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The trade and health imperative:

Managing the pursuit of health and wealth

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Introduction

Access to patented medicines protected by trade agreements, use of treaties to liberalize trade in tobacco products, growing trade in health services, and the impact of expanded trade on health equity within and across countries, are all examples of the increasingly important nexus between trade and health. Historically, trade and health have long affected each other but have tended to operate as separate policy spheres. In recent decades, these spheres have come together increasingly to form a rapidly expanding agenda, much of it requiring joint policy attention. Although some issues have produced closer cooperation, others have exposed tensions between the goals of protecting and promoting health, and generating wealth through trade in goods, services, and capital.

This article is the first in a series on the evolving interface between trade and health. The series takes stock of this relationship in order to provide forward-looking analyses of this fluid and often controversial subject. Both trade and health have reached turning points, as issues in world affairs, and this series provides timely analysis of key

challenges facing efforts to achieve an appropriate balance between the two spheres across a diverse range of issues. Of particular interest, for *Lancet* readers, is how health can best be protected and promoted amid rapidly expanding trade relations.

This article sets the stage for this series by considering key issues that define the trade and health linkage. We focus, first, on how, in the past decade, both trade and health have risen and expanded on global policy agendas in unprecedented ways. Second, we begin to describe how the trade and health relationship is governed in international relations. This analysis reveals a contrast between trade's structured and formalized governance system, and the "unstructured plurality" that characterises global health governance. This difference helps explain why trade agreements dominate the trade-health relationship. More detailed analysis of governance issues is provided in Paper 2.

Third, this article examines the ongoing search for policy coherence between the two spheres. Policy coherence requires handling both direct and indirect linkages between health and trade, which, as discussed below, pose different policy and governance challenges. The trade and health nexus represents, therefore, a daunting agenda for national governments, intergovernmental organisations (IGOs), the private sector, and non-governmental organisations (NGOs). We conclude by describing the remaining articles in this series, which collectively seek to stimulate efforts to align the pursuit of health and wealth in a sustainable and mutually beneficial manner.

A seminal convergence: The rise of trade and health in world affairs

The relationship between trade and health today exhibits unprecedented breadth, depth, and intensity. Historically, the oldest manifestation of this interface has been the

concern that trade spreads disease. Long before germ theory developed, governments adopted measures to prevent the importation of diseases associated with trade, such as plague and cholera.[1] The growth in the use of quarantine measures, and the expansion of trade in the nineteenth century, led states to engage in more systematic cooperation.[2] The international sanitary conferences and conventions, of the latter half of the nineteenth and first half of the twentieth centuries, constituted the first efforts at policy convergence, namely to produce international law that attempted to balance trade and health objectives.[3]

Invariably, this convergence was defined by the trading powers of the day, was ostensibly framed to protect their trading interests, and gave no attention to the negative health consequences of imperialism arising from the economic exploitation of colonised territories. Thus, the narrow scope of this early policy convergence focused on minimising the burden that national health measures (e.g., quarantine) imposed on the trading interests of the most economically powerful countries. Disease surveillance and data collection were limited to a handful of acute epidemic infections (e.g., cholera, plague, and yellow fever), the spread of which was associated with trade. The measures adopted focused on actions to be taken at the border to protect trading powers from external threats, and did not require states to improve, for example, health determinants within their own territories, let alone population health in other countries.

It was not until the latter half of the nineteenth century that, alongside the adoption of international sanitary measures, actions began to be taken to improve conditions for labourers, albeit focused on the industrialising economies of Europe. The exploitation and appalling conditions in which factory workers toiled and lived fed the

emergence of communism and stimulated the eventual development of the International Labour Organization (ILO) and labour standards after World War I, including occupational safety and health protections.[4] This period also witnessed efforts to address the negative health and environmental consequences of transboundary pollution arising from industrialisation.[5] Unlike the international sanitary conventions, these measures focused attention on health conditions and standards within countries, as well as on the responsibilities of states not to cause spillover harm in other countries through economic activities. Adverse health consequences associated with industrialisation implicated trade because industrial products were often the goods traded in international commerce. Competition from cheaper imports placed pressure on economic sectors to reduce costs, often at the risk of worker health and safety, and environmental degradation. This led to the ILO's efforts to harmonise labour protections across countries, and attempts to control transboundary pollution through standards and treaties.

Recognition of the direct and indirect links between trade and health waned during the Cold War. The General Agreement on Tariffs and Trade (GATT),[6] adopted in 1947, and the International Sanitary Regulations (ISR, which later became the International Health Regulations (IHR)),[7] adopted by the World Health Organization (WHO) in 1951, included provisions for balancing trade and health interests. However, although occasional controversies arose,[8] GATT's development did not include significant attention to the trade-health linkage. As trade became caught up in the geopolitical struggle between the United States and the Soviet Union, the trade-health relationship was marginalised.

In international health cooperation, WHO's efforts to improve health in developing countries, through such strategies as Health for All, Essential Drugs List, and International Code on the Marketing of Breast Milk Substitutes, raised deeper questions about the health implications of certain economic activities, including trade. As support by developing and socialist countries in the 1970s for a New International Economic Order intensified, the Health for All initiative and Declaration of Alma Ata became entangled in disputes between the West, the Soviet bloc, and the developing world.[9] The bitterness of these conflicts ensured that little constructive attention was focused on the trade and health interface. Instead, the focus on infectious diseases and trade continued through the IHR, but even these regulations faded in policy relevance as the Cold War progressed.[10]

The interface between trade and health has changed substantively since the end of the Cold War, characterised foremost by a greater convergence of policy issues. The end of the ideological struggle leavened the international system for the expansion of the trade liberalisation project, initially begun under GATT and then advanced by the far-reaching World Trade Organization (WTO). When established in 1947, GATT had 23 contracting parties and was limited to trade in goods.[11] Today, the WTO has 151 members[12] (which account for 97% of world trade[13]), with another 29 countries seeking accession,[14] and includes trade in goods and services and the protection of intellectual property rights (IPRs). Trade liberalization--the lowering of restrictions on and barriers to the cross-border exchange and movement of goods, services, and investment capital—has emerged in the post-Cold War period as a leading political and economic strategy in advancing objectives in world affairs. Importantly, virtually all post-Cold War strategies

for development have identified trade and its expansion as critical to economic growth, including the lifting of people out of poverty in the developing world.[15]

Simultaneously, health's prominence in global politics has increased significantly since the 1990s, in part reminiscent of the nineteenth century in being defined by the preoccupations of powerful political and economic interests. This prominence has been particularly notable concerning the perceived threats posed by emerging and re-emerging communicable diseases, and biological terrorism. At the same time, health has featured prominently in new development initiatives, such as the importance accorded to health in the Millennium Development Goals. While not all health needs have equally enjoyed this higher political status, global health has been transformed by its linkage to security, economic development, and humanitarian issues. Consequently, addressing global health issues is perceived as important to national and international strategies for diplomatic activity, as witnessed by health's rise as a foreign policy issue.[16]

The acceleration of trade liberalisation, combined with the increased prominence of global health, over the past decade or so has produced the seminal policy convergence we see today. This convergence encompasses direct (e.g., link between trade and pathogen spread) and indirect (e.g., trade's impact on the broad determinants of health) policy linkages. While this convergence echoes issues from earlier periods, the unprecedented breadth, depth, and intensity of trade-health linkages pose new challenges.

The policy agenda today covers flows of trade in industrial and agricultural goods, health-related services, protection of IPRs and investment capital, and their varied impacts across a range of communicable and non-communicable diseases, and health services provision and financing. The convergence of trade and health issues, thus,

requires both areas to adjust to the policy importance accorded to the other. Finding effective ways of making such adjustments has generated controversy because this may significantly affect how states exercise their sovereignty. With much at stake, outcomes are also likely to be shaped by unequal political and economic power among countries, and differences in values and policy goals, including how the importance of equity in the distribution of health and wealth are perceived.

Trade, health, and governance: The structure and dynamics of the trade-health relationship

Balancing trade and health policies requires cooperation through international governance mechanisms. Comparing mechanisms within the two realms reveals why trade dominates governance of this relationship. The governance of international trade has a highly structured, formalized, and demanding system. In contrast, international health governance exhibits little structural coherence, greater diversity of actors and approaches, and weaker legal obligations on states.

The WTO is the centre of authority for the governance of trade, as reflected in the large number of its member states and the substantive reach of its agreements. Other articles in this series examine the health implications of specific WTO agreements, such as the General Agreement on Trade in Services (GATS)[17] and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).[18] Here, we emphasise cross cutting WTO features that affect the trade-health relationship.

The first feature reflects how the WTO facilitates trade among member states through centralised and comprehensive governance architecture. The strategic objective

of trade liberalization within a multilateral system has produced, in the WTO, a core structure with strong legal foundations (e.g., GATT) and the incentive and capacity to handle new issues (e.g., GATS, TRIPS). This architecture contrasts with the "unstructured plurality" of governance in global health.[19] Rather than centring around WHO, global health governance has fragmented, diversified, and multiplied in ways that challenge WHO's lead role as the UN specialised agency for health.

Second, the WTO's political and substantive scope is critical to understanding its impact on trade and health issues. Politically, WTO's membership is extensive and expanding. This reality demonstrates the WTO's importance to developed and developing states. In thirteen years, the WTO has become one of the most significant IGOs because of the widely shared perception that economic growth and public welfare depend on participation in a robust system of international trade.

By contrast, WHO's influence mainly derives from its technical expertise used in the promotion of non-binding collective action across its member states (e.g., eradication of smallpox and polio). WHO is also expected to address new and emerging global health issues (e.g., public health innovation and IPRs; sharing of influenza viruses and related benefits). Only recently have member states used WHO as a forum to negotiate international legal instruments (the Framework Convention on Tobacco Control[20] and the International Health Regulations 2005[21]).

Substantively, the scope of issues covered by WTO agreements is breathtaking. To become a WTO member, a state has to agree to accept no less than 17 main multilateral agreements and 60 agreements, annexes, decisions and understandings that contain binding obligations on, among other things, tariffs and non-tariff barriers on

industrial and agricultural goods, trade in all kinds of services, application of sanitary and phytosanitary measures, implementation of technical barriers to trade, use of trade-related investment measures, imposition of anti-dumping and countervailing duties, and protection of IPRs. The large number of WTO member states means that most of the international system has committed itself to implementing this vast array of obligations.

Although the WHO Constitution contains a broad definition of health, WHO membership does not involve acceptance of multiple, extensive legal obligations. The WHO Constitution does not require member states to accept other international legal rules,[22] so WHO membership lacks the broad, deep, and binding commitments WTO membership imposes. This observation does not mean that WHO member states refrain from entering into other international agreements. These other arrangements, such as human rights and environmental treaties, have arisen outside WHO's auspices, creating a patchwork effect rather than a centralised, integrated set of legal obligations on health.

Third, WTO agreements place extensive demands on member states. Each WTO agreement contains detailed, complex, and legally binding requirements that seriously discipline the sovereignty of WTO member states. These requirements test the skill of trade lawyers, let alone health experts coming to this field without training. In contrast, WHO membership is not legally demanding on states, and historically other international legal agreements directly affecting health have not contained extensive duties (e.g., the ISR/IHR) or detailed and specific requirements (e.g., human right to health). In addition, voluntary membership in new global health initiatives, such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria[23] and the International Finance Facility for

Immunisation,[24] have not been created through treaty law and thus do not impose legal obligations on participating states.

Fourth, the WTO reinforces the scope and demanding nature of its rules through its dispute settlement mechanism. Unlike most areas of international law, the WTO's dispute settlement provisions are comprehensive, covering disputes under all mandatory WTO agreements, and are compulsory.[25] This combination makes the WTO dispute settlement mechanism an authoritative source of interpretation for its agreements. In addition, the WTO dispute settlement mechanism allows members states prevailing in disputes to use trade sanctions to enforce rulings against member states that fail to comply with decisions. Given the number of WTO member states and the demanding nature of many WTO rules, authoritative interpretations and the potential for enforcement carry far-reaching implications for trade and other policy efforts that trade liberalization affects. Decisions by WTO dispute panels and the Appellate Body become, thus, focal points for the governance of trade's relationship with other areas, including health. The importance of the WTO's dispute settlement mechanism has drawn much attention to how it functions, and proponents and critics of the mechanism's structure and performance are abundant.

In contrast, health-specific legal agreements, such as the Framework Convention on Tobacco Control (FCTC) or the revised International Health Regulations (IHR 2005), do not contain compulsory dispute settlement and enforcement provisions, and thus lack the compliance bite WTO rules have. This difference may affect how seriously states take obligations connected to the two organisations. Consequently, the WTO dispute

settlement mechanism heightens the political and economic significance of compliance with WTO rules, including those rules that may affect health policy.

The above features of the WTO help explain why governance of the trade-health relationship is weighted toward international trade law. Although it raises concerns about the future of WTO's centralised architecture, the proliferation of regional and bilateral trade agreements reinforces international trade law's dominant governance role in the trade and health area. These observations do not discount health's increased political importance, but they highlight that this prominence exists in a governance context marked by the WTO regime. Efforts to shift governance of trade and health away from trade agreements have proven controversial and not entirely effective, as witnessed by problems concerning IPRs. This context draws attention to larger political questions that focus on why governance of trade relations and health problems in international relations are markedly different, and these questions force consideration of the relative weight given to trade and economic issues by states in the formulation of their national interests.

Given this reality, a key question becomes whether this governance environment permits states to pursue trade and health interests in ways that do not privilege one area to the detriment of the other. Paper 2 in this series examines the governance of trade and health in greater detail, including the prospects for achieving more appropriate and effective policy coherence between trade and health.

Towards policy coherence: Understanding the direct and indirect linkages between trade and health

The convergence of trade and health policy, amid the current dominance of trade governance, creates important challenges for the public health community. Policy coherence requires common ground with respect to substantive policy objectives, which is often not easy to find or construct because of divergent public and private interests. The search for policy coherence is also complicated by the need for a broad agenda because trade and health have direct and indirect linkages (see below). In addition, trade and health coherence has to be achieved within and across individual states. Papers in this series explore specific areas of this trade-health relationship, but here we provide general considerations about the intensifying search for policy coherence.

An initial challenge is developing clearer evidence of how trade affects population health and health policy. Where the link is direct, such as trade in goods contaminated with harmful pathogens or containing dangerous substances, coherence analysis focuses on whether specific trade-restricting health measures comply with particular rules in trade (e.g., GATT) or health (e.g., IHR 2005) agreements: Was the measure applied in a non-discriminatory manner, based on scientific evidence, or the least trade-restrictive measure reasonably available to achieve the level of health protection sought? Controversies arise in applying these trade and health rules (e.g., how much scientific evidence is sufficient?), but these questions are rule-based, require case-by-case factual determinations, do not invite ideological debate, and make good candidates for third-party dispute settlement. For example, whether a WTO member has conducted an adequate risk assessment before imposing a trade-restrictive measure is a question frequently adjudicated before the WTO dispute settlement mechanism in the area of sanitary and phytosanitary protection.

The coherence allowed by each rule must be assessed by the rule-based, case-by-case analysis of direct linkage problems. Some rules, such as the prohibition on discriminatory trade measures, may pose no concerns for health. Health officials do not need to discriminate on the basis of the origin of a product in order to protect health from direct trade-related threats because such a basis finds no support in scientific principles or evidence. Other rules, such as the requirement for trade-restricting health measures to be the least trade-restrictive measures reasonably available, raise more coherency concerns. Disagreements arise over whether one measure is more or less trade restrictive than another, and over whether the least trade-restrictive measure is actually feasible for the country in question to implement. These issues hinge on how states or dispute settlement mechanisms interpret the rules. Authoritative interpretations of WTO rules have a uniformity of meaning across the international system, even if the meaning remains controversial among some states and non-state actors.

The possibility of policy coherence from the application of the rules does not, however, ensure policy coherence in practice. Countries may not take advantage of the policy space they are afforded by trade and health governance mechanisms, but such failures to act may flow from lack of political will, competence, or capability rather than the presence of skewed rules. For example, many direct linkage contexts (e.g., liberalising trade in health-related services[26]) require sophisticated analysis in order for policy makers to achieve their political and economic objectives (e.g., wealth creation, economic and health equities) for their populations.

Even greater difficulty can arise when there is an indirect causal relationship between trade and health. For example, trade may affect macroeconomic conditions that,

in turn, influence employment levels and income equities, which affect access to health services. Or, trade may form only part of the explanation for certain problems (e.g., access to essential medicines; the growth in obesity-related diseases; health harms from environmental degradation). Where such indirect linkages exist, what coherence should look like, how it should be achieved, and how it relates to concepts of fairness and equity, constitute more difficult questions because the number and nature of the variables to be analysed and regulated is considerable. Simplistic responses, such as ignoring trade's indirect impact on health or blanket opposition to trade liberalisation, do not provide foundations for policy coherence.

Where indirect linkages exist, coherence analysis is not typically rule-based and does not proceed through case-by-case determinations of trade measures applied to products or services. Rather, analysis of indirect trade-health linkages tends to lead to "big picture" questions that invite debate about larger governance challenges. For example, if data indicate that government health expenditures declined because tariff revenues decreased under trade liberalisation agreements, is the proper response to restrict trade by increasing tariffs, or to find strategies for financing health care not dependent on high, fixed tariff rates? Or, if trade liberalisation leads to economic growth but, at the same time, to greater income inequality which, in turn, reduces access to health services, what is the appropriate policy response higher trade barriers, more progressive taxation of incomes, or increased health care expenditure? More broadly, does the combination of trade liberalisation strategies and other policy reforms (e.g., deregulation of the economy, privatization of government-run services) unduly limit the range of options available for addressing inequities in income and access to health services?

The application of treaty interpretation principles does not provide answers to these broader policy choices, nor would there be uniformity in the answers across all countries. Achieving policy coherence in situations of indirect linkage often does not involve fine-grained, simultaneous balancing of trade and health interests in specific cases under detailed rules. Rather, it unfolds through separate responses in distinct policy spheres using multiple instruments at different times (e.g., liberalise trade internationally through trade law, redistribute wealth domestically through national fiscal measures, and reform access to health services through health policy). In addition, indirect linkages raise ideological considerations because the issues invite articulation of value-based preferences within and among societies.

The indirect linkage between the international trade of foods and drink, and the obesity pandemic, provides a good example of these analytical dynamics. Trade constitutes only one variable in a complex set of factors that contribute to obesity,[27] and evidence that addressing obesity specifically through direct trade policies (as opposed to general economic measures applicable to all goods and services, such as marketing restrictions) would be effective is non-existent. The complexity of the obesity problem invites expression of political perspectives that frame responses to obesity in different ways—"preventing and controlling obesity is an individual responsibility not the duty of the 'nanny State'" versus "obesity management requires government intervention to protect vulnerable individuals from corporate exploitation."

As the obesity example illustrates, what policy coherence between trade and health actually means in practice is difficult to pinpoint. Management of such indirect linkages requires more than fine-tuning the application of specific rules under trade and

health agreements. What is feasible in addressing indirect linkages would vary from country to country, and conceptions of equity and fairness differ between trade and health sectors within and between countries. These observations apply, for example, to tensions over the protection of IPRs, an issue on which coherence has remained technically, politically, and philosophically elusive.

To make things more complicated, the larger political footprint of indirect linkage problems also invites analysis on *how* such problems get managed in trade and health venues. Do the strong do what they will, while the weak suffer what they must, or are trade and health governance mechanisms capable of producing more symmetry between trade and health interests in indirect linkage areas?

Conclusion

The relationship between trade and health in the early 21st century is as important as it is complicated and controversial. The convergence of trade and health in recent decades, the structure and dynamics of governance to address this relationship, and the ongoing search for policy coherence nationally and globally underscore the imperative of finding ways to manage the pursuit of health and wealth more effectively. The purpose of the remaining articles in this series is to flesh out this imperative through analysis of key inflection points in trade and health.

The second paper in this series delves more deeply into the governance challenges, tracing the origins of the global trading system and international health cooperation. As well as the differences in the two policy spheres described above, the paper assesses how effectively the two systems come together, and how current deficits

in the representation of health interests within the governance of international trade might be addressed. Paper 3…[insert]. Paper 4…[insert]. Paper 5…[insert]. The final paper in this series outlines three priority areas in terms of the major challenges faced and actions required. These form the basis of a trade and health Agenda for Action.

Trade and health policies are at turning points in their respective political and governance trajectories. The WTO's Doha Development Agenda has stagnated, leading to an explosion in regional and bilateral trade agreements, the portents of which for the trade-health linkage remain uncertain, especially in the controversial area of protection of IPRs (see Paper [ ] in this series).[28] Global health's rise to political prominence has stimulated hard questions about whether states, IGOs, the private sector, and NGOs will harness or squander this prominence within and beyond the world of trade. The breadth, depth, and intensity of the trade and health linkage connect these two trajectories in ways vital to the prospects of both policy endeavours.

Trade and health have a long history that has seen these areas converge and diverge at different points in time. The current convergence, and the search for coherence, will define the trade and health relationship for decades. Whether those in both policy communities understand fully the trade and health imperative, and its technical and political challenges, will influence how these critical objectives in global affairs will shape the future of states and their peoples.

References

[1] Goodman NM. *International Health Organizations and Their Work* (London: Churchill Livingstone, 2nd ed., 1971).

[2] Howard-Jones N. Origins of international health work. *British Medical Journal* (May 6, 1951): 1032-36.

[3] Howard-Jones N. *The Scientific Background of the International Sanitary Conferences, 1851-1938* (Geneva: World Health Organization, 1975).

[4] International Labour Organization. Origins and History, at http://www.ilo.org/global/About_the_ILO/Origins_and_history/lang--en/index.htm.

[5] Sands P. *Principles of International Environmental Law* (Cambridge: Cambridge University Press, 2nd ed., 2003).

[6] General Agreement on Tariffs and Trade. In World Trade Organization, *The Results of the Uruguay Round of Multilateral Trade Negotiations* (Cambridge: Cambridge University Press, 1999), at 423-92.

[7] International Sanitary Regulations. 175 *United Nations Treaty Series* 214.

[8] Fidler DP. *International Law and Infectious Diseases* (Oxford: Clarendon Press, 1999).

[9] Cuerto M. The origins of primary health care and selective primary health care. *American Journal of Public Health* 2004; 94: 1864-74.

[10] Dorolle P. Old plagues in the jet age: international aspects of present and future control of communicable diseases. *Chronicle of the World Health Organization* 1969; 23: 103-11; Velimirovic B. Do we still need the International Health Regulations? *Journal of Infectious Diseases* 1976; 133: 478-81.

[11] World Trade Organization. The GATT Years: From Havana to Marrakesh, at http://www.wto.org/english/thewto_e/whatis_e/tif_e/fact4_e.htm.

[12] World Trade Organization. Members and Observers, at http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm.

[13] World Trade Organization. WTO in Brief (Part 2): The Organization, at http://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr02_e.htm.

[14] World Trade Organization. Accessions, at http://www.wto.org/english/thewto_e/acc_e/acc_e.htm.

[15] International Conference on Financing for Development. Monterrey Consensus on Financing for Development (New York: United Nations, 2003).

[16] Store JG. Oslo ministerial declaration--global health: a pressing foreign policy issue of our time. *Lancet* 2007; 369: 1373-78.

[17] General Agreement on Trade in Services. In World Trade Organization, *The Results of the Uruguay Round of Multilateral Trade Negotiations* (Cambridge: Cambridge University Press, 1999), at 284-319.

[18] Agreement on Trade-Related Aspects of Intellectual Property Rights. In World Trade Organization, *The Results of the Uruguay Round of Multilateral Trade Negotiations* (Cambridge: Cambridge University Press, 1999), at 320-53.

[19] Bartlett C, Kickbusch I, Coulombier D. *Cultural and Governance Influence on Detection, Identification, and Monitoring of Human Disease* (Foresight Project on Infectious Diseases: Preparing for the Future, April 2006), at http://www.foresight.gov.uk/Previous_Projects/Detection_and_Identification_of_Infectious_Diseases/Reports_and_Publications/Final_Reports/D/d4_3.pdf.

[20] World Health Assembly. *WHO Framework Convention on Tobacco Control*, WHA56.1, 21 May 2003.

[21] World Health Assembly. *Revision of the International Health Regulations*, WHA58.3, 23 May 2005.

[22] Constitution of the World Health Organization. In World Health Organization, *Basic Documents* (Geneva: World Health Organization, 40th ed., 1994), at 1-18.

[23] Global Fund to Fight AIDS, Tuberculosis, and Malaria. How the Global Fund Works, at http://www.theglobalfund.org/en/about/how/.

[24] International Finance Facility for Immunisation. Why IFFIm?, at http://www.iff-immunisation.org/.

[25] Understanding on Rules and Procedures Governing the Settlement of Disputes. In World Trade Organization, *The Results of the Uruguay Round of Multilateral Trade Negotiations* (Cambridge: Cambridge University Press, 1999), at 354-79.

[26] Smith R, Blouin C, Drager N, Fidler DP. Trade in health services and GATS. In *A Handbook of International Trade in Services* (Aaditya Mattoo, Robert M. Stern, and Gianni Zanini, eds.) (Oxford: Oxford University Press, 2008), at 437-58.

[27] World Health Organization. *The Challenge of Obesity in the WHO European Region and the Strategies and Responses* (Francesco Branco, Haik Nikogosian, and Tim Lobstein, eds.) (Copenhagen: World Health Organization, 2007).

[28] Fink C, Reichenmuller P. Tightening TRIPS: Intellectual property provisions of US free trade agreements. In *Trade, Doha, and Development: A Window into the Issues* (R. Newfarmer ed.) (Washington, D.C.: World Bank), at 285-300.