevalence rates, 369 million adult cigarette smokers were living in the G-20+ countries. In the future, 95.5 million youth out of 694 million youth below 15 years of age in the G-20+ countries will become smokers.
- It is predicted that 148 million adult smokers and 38 million youth smokers will die prematurely from smoking-related illness in the G-20+ countries.
- A solidarity contribution of US\$ 0.05/US\$ 0.03/US\$ 0.01 per pack in high-income, upper-middle- and lower-middle-income G-20+ countries, respectively, will lead to a small increase in cigarette prices (on average, 3.3%). In most countries, this price increase will be lower than the estimated GDP increase and will therefore not affect affordability or add a financial burden on smokers.
- O However, even this small increase will have some life-saving effect. An estimated 223,000 quitting adults and 149,000 young people who will never start smoking will be saved due to this policy¹³ in the G-20+ countries.
- The price increase will not be high enough to generate substantial smuggling. In any case, the generated additional revenues would outweigh the estimated costs of a potential increase in smuggling.

STC pilot scenarios

Potential initial revenue share would be determined by those countries participating, as it is assumed that not all will share the full 100% of STC proceeds for global purposes. For illustrative purposes, assuming that a set of nine pathfinding countries ¹⁴ are interested in an international mechanism and decide to allocate some or all of their proceeds of their increase in tobacco taxes to it, **US\$ 1.8 billion could be generated each year as early as the end of 2012.** ¹⁵ Even if these countries were to devote half of this amount initially, it would produce nearly US\$ 1 billion for international health-financing purposes.

Appropriateness of the STC for innovative financing

In addition to public health goals, the STC is an innovative financing mechanism. The STC fits the four criteria for assessing innovative financing options presented in the

¹³ This is the number of lives saved as a result of the tax increase; it is a one-time change based on current prevalence.

¹⁴ For instance and for reference purposes only: France, Brazil, Norway, Japan, United-Kingdom, Chile, Spain, Australia and Russia.

¹⁵ Even as a pilot, the STC would generate more initial start-up revenue than any innovative financing mechanism for development launched and implemented to date.

2010 report of the Committee of Experts to the Taskforce on International Transactions and Development¹⁶:

- Sufficiency. First and foremost, innovative financing options must be capable of generating annual revenues on a scale sufficient to make a meaningful contribution that achieves visible impacts.
- Market impact. Second, any mechanism that is likely to meet the revenueraising-sufficiency requirements can be expected to create minimal incentives for avoidance. Consequently, market impact should be minimized.
- Feasibility. Third, the mechanisms must be both technically and legally feasible.
 Infrastructure should exist or be feasible to establish, and it should be operationally and legally possible to raise revenues at a low administrative cost.
- Sustainability and suitability. Fourth, annual revenues must be sustainable, i.e., predictable and stable over time, and suitable, i.e., the source and its mechanisms should be appropriate to the financing of global public goods (or health).

As regards the market impact criterion above, the STC fits the four fundamental criteria for raising money when relying on markets and a larger population base:

- Large base. The funds are collected from a large base: many consumers (more than a billion smokers in the world, almost 370 million adult cigarette smokers in the G-20+ countries) and many transactions (268 billion packs sold in the world in 2009, 226 billion packs in the G-20+ countries).
- Minimal impact. The funds are collected in a way that has minimal impact on the global economy (the price increase after the introduction of a \$US 0.05, \$US 0.03 or \$US 0.01 STC per pack of cigarettes will be not be high enough to make the products substantially more expensive or create financial incentives for increased illicit trade in tobacco products) but, as with any increase, there will be some effects on consumption (see above).
- Easy access. Governments collect the tax. The base for fund-raising can easily be accessed through a small number of gatekeepers (most governments of the G-20+ countries already have a specific excise tax on tobacco).
- North-South based. The base for fund-raising includes more of the global economy's haves than have-nots (the benefit of the STC will go to the developing countries).

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 $^{^{16}\,}http://www.leadinggroup.org/IMG/pdf_Financement_innovants_web_def.pdf$

SECTION 4 - OPTIONS FOR INVESTING AND MANAGING STC FUNDS

Investing STC funds – determining key investment cases in health

As noted in Section 2, the STC is capable of addressing many needs for global public health in low- and middle-income countries, particularly given existing financial gaps and the need to advance the health MDGs and other health priorities. This is subject to Member State decisions.

As with all aid for health, funds will need to be invested wisely and on health programmes that are results-based, respond to identified health sector priorities and have the greatest potential for health outcomes, in order to create the largest demonstrable health impact. Experiences from other global health and innovative financing initiatives, such as GAVI, illustrate the utility of investment cases to catalyze much-needed national responses for health in low- and middle-income countries.¹⁷

Given the nature of an STC and the WHO FCTC, Member States will need to consider whether to invest some of the funds for tobacco control (see Annex 2)¹⁸ and for tobacco-related diseases.

Tobacco use is a major risk factor for the increasing magnitude of noncommunicable diseases (NCDs), including tobacco-related diseases. As NCDs continue to rise worldwide, there is a pressing need for greater global and country responses. Member States will therefore increasingly seek to identify national sources of revenue with which to respond, including tobacco taxes. Low- and middle-income countries, where NCDs represent major unaddressed health challenges, are particularly affected. In addition, tobacco affects many other health conditions, including those addressed by the health-related MDGs (MDGs 4, 5 and 6). WHO has documented the state of worldwide progress on the health-related MDGs as well as the extent of tobacco-related diseases in developing countries¹⁹.

Choosing the appropriate implementing mechanism – options and considerations

Member States will need to determine whether to use an *existing mechanism* to channel funds or to create *a new mechanism*. If the former, Member States will need

 $^{^{17}}$ This approach follows the successful models used by GAVI and the IFFIm, with an emphasis on short-term, high-value investments in the run-up to the MDG deadline of 2015

¹⁸ As the leading world health authority, WHO has developed a set of Member State-endorsed proven and affordable tobacco-related prevention and treatment strategies and guidelines that can serve as the basis of investment cases.

¹⁹ WHA 64/12 and EB report 128/7

to evaluate whether an existing mechanism can accommodate the preferred use for the STC or to change their mandate, and whether the mechanism's governance and disbursement modalities are compatible with the STC contributors' preferences. How potential recipient countries are involved in the decision-making is also open to review. If a new mechanism is to be created, decisions will be required to identify its purpose, implementing agency, governance and methods of work.

Planning for an appropriate governance arrangement (including a possible subsidiary body composed of early-adopter countries) is required to provide oversight concerning the STC. At the outset, care would be required to avoid generating additional transaction costs and delays not conducive to a successful rapid launch and implementation.

Experience has shown that whichever mechanism is chosen, countries require continued dedicated technical support related to the mechanism-specific implementation processes.

Based on its experience in supporting the creation of many health initiatives and partnerships, as well as its experience with innovative health financing mechanisms, WHO has identified a series of key desirable features for any international implementing mechanism (new or existing) for STC funds:

- 1. The ability to **rapidly receive and disburse** large influxes of funds with sound oversight.
- 2. A light **governance**, **management and administrative structure** to facilitate rapid, efficient and flexible use of funds.
- 3. A strong **results-based approach,** with regular audit, monitoring, evaluation and reporting:
 - a. Using existing organizational capacity and mechanisms to ensure maximum efficiency.
 - b. Rapid start-up capacity
- 4. Clear eligibility criteria for use of funds and country eligibility
- The ability to make technical judgments on proposals and possible use of an independent review committee to assess proposals for governing-body review.
 WHO technical guidelines should be used.
- 6. **Expertise in health issues** that the STC will support, as well as the ability to coordinate with technical agencies to ensure **technical support** to countries.
- 7. The ability to **ensure coordination of funding streams** to maximize country alignment and ownership of funding flows.

- 8. A multilateral, pooled mechanism relying on additional, sustainable and predictable sources of revenue. (Advantages of a pooled mechanism include the ability to agree on priority interventions and to efficiently and rapidly distribute funds and monitor results.)
- 9. The ability to channel funds **directly to countries and other stakeholders as appropriate** in a manner that reduces transaction costs and ensures maximum coordination with national health plans.

Review of existing financial mechanisms

A review was conducted of existing health implementation mechanisms that could serve as a vehicle for managing, governing and distributing STC funds through a pooled mechanism. These included mechanisms that rely on innovative financing sources as well as a number of trust funds managed by institutions. Using the criteria above, an analysis of strengths, weaknesses, opportunities and threats (SWOT) of different mechanisms was conducted; the findings are presented in Annex 3.

In addition to creating a new dedicated mechanism/organization for the STC, two types of existing financial mechanisms and related governance models were assessed (a total of eight models):

- 1. Existing mechanisms/organizations (GFATM, GAVI, Millennium Foundation; WHO for a hosted partnership, e.g., UNITAID)
- A fund administered by an intergovernmental or international financing institution (UNDP Multidonor Trust Fund [e.g., MDG Achievement Fund], World Bank)

Although an effort was made to include as many existing health-related financial mechanisms as possible, the assessment does not purport to be comprehensive.

Focusing on using existing mechanisms rather than creating a new one maximizes efficiency by eliminating start-up costs and not adding to an already crowded international health architecture. It also offers the advantages of rapid start-up and potential high buy-in from participating Member States (especially if they are already board members of the institution chosen). Existing mechanisms can also potentially have streamlined disbursement processes for recipient countries and thus can contribute to better harmonization and alignment of assistance as recommended by the Paris Declaration and Accra Agenda for Action.

However, existing mechanisms are purpose-built to serve specific health objectives and therefore present not only strengths but also weaknesses, e.g., focus on only one disease or absence of strong global governance dedicated to contributions. In integrating an STC contribution into an existing mechanism, special attention would therefore be required to manage the inclusion of priorities established by Member

States committed to an STC contribution, as well as those identified by recipient countries, into the mechanism and its established priorities.

Two examples of existing mechanisms highlight some of the issues. One relies on revenues that have characteristics similar to those of the STC, i.e., reliance on solidarity airline levy revenues and national government contributions (e.g. UNITAID, which is hosted by WHO). UNITAID is specifically devoted primarily to supporting purchasing of commodities (and having a market impact) for HIV, tuberculosis and malaria. It has a defined governance structure. Another example would be the trust funds managed by the World Bank that provide fiduciary services to countries, including services for health. These trust funds are designed for specific purposes, and therefore it is necessary to consider whether an existing one can accommodate the STC defined use or it is necessary to create a new one. Another similar model is multi-donor trust funds managed by UNDP.

These examples have built-in proposal review systems, can rapidly disburse funds (global procurement models), rely on partners to implement and have an internal monitoring and evaluation system. Funds administered by an intergovernmental/international finance institution also have broad-based networks, institutional systems and country offices, as well as past experience in managing funds for global use.

Pilot and Immediate Implementation

Once Member States and other stakeholders declare an intent to proceed, they will need to further delineate all ensuing national legal requirements and means to contribute. Among the considerations is the use of a pilot to inform broader decisions. With required time and critical use/management questions answered, ideally, piloting strategies could be introduced sometime in 2012, with first proceeds flowing at the end of 2012 or early 2013 at the earliest (or sooner, if a pledge/cash-flow guarantee can be activated).

This timing means that the STC could be used in furthering the implementation of health targets and priorities and/or for any other health issue decided in a manner paralleling the last three years required to reach the MDGs (2013–2015).

Marketing of the STC

A new innovative financing mechanism cannot take off without clear communication and marketing for the use of STC proceeds, as well as a well-defined management and governance structure and processes. As has been the experience with the development of the GFATM, the IFFIm and the Airline Solidarity Levy, a dedicated effort will be needed from committed countries and stakeholders to further develop the concept, external relations, technical support and communications.

Similarly, as was the case with the IFFIm ("the value of vaccines") or the Air Solidarity Levy ("you fly I live"), the definition of STC marketing slogans for the pathfinding countries could help garner support for the STC.

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SECTION 5 - CONCLUSION AND NEXT STEPS

Securing national and international resources will be important for enabling countries, notably low- and lower-middle-income countries, to address existing and emerging health priorities, along with a severely underfunded health and MDG agenda, as well emerging health issues such as tobacco control and tobacco-related noncommunicable diseases. Innovative financing mechanisms, such as the STC, offer new approaches to raising funds for health nationally and internationally.

As follow-up to the High-Level Taskforce on Innovative Finance for Health Systems, HO has determined that an STC based on voluntary contributions from a "microlevy" on tobacco products (as part of larger national tobacco tax increases) is feasible and could raise significant amounts of additional revenue for health if Member States are committed to the concept.

The STC concept builds on and is additional to existing national taxes on tobacco products and broader WHO recommendations for countries to raise their tobacco taxes for public health goals. The STC does not replace existing national tobacco excise taxes or the need to increase them to WHO-recommended levels. For international health purposes, it represents a voluntary contribution by participating Member States based on a solidarity principle. The STC benefits from lessons learned from other innovative financing-for-health mechanisms.

The STC would thus achieve three simultaneous benefits for countries and people:

- Strong public health benefits and impact by reducing tobacco consumption and saving lives
- Raising national revenue that could be used to support health
- Support for international health efforts in developing countries.

WHO has conducted an economic feasibility study and has determined that potential revenue from an additional contribution, if applied in 43 countries (G-20+), could generate between US\$ 5.5 billion and US\$ 16 billion each year. The exact amount would depend on the scenario chosen.

The STC should be additional to other sources of Official Development Assistance.

Member States will need to consider this technical-feasibility paper in the context of their national tobacco taxation policies and legislation.

Those expressing their intent to support a voluntary STC contribution for global health purposes will need to review and decide upon a number of use and management questions: how much of an STC will be used for national vs. international purposes; specific uses for the STC-revenue, influenced by the health priorities of recipient countries (including the proportion for tobacco control);

whether to pool international STC contributions, and if so, on what management/governance mechanisms

Next Steps

There are various opportunities for Member States to further consider the STC concept and to determine whether they wish to pursue further action. Innovative financing for development is a G-8 and G-20 priority in 2011, and the STC has been presented to the Leading Group on Innovative Financing for Development meetings in 2011 and as part of the Leading Group Task Force on Innovative Financing for Health. Other key health events in 2011 includes the UN General Assembly High-Level Meeting on Noncommunicable Diseases in September. Annex 4 presents key events in 2011 related to the development of an STC contribution.

Building upon past experiences to make innovative financing for development work, and based on the economic revenue-generation premise established, the STC points to the need for one or several pathfinding Member States to champion the concept. As was done for the creation of the GFATM and UNITAID, as well as the IFFIm, Member States could establish an STC core group to further assess the possible ways forward.

The WHO teams remain at the entire disposal of Member States and stakeholders to further present the STC concept over the course of 2011 and to support all of their partner countries.

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ANNEXES

- **Annex 1 STC Economic Feasibility Analysis**
- **Annex 2 Elements of Tobacco Control Programmes**
- **Annex 3 SWOT Analysis of Possible Implementing Mechanisms**
- **Annex 4 Key Events Related to STC Development**

ANNEX 1 - STC ECONOMIC FEASABILITY ANALYSIS

I. Introduction

In 2009, about 80 countries consumed 268 billion packs of 20 cigarettes and generated an estimated US\$ 255 billion in excise and US\$ 322 billion in total tax revenues. The G-20+countries²⁰ accounted for about 85%, or 227 billion packs, of the global cigarette consumption and generated 91.4% (US\$ 231.5 billion) of the global excise and 90.8% (US\$ 293.9 billion) of the global tax revenues from cigarettes.

The Taskforce on Innovative International Financing for Health Systems included as one of the recommendations in its report "More money for health, and more health for the money" to explore the technical viability of tobacco taxes as a solidarity contribution. WHO suggested that if the G-20+ countries introduced an **additional US\$ 0.05US\$ 0.03/US\$ 0.01** (in high-income, upper-middle- and lower-middle-income countries of the G-20+ respectively) as a solidarity contribution per pack of 20 cigarettes, this would yield \$US 5.47 billion in additional revenue. Member States would decide whether to use this revenue for international health financing for low- and middle-income countries (a global initiative). Furthermore, countries (particularly low-income countries) could also decide to use a portion of their national tobacco tax revenue to support financing their health care systems by increasing levies on tobacco products (country-level initiatives).

In this annex, the economic feasibility of this global initiative is examined. **Specifically, the annex looks at the consequences of introducing a solidarity contribution** on retail prices of cigarettes, the share of the solidarity contribution inclusive of excise and total tax on retail prices and the impact of the introduction of the solidarity contribution on consumption, affordability, illicit trade of cigarettes and lives saved in the G-20+ countries.

This annex does **not** present a similar analysis for scenarios that reflect higher micro-levies per pack of cigarettes sold.

II. Data

The data used in this estimation were obtained from various sources. Cigarette consumption data by country were obtained for 2009 from the Euromonitor 2011 Cigarette Report.

The cigarette price data and the taxes levied on prices for 2010 were obtained from the 2011 WHO Report on the Global Tobacco Epidemic (GTCR). The prices in the report are the prices of the most sold brand of cigarettes in US\$, which was assumed to approximate the average price of a pack of 20 cigarettes. Similarly, the report provides the corresponding taxes levied on the most sold brand.

The data on per capita gross domestic product (GDP), the exchange rates from local currency to US\$ and purchasing power parity for 2010 were obtained from the 2011 IMF World Economic Outlook and the IMF International Financial Statistics.

²⁰ G20+ countries include: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, India, Indonesia, Ireland, Italy, Japan, Latvia, Lithuania, Malta, Mexico, Netherlands, Norway, Poland, Portugal, Romania, Republic of Korea, Russia, Saudi Arabia, Slovakia, Slovenia, South Africa, Spain, Sweden, Turkey, United Kingdom, United States.

The population data for 2010 were obtained from the United Nations World Population Prospects, 2008 Revision.

Estimates of the shares of national cigarette markets attributable to non-duty paid transactions (such as cross border sales, counterfeit production, and illegal smuggling) were taken from the 2009 ERC World Cigarette Report, when possible, and the Euromonitor 2011 Cigarette Report was used to supplement those data.

Adult prevalence of cigarette smoking data (crude-adjusted) were taken from the WHO 2011 internal database.

The World Bank country classification for July 2009 was used to classify countries by income group.

III. Methodology

The methodology for the estimation of price, revenue and other variables is applied separately for each country, which usually is represented by i in each equation. For the sake of simplicity, the subscript i is removed from the equations.

The average price for a pack of cigarettes per country is assumed to include the following:

$$\mathbf{P} = \mathbf{P}_{n} + \mathbf{P}_{rm} + \mathbf{T}_{sp} + \mathbf{T}_{av} + \mathbf{T}_{vt} \tag{1}$$

where

- P is the retail price for a pack of cigarette in US\$
- \mathbf{P}_n is the producers' price for a pack of cigarettes in US\$, defined by the following:

$$\mathbf{P}_{p} = \mathbf{P} - \left(\mathbf{P}_{rm} + \mathbf{T}_{sp} + \mathbf{T}_{\alpha v} + \mathbf{T}_{v\tau}\right) \tag{2}$$

- $oldsymbol{P}_{rm}$ is the retailer's margin, assumed to equal 10% of the retail price
- \mathbf{T}_{sp} is the specific excise tax per pack in US\$
- \mathbf{T}_{av} is the ad valorem excise tax measured as percentage of either \mathbf{P} , \mathbf{P}_p , or $\mathbf{P}_p + \mathbf{P}_{rm} + \mathbf{T}_{sp}$, depending on the country
- \mathbf{T}_{vt} is the value added tax (VAT) or sales tax as a percentage of retail price. If the statutory VAT (V) rate is levied on VAT exclusive retail price, it is converted to $\mathbf{T}v_{\tau}$ as

$$\mathbf{T}_{vt} = \frac{V}{(V+1)} \tag{3}$$

III. 1. Predicted price after the introduction of the "micro-levy" for a solidarity contribution

The predicted price of cigarettes given a US\$ 0.05/US\$ 0.03/US\$ 0.01 solidarity contribution is given by

$$P' = P_p + P_{rm}' + T_{sp}' + T_{av}' + T_{vt}'$$
(4)

Here the producer price is assumed to remain constant after the tax increases, so P_P does not change. The solidarity contribution is also added into the specific excise tax (T_{sp} +0.05 or 0.03 or 0.01). If the country does not have a specific excise tax, the solidarity contribution is added onto the price of a pack of cigarettes. Thus the new specific excise tax per pack is estimated as

$$T_{sp} = T_{sp} + 0.05 \text{ or } 0.03 \text{ or } 0.01$$
 (5)

However since the retailer's margin P_{rm} , the value added tax T_{vt} and, in some cases, ad valorem excise T_{av} are defined as % of retail price, their value per pack will change as the predicted price changes. In this annex, changes were iterated by using Excel iteration calculation.

It is important to note here that the introduction of the STC would lead, in some countries, to an increase higher than the amount of the STC itself. For example, in countries with an ad valorem rate applied on the retail price, the introduction of the STC will increase the base on which the ad valorem is calculated, leading to an increase in the ad valorem tax amount in addition to the increase of the STC amount. This means that, in some countries, the introduction of the STC would have a multiplier effect on the tax burden and would increase the tax burden and the price by more than US\$ 0.05, US\$ 0.03 or US\$ 0.01 per pack.

III. 2. Revenue Estimation

To estimate the revenue from cigarette excises, country consumption of cigarettes (C) for 2009 was used. First the current excise (R) revenues were estimated using the following equation:

$$R = C * (T_{sp} + T_{av} + T_{vt})$$
 (6)

To predict the new revenue after a tax change, the tax increase was assumed to be fully reflected in the price (P), keeping producers' price P_p constant. Changes in consumption level were estimated using the changes in price. The price elasticity of cigarette demand was assumed to be -0.4, as indicated by the 1999 World Bank report "Curbing the Epidemic". This means that as the price of cigarettes increases by 10%, the consumption will be reduced by 4% in developed countries.

The percentage change in price is estimated as

$$\% \Delta P = \frac{(P' - P)}{P} \tag{7}$$

and the projected consumption (C') is estimated as

$$C' = C * (1 + (\% \Delta P * \varepsilon))$$
(8)

where ε is the price elasticity of -0.4.

The projected revenue is thus

$$R' = C' * (T_{sp}' + T_{av}' + T_{vt}')$$
(9)

The extra revenue after a tax increase is estimated by taking the difference between the estimated (R) and the predicted (R'), using the following equation:

$$\Delta R = R' - R \tag{10}$$

Given the multiplier effect of the introduction of the STC, excise and total revenues are expected to increase by more than the simple introduction of the STC amount in some countries. Therefore, globally, the revenues generated will be higher than the amount the simple attribution of the STC amounts would generate. This paper reports the revenues generated globally but focuses on the STC revenue, that is, the revenue directly attributable to the STC amounts. These revenues were calculated by multiplying the STC amounts by C', the new consumption expected to result from the total tax impact of the introduction of the STC.

III. 3. Average price and tax estimations

The average price per pack of cigarettes among countries is calculated by using the consumption of cigarettes as a weight. The weighted average price per pack of the most sold brand is estimated by using the following formula:

$$\overline{P} = \frac{\sum_{1}^{n} P * C}{\sum_{1}^{n} C} \tag{11}$$

where n = 43 for the G-20+ countries.

Average tax estimations are performed in a similar manner. For example, the weighted average excise per pack of cigarettes is estimated by the following formula.:

$$\overline{T_{ex}} = \frac{\sum_{1}^{n} (T_{sp}^{'} + T_{av}^{'}) * C}{\sum_{i}^{n} C}$$
(12)

III. 4. Estimation of the tax as a share of retail price

For the excise share of retail price, the weighted average excise per pack of cigarettes was divided by the weighted average price per pack. For the total tax share, the weighted average total tax per pack was divided by the weighted average price per pack:.

$$E_{x} = \frac{\overline{T_{ex}}}{P} *100\%, T_{tx} = \frac{\overline{T_{x}}}{P} *100\%$$
 (13)

where

 $\overline{T_{\!\scriptscriptstyle ex}}$ is the weighted average excise tax per pack

 $E_{_{\scriptscriptstyle Y}}$ is the excise share as % of retail price

 T_{tx} is the total tax share as % of retail price

 $\overline{T_x}$ is the weighted average total tax per pack.

III. 5. Affordability index

Given the income structure and the price of a pack of cigarettes, consumers in each country face different affordability levels. To compare the affordability of cigarettes by country, an affordability index was calculated using the following formula:

$$S_{gdp}^{p} = \frac{P}{PC_{CDP}} \tag{14}$$

where

 $S_{\it gdp}^{\it p}$ is the share of the price of the most sold brand of cigarettes in the per capita gross domestic product

 PC_{GDP} is the per capita GDP in US\$.

The mean of the share $\overline{S_{gdp}^{\,p}}$ was estimated by dividing $\sum_{i}^{n} S_{gdp}^{\,p}$ by the total number of countries (N):

$$\overline{S_{gdp}^{p}} = \frac{\sum_{1}^{n} S_{gdp}^{p}}{N} \tag{15}$$

The mean value of $S_{gdp}^{\ p}$ was then indexed as 1, and each country's value was indexed based on the mean value of 1 to create the index using

$$Af_{ind} = \frac{S_{gdp}^{p}}{S_{gdp}^{p}} \tag{16}$$

Countries that have an index below 1 have relatively more affordable cigarettes than those with an index above 1.

III. 6. Non-duty paid sector estimations

Using the 2009 quantities of cigarette consumption (C) and the non-duty paid share of the market S_{ND} , the total market size (M) was calculated as

$$M = \frac{C}{1 - S_{ND}} \tag{17}$$

and the size of the non-duty market in packs of 20 cigarettes $\,C_{\scriptscriptstyle ND}\,$ was estimated as

$$C_{ND} = M * S_{ND} \tag{18}$$

For a number of countries, C_{ND} was already reported, so there was no need to calculate it. The loss of revenue due to non-duty paid sales in 2010 R_{LS} was then estimated as

$$R_{LS} = C_{ND} * T_{x} \tag{19}$$

Where $T_{\scriptscriptstyle x}$ is the 2010 total tax per pack of the most sold brand of cigarettes.

The change in size of the non-duty paid cigarette sector was also estimated assuming that the total reduction in duty-paid cigarette consumption resulting from the introduction of the solidarity contribution led to an increase in non-duty paid consumption, i.e., some of those who stopped buying cigarettes legally turned to the black market or to cross-border purchases. In the present estimation, based on the latest global estimate of illicit trade²¹, we assumed that 11.6% of the reduced consumption would go to the illegal market. The change in non-duty paid consumption $\Delta C_{\it ND}$ was estimated as

$$\Delta C_{ND} = 11.6\% \times (C - C')$$
 (20)

where C' is the estimated duty paid consumption after the solidarity contribution is introduced.

The additional revenue loss due to the increase in non-duty paid transactions was estimated as

$$\Delta R_{LS} = T_{r}^{'} * \Delta C_{ND} \tag{21}$$

where $T_{x}^{'}$ is the tax per pack of cigarettes after the introduction of the solidarity contribution.

III. 7. Estimation of the lives saved due to solidarity contribution

Using adult prevalence rates AP_r the number of current adult cigarette smokers SM_a was estimated using the following equation:

$$SM_a = AP_r * PO_{15+}$$
 (22)

where PO_{15+} is the population over 15 years of age. The number of young people who will become smokers $SM_{_{_{_{1}}}}$ was estimated by

$$SM_{v} = AP_{r} * PO_{0-14}$$
 (23)

where PO_{0-14} is the population aged 0–14. The numbers of deaths for adults, youth and total (D_a, D_y, D_T) that will occur in the population due to smoking-related illnesses were estimated by

²¹ L Joossens, D Merriman, H Ross, M Raw. "How eliminating the global illicit cigarette trade would increase tax revenue and save lives." Paris: International Union Against Tuberculosis and Lung Disease; 2009.

$$D_{a} = SM_{a} * 0.4$$

 $D_{y} = SM_{y} * 0.4$ (24)
 $D_{T} = D_{a} + D_{y}$

Here, the number of smokers was multiplied by 0.4. Although the World Bank Report²² indicates that one in two long-term smokers will be killed by his or her addiction, 40% of smokers were assumed to die from smoking-related illness.

Once the current prevalence and expected deaths among the smoking population were estimated, the effect of the price change on smoking prevalence was calculated. The effect was assumed to be different for the adult and youth populations. For adults, demand elasticity (ϵ) was assumed to be -0.4^{23} . This means that a 1% increase in price leads to a decrease in consumption by 0.4%. Moreover, the prevalence elasticity was assumed to be $\varepsilon_{pr}=0.2$, i.e., a 1% decrease in consumption indicates a 0.2% decrease in prevalence²⁴.

The number of adult smokers who quit \mathcal{Q}_a was estimated by

$$Q_a = SM_a * (\% \Delta P * \varepsilon * \varepsilon_{pr})$$
(25)

To estimate the number of lives saved L^a_{sv} , a survival rate of 70%²⁵ was used for smokers who quit in order to find the number of survivors after smokers quit because of the introduction of the solidarity contribution on the packs of cigarettes. Of these survivors, an expected 40% would have died had they continued to smoke. Consequently, the number of lives saved among adults was estimated by

$$L_{sv}^{a} = Q_{a} * 0.70 * 0.4 \tag{26}$$

Studies indicate that demand elasticity for young people is twice the elasticity for adults ²⁶. As the price increases, the percentage reduction of the youth prevalence rate will be

$$\%\Delta YP_{r} = \alpha * \varepsilon_{nr} * \varepsilon * \%\Delta P \tag{27}$$

where α is the youth elasticity factor and is assumed to be equivalent to 2. Consequently, there will be fewer young smokers Q_{v} ':

$$Q_{y}^{'} = Sm_{y} * \% \Delta YP_{r} \tag{28}$$

The number of lives saved by the tax increase L_{sv}^{y} were estimated by multiplying $Q_{y}^{'}$ by the probability that those young people would have died from smoking=related diseases (40% of smokers die prematurely) had they become smokers later in life:

²² Curbing the Epidemic: Governments and the Economics of Tobacco Control. The World Bank 1999.

²⁴ "Effectiveness of tax and price policies for tobacco control." IARC Handbook of Cancer Prevention, Volume 14. International Agency for Research on Cancer. In press.

²⁵ A Parson, A Danley, R Begh, P Aveyard. "Influence of smoking cessation after diagnosis of early stage lung cancer on prognosis: Systematic review of observational studies with meta-analysis". BMJ2010:340:b5569

²⁶ See footnote 24.

$$L_{\rm sv}^{\rm y} = Q_{\rm v}^{\rm y} *40\% \tag{29}$$

The total number of lives saved is the sum of adult lives and youth lives saved:

$$L_{sv}^T = L_{sv}^a + L_{sv}^y \tag{30}$$

IV. Results

IV.1. Excise tax revenues from cigarettes in the G-20+ countries

It is estimated that a solidarity contribution of US\$ 0.05 per pack for HI G-20+, US\$ 0.03 per pack for UMI G-20+ and US\$ 0.01 per pack for LMI G-20+ countries will lead to US\$ 6.23 billion in extra excise revenues and \$US 7.9 billion in extra total revenues. The solidarity contribution will increase excise tax revenues by 2.3%, from US\$ 171.2 billion to US\$ 175.2 billion, among HI G-20+ countries and by 3.7%, from US\$ 60.3 billion to US\$ 62.3 billion, among MI G-20+ countries (both lower- and upper-middle-income countries).

It is estimated that the price increase due to the introduction of the solidarity contribution will reduce cigarette consumption by 1.1% among HI G-20+ countries and 3.6% among MI G-20+ countries.

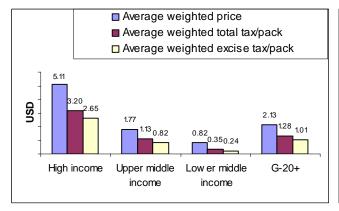
The direct attribution of the STC will generate US\$ 5.47 billion among the G20+ countries. Of this amount, US\$3.1 billion will be generated by HI G-20+ countries and US\$2.37 billion by the middle income G-20 + countries.

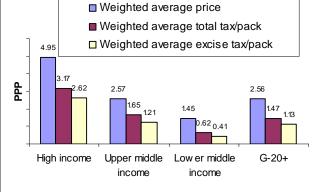
IV. 2. Average price of cigarettes

In 2010, the weighted average retail price of most sold brands among the G-20+ was US\$ 2.13 per pack; 47.2% of that price was the share of excise tax. In HI G-20+ countries, the average price (US\$5.11/pack) was more than twice that in upper-middle-income G-20+ countries (US\$ 1.77/pack) and lower-middle-income G-20+ countries (US\$ 0.82/pack).

When comparing price, the corresponding tax share and the value per pack by purchasing power parity (PPP) values, the average retail prices increase to US\$ 2.57/pack and US\$ 1.45/pack in UMI and LMI G-20+ countries, respectively, while in the HI G-20+ countries, price declines to US\$ 4.95/pack. Consequently, the price gap between HI, UMI and LMI G-20+ countries is significantly reduced under the PPP estimates (Figure 1).

Figure 1 Weighted average price and total tax per pack in US\$ and PPP and excise share as % of price in G-20+ countries, 2010





If the solidarity contribution of US\$ 0.05/US\$ 0.03/US\$ 0.01 per pack is introduced on existing excise taxes among HI/UMI/LMI G-20+ countries, respectively, the weighted average price per pack would increase by 7.3%, from US\$ 5.11/pack to US\$ 5.49/pack, in HI countries; by 4.3% in UMI, from US\$ 1.77 to US\$ 1.85;, and by 9.9%, from US 0.82 to US\$ 0.9, in LMI. Figure 2 shows the price increases in selected G-20+ countries and the corresponding consumption change (assuming a price elasticity of –0.4).

% Change Price % Change Consumption Consumption 10% Price 9% 8% -1% 7% % change in -2% 6% 5% 4% -2% change in -3% 3% -3% 2% 1% Austria Saudi Korea Portugal **Szech Rep** Sweden Germany reland Denmark Vetherlands

Figure 2: Estimated percentage changes in price and sales (consumption) in selected G-20+ countries, 2010

IV. 3. Affordability

Based on the IMF World Economic Outlook, it is predicted that the mean per capita US\$ income (GDP/capita) among the HI G-20+ countries will increase by 3.8% between 2011 and 2012. The price increases due to the introduction of the solidarity contribution leads in some cases to an increase smaller than the per capita GDP increase, meaning that prices in those countries will become more affordable despite the contribution revenue.

This is not the case, however, for Belgium, Chile, China, Cyprus, France, Greece, Italy, Portugal, Romania, Russia, Slovenia, South Africa, Sweden, the United Kingdom and the United States of America. In those countries, cigarettes would become less affordable after the solidarity contribution is introduced (Figure 3).

../..

■ % change in price due to the introduction of the STL (left scale) ■ % change in GDP/capita between 2011and 2012 (right scale) 14% 18% 16% 12% 14% 10% 12% 8% 10% 8% 6% 6% 4% 4% 2% 2% 0% 0% Bulgaria India Russia Ireland Mexico Qhina Italy Lithuania Slovakia France ndonesia Argentina Greece

Figure 3: Percentage change in GDP/capita and price of most sold brand in selected G-20+ countries, 2010

However, the data reveal that cigarettes are affordable in the majority of G-20+ countries (Figure 4). So the concern about a disproportionate effect of a tax increase on low-income populations cannot be used against the introduction of the contribution, which will not substantially increase prices that are already affordable.

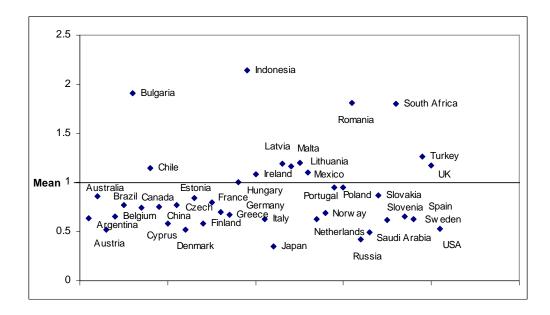


Figure 4: Affordability index of most sold brand price in G-20+ countries, 2010

IV. 4. Non-duty paid sector implications

It is difficult to predict the level of non-duty paid market and also the impact of price increases on the non-duty market. Based on available literature or expert opinions, in 2009, on average, the non-duty paid sector accounted for about 11.5% of the G20+ countries' cigarette markets. Thus, governments were losing an estimated US\$ 27 billion in tax revenue

to the non-duty paid sector, assuming that people purchasing illegally would otherwise be purchasing the most sold brand of cigarettes.

The impact of the solidarity-contribution-induced price increases on the non-duty paid sector was examined for the G-20+ countries by assuming that 11.6% of the reduction in duty-paid consumption due to the solidarity-contribution-induced price increase went towards non-duty paid sales (including counterfeit cigarettes, smuggled cigarettes and crossborder purchases). In other words, consumption was estimated to fall by 6.5 billion packs following the price increases resulting from the introduction of the solidarity contribution, and the non-duty paid market was assumed to increase by 759 million packs (11.6% of the reduction in consumption). This number is based on the latest estimate of illicit trade globally and is consistent with the average rate of the non-duty paid sector reported for the G-20+ countries (11.5%). This would lead to a 3.5% increase of the 2009 non-duty paid market. Furthermore, if consumers of non-duty paid cigarettes would otherwise be buying duty-paid packs of the most sold brand of cigarettes, this increase in illicit sales would lead to an additional loss of US\$ 564 million. However, because of increased tax revenues on duty paid cigarettes, revenue changes continue to remain positive for G20+ countries, the total revenue gain being much higher, at US\$ 7.91 billion. Thus, even in the worst-case scenario in which the solidarity contribution leads to a number of consumers moving to the non-duty paid sector, the fiscal benefits of the tax increase outweigh the fiscal costs.

IV. 5. Lives saved due to the introduction of the solidarity contribution

Based on 2009 smoking prevalence rates, 369 million adult smokers were living in the G-20+ countries in 2009. In the future, 95.5 million youth out of 694 million youth below 15 years of age in the G-20+ countries will become smokers. It is predicted that 148 million adult smokers and 38 million youth smokers will die prematurely from smoking-related illness in the G-20+ countries.

Although the solidarity contribution will lead to only a small increase in cigarette prices (on average, 3.3%), even this small increase will have some life-saving effect. An estimated 223,000 quitting adults and 149,000 young people who will never start smoking will be saved due to this policy in the G-20+ countries.

V. Conclusion

The introduction of a solidarity contribution of US\$ 0.05, US\$ 0.03 and US\$ 0.01 per pack would increase excise revenues by US\$ 6.23 billion and total revenues by US\$ 7.91 billion. But the direct attribution of the STC will generate US\$ 5.47 billion among the G20+countries. In addition, lives would be saved – a total of 372 thousand lives, 40% of them young people.

Prices would not rise dramatically (between 4.3% to 9.9% for weighted average prices), cigarettes would remain affordable relative to world prices and the liberally estimated increase in non-duty paid sales would not offset the fiscal gains.

Hence, a solidarity contribution would be very effective in enabling G20+ countries to help finance health care systems of low- and middle-income countries.

ANNEX 2 - ELEMENTS OF TOBACCO CONTROL PROGRAMMES

Member States may wish to use some of the funds for global tobacco control efforts. It will of course be up to Member States to determine the fund usage, depending on their own health priorities.

In the specific case of tobacco-use-related conditions, two possible uses are suggested:

1) Support national tobacco control activities and prevention of tobacco-related diseases (particularly in countries with high prevalence of smoking).

National tobacco control activities focus on key strategies, including: tobacco tax and price increases, creating smoke free environments in public places and in workplaces, banning tobacco advertising, offering ways for smokers to quit and public education campaigns, including pictorial health warnings on cigarette packs.

A number of countries (28) are successfully collecting national taxes on cigarettes and using these funds for national tobacco control or health activities – recent examples are Thailand, Mongolia, Turkey, Egypt and India.

2) Support innovative, market shaping, high impact and visible investments in the prevention of tobacco-related diseases.

Two possible investments scenarios for the STC, notably for supporting low- and lower-middle-income countries, are the following:

a. Scale up tobacco control in developing countries.

The STC could be used to scale up effective tobacco control demand reduction measures to reduce tobacco use²⁷. The funds could also be used to strengthen in-country surveillance and monitoring systems to collect standardized data on tobacco and other risk factors in low-income, high-burden countries. In this context, it is worth noting that "[g]overnments collect nearly US\$ 133 billion in tobacco excise tax revenues each year, but spend less than US\$ 1 billion combined on tobacco control – 97% of this amount are spent by high-income countries. While per capita excise revenues are about 124 times higher than tobacco control expenditures in high-income countries (US\$ 167.57 per capita excise revenues vs US\$ 1.36 per capita tobacco control expenditures), the difference is much higher in middle-income countries (excise revenues 1339 times higher than tobacco control expenditures) and low-income countries (excise revenues 4304 times higher than tobacco control expenditures)."²⁸ Therefore, there is still much opportunity for low- and middle-income countries to raise tobacco taxes and to generate more resources for health.

²⁷ For example refer to best buys and good buys in chapter 4 of the Global Status Report on Noncommunicable Diseases 2010. http://www.who.int/nmh/publications/ncd_report2010/en/ ²⁸ WHO Global Report on the Tobacco Epidemic, 2011, pages 70–72.

b. Scale up access to cost-effective treatment and diagnostics for tobacco-related diseases.

Some of the STC funds could be used to strengthen primary health care systems for treating tobacco dependence and to establish and improve national toll-free tobacco quit-line services. STC funds could also be used to increase access to cost effective tobacco cessation medications such as nicotine replacement therapy. In so doing, innovative financing could support market impact strategies to lower the price of tobacco cessation products and thereby increase affordability, quality of and access to diagnostics and essential medicines for tobacco control and tobacco-related diseases.

STC funds could also be used to accelerate the introduction of new medicines and diagnostics for tobacco control and tobacco-related diseases.

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ANNEX 3 - SWOT ANALYSIS

Possible Implementing Mechanisms for the Global Solidarity Tobacco Contribution (STC)

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The Solidarity Tobacco Contribution (STC) for International Health Financing

	EXISTING (HEALTH) MECHANISMS	FUNDS ADMINISTERED BY AN INTERGOVERNMENTAL ORGANIZATION/INTERNATIONAL FINANCING INSTITUTION	NEW FUND*
Strengths	 High political buy in from participating governments towards existing mechanisms (e.g GFATM, GAVI and UNITAID (WHO hosted)) Existing mechanism/institution has its own legitimacy, brand & expertise High capacity to advocate and promote STC (e.g. GFATM, UNITAID) Capacity to implement quickly rapid start up Some rely on innovative financing/solidarity levy sources of revenue (UNITAID) Existing and proven governance systems; Broad governance constituencies Multilateral institutions have built-in member state governance; also, country office presence No creation of a new institution/organization Very good capacity to report and communicate on use of funds to development community and general public For multilateral institution managed mechanisms: built in privileges and immunities Can link to or fund technical agencies (e.g. WHO) to technically support countries Processes to request funding proposals and vetting. 	High political buy in from governments Multilateral institution status (and thus privileges and immunities) Past experience with managing funds from multiple donors Local fiduciary capacity and country office presence (World Bank; UN) Existing networks Early start-up Linkages with UN Country Teams (UNDP)	High political buy in from hosting government Adapted to launch STC as pilot with some founding early adopter countries
Weaknesses	 Purposes of mechanism not necessarily fully in line with STC use possibilities. If so, then how to integrate STC branding and purposes. Existing governance may not be fully representative of all STC participating countries Possible need for speedy and new processes required if the STC supports direct grants to NGOs Can distract from mechanism/fund's core functions and priorities 	Not health specific Multiple governance layers (country and global) for some UNDP Trust Funds High transaction costs (especially if several agencies involved) Delays in disbursement UNDP Multi-Donor Trust Funds generally limited to UN system Limited governance representation (i.e. from NGOs) Not specific to management of innovative financing Purposes of mechanism not necessarily fully in line with STC use possibilities. If so, then how to integrate STC branding and purposes.	Needs start-up financing and business center Transaction & set-up costs Long set up time delays results Does not conform to the Paris agenda as creation of a new institution Potential nationalization of interests? Multilateral institution status is not guaranteed(i.e. privileges and immunities) Legitimacy?
Opportunities	Capitalizes on past experiences with financing Maximize existing networks. For institutions hosting mechanisms, capitalizes on host institution's past management and governance experience For multilateral institutions, maximizes use of member state-based governing bodies Technical expertise	STC could initially use existing MDTF (MDG Achievement Fund), but limited to UNCT Use World Bank capacities and experience in fund management and county fiduciary	Can build upon past lessons learned of governance and public-private collaborations Mechanism/organization specifically tailored to STC
Threats	Introducing STC into an existing mechanism could create competition funds, or lead to substitution Loss of STC identity and focus Recipient countries' health priorities do not influence global mechanism decisions	Low visibility of results Participating countries may not like "financing the UN" or World Bank	No brand, Feasibility

^{*}To set up a new independent financial mechanism outside of WHO and based on the non-for-profit models of the US 501C3, the French Loi 1901 or the Swiss Foundation models

ANNEX 4 - KEY EVENTS RELATED TO STC DEVELOPMENT

December 2010

Leading Group on Innovative Financing for Development, Tokyo

- o WHO presents the STC concept
- o 66 Member States and interested parties attend
- Final Leading Group Presidency (Japan) Statement's conclusions include reference and supportfor the STC concept
- o Final NGO statement includes reference and support for the STC concept
- The Leading Group establishes a time-limited Task Force on Innovative Financing for Health. The STC is referenced.

January 2011

Expressions of interest

- French President Sarkozy references the STC idea at the G-8/G-20 press conference
- o The French government formally requests the STC concept paper from WHO
- o UN Special Advisor for Innovative Finance for Development expresses interest in the concept

March 2011

OECD Working Group meeting on Innovative Finance

WHO references the STC concept at the meeting

UNITAID Executive Board retreat

 The STC is referenced in a Resource Mobilization Landscape Analysis and is supported by theUNITAID Chair/UN Special Advisor for Innovative Finance for Development

Foundations

o Bloomberg Philanthropies and Bill and Melinda Gates Foundation express interest

April 2011

First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Disease Control, Moscow, Russia

- o Innovative financing roundtable discusses the STC concept
- Egypt, Greece, Russia and other countries express interest

UNITAID Finance and Administration Committee meeting

 The STC is referenced in Resource Mobilization papers reviewed and to be presented at the July 2011 UNITAID Board meeting.

May 2011

Least Developing Country Summit, Istanbul, Turkey

o Leading Group Innovative financing roundtable, The STC is informally discussed

World Health Assembly

 The STC is discussed informally with Member State delegations on margins of the NCD Agenda item

French Cancer League

Expresses support for the STC concept

June 2011

NCD Civil Society meeting

The STC is noted by some in the meeting

Leading Group/Innovative Financing for Health Task Force

First meeting of the Leading Group Innovative Financing for Health Task Force, 14 June 2011.
 WHO presents on the STC concept and prepares report for Bamako 9th meeting of the Leading Group on Innovative Financing

Leading Group / 9th meeting of the Leading Group, Bamako, Mali

Health session discusses the STC concept

July 2011

G-20 Development Working Group meeting, South Africa

Discussion of innovative financing concepts

September 2011

UN High-level meeting on NCDs

The Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Noncommunicable Diseases (resolution 66/2) calls on Member States to "explore provision of adequate, predictable and sustained resources, through domestic, bilateral, regional and multilateral channels, including traditional and voluntary innovative financing mechanisms" (paragraph 45.d), and "Promote all means to identify and mobilize adequate, predictable and sustained financial resources and the necessary human and technical resources, and to consider support for voluntary, cost-effective, innovative approaches for a long-term financing of noncommunicable disease prevention and control, taking into account the Millennium Development Goals" (paragraph 49).

October 2011

Publication

o WHO publishes the STC concept paper on its website as a discussion paper

November 2011

G20 Summit ("New World, New Ideas"), Cannes

- o Bill Gates' report to the G-20 Presidency on Development Financing will reference the STC
- o Participating Heads of State and Government may discuss and possibly endorse the STC

December 2011

10th Leading Group meeting, Spain

- o Formal presentation of the final STC
- o Final Report of Leading Group Task Force on Health, may include referencing of the STC

2012

o When operational, mechanism managing STC calls for proposals.

DESIRED END RESULT: FIRST STC DISBURSEMENT AT END OF 2012 OR EARLY 2013

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