NOTES

CHAPTER 1: Does Trade Liberalization Contribute to Economic Prosperity?

YES

1. Views expressed are those of the author and do not necessarily represent official views of the World Bank.

2. It is difficult to take the survey-based estimates of poverty back before 1980. Bourguignon and Morrison (2002) combine what survey data are available with national accounts data to provide rough estimates of poverty back to 1820. The broad trend is clear: the number of poor in the world kept rising up to about 1980.

NO

1. I thank Diana Weinhold, Brian Hindley, Razeen Sally, and Manfred Bienefeld for good discussions.


3. Jagdish Bhagwati, "Rethinking Trade Strategy," in Development Strategies Reconsidered, ed. J. Lewis and V. Kallab (New Brunswick, N.J.: Transaction Books), 93. In "The Free Trade Consensus Lives On" (Financial Times, October 10, 2007), Bhagwati recently reiterated the point: "Turn to the leading U.S. newspapers these days and you will read the ... 'loss of faith' in free trade by economists. ... The truth of the matter is that free trade is alive and well among economists."


7. From a participant who requested anonymity.

9. This essay is limited to the trade policy–production structure–economic prosperity links, with reference primarily to (a) national economies as the unit and (b) developing countries facing the challenge of catch-up growth. It does not go into the literature on the impact of trade on income and wealth distribution, or that on the impact of rich country trade policy on developing countries. The essay avoids the effects of trade liberalization on public revenues, as well as the contentious subject of exchange rate regimes and the absence of international coordination of exchange rates, even though exchange rates are directly relevant to trade policy and trade flows. For an idiosyncratic and entertaining discussion of some of these issues, see Edward Leamer, “A Flat World, a Level Playing Field, and Small World After All, or None of the Above? A Review of Thomas L. Friedman’s The World Is Flat,” Journal of Economic Literature 45 (March 2007): 83–126. For a World Bank argument substantially more nuanced than anything the Bank has said about trade policy for decades, see World Bank, Economic Growth in the 1990s, Washington, D.C., 2005, chap. 5.


21. For a non-technical discussion of this argument, see Ha-Joon Chang, *Bad Samaritans* (London: Random House, 2007), chap. 3.


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**CHAPTER 2:** Does Free Trade Promote Economic Equality?

YES

1. For example, see McCulloch, Winters, and Cirera 2001; Winters 2002; and Winters, McCulloch, and McKay 2004, on all of which I draw freely. Winters 2006 offers an accessible account of the field, and Winters 2007 provides a collection of economic readings on the subject.

2. Milanovic also shows that our view of the degree of inequality and changes in it over time depend strongly on the following: the index of inequality that we use (that is, how we value one income against another); the prices we use to value different elements of consumption (haircuts and piano lessons are cheap in China but not in the United States); and the source of our income data—household surveys (Milanovic’s preference) or national income accounts (as, for example, in Bhalla 2005). I shall not discuss these issues here, but when considering contributions to the debate, they must be taken into account.

3. A simple example helps. Two countries have incomes per head of $1,000 and $10,000, respectively, so that the max/min ratio (one measure of inequality) is 10. If both grow by 50 percent to $1,500 and $15,000, the ratio remains 10. Note, however, that the absolute gap has increased from $9,000 to $13,500. Such absolute inequality almost always increases with income growth, but it is not the concept we commonly use.

4. This question is often expressed as “Is openness good for growth?” but growth is the change in income, not the level. The evidence suggests that openness raises the level of income but does not boost growth permanently, although, of course, increasing openness (liberalization) will lead to increasing income (growth) as the economy converges to the higher level of income commensurate with its greater openness; see Winters 2004.

5. If income is very unequally distributed, there will be only a relatively small proportion of households whose income is, say, 5 percent below the poverty line. Thus, if growth increases everyone’s income by 5 percent, only a relatively small number of these households are pulled up over the line. If, on the other hand, income distribution is very concentrated, but the average is still low enough to reflect significant poverty, a large share of households will be just below the line and thus will be pulled above it by an increase in all incomes. Imagine two economies, each with one hundred households whose incomes are spread evenly over a range. The unequal society might have a range of $50 to $150—basically one household for every dollar of the distribution. If the poverty line is $100, there are only five households with incomes between $95 and $100, which would be pulled above $100 by 5 percent growth. The more equal society might have all its households in the range of $90 to $115—four households per dollar, or twenty in the range $95 to $100. Here, 5 percent growth will pull twenty households over the poverty line.

6. The informal sector is, loosely speaking, that part of the economy that is not registered, pays no tax, and provides no benefits for workers apart from wages. It is typically comprised of single-person or very small enterprises, such as selling cigarettes on the sidewalk.
NO

1. Barro 2000. Also, Cornia, Addison, and Kiistki (2004) report a positive effect on growth as the Gini coefficient increases from very low levels (from the .15 typical of subsistence economies and of the former socialist economies to .30) and a negative effect as the Gini coefficient rises from .45 (typical in Latin America and sub-Saharan Africa) to higher levels. The $3,200 is in purchasing power parity terms, in 2005.
2. This result is known as the Stolper-Samuelson theorem.
4. Cuba, China, and Kerala in India are exceptions; see Birdsall 2005.
5. For a menu of fair growth policies and their application in Latin America, see Birdsall, de la Torre, and Menezes 2007.

CHAPTER 3: Can Foreign Aid Reduce Poverty?

YES

3. Paragraph 41 in Monterrey Consensus.
5. General George Marshall, speech at Harvard University, June 5, 1947.

NO

8. This Day [Lagos], December 4, 2003.

chapter 4: Is the Precautionary Principle an Effective Tool for Policymakers to Use in Regulating Emerging Technologies?


chapter 5: Is International Terrorism a Significant Challenge to National Security?

YES

1. Such a “gun-type” device, weighing over 500 kg, consists of four elements: a “gun” that shoots a “uranium bullet” from one end of a “rail” to a “uranium target” at the other end. Neither the bullet nor the target has enough Uranium-235 to generate a chain reaction, but when they are slammed together, a “critical mass” is achieved that is sufficient for a nuclear explosion. According to physicist Richard Garwin, who built America’s first hydrogen bomb, the minimum “fizzle bomb” needed to do serious damage is estimated to be about one kiloton, and it could be fabricated in a small apartment. The effective distances within which (roughly speaking) all the people die and all those outside survive are shown in the table below:

<table>
<thead>
<tr>
<th>Yield (kt)</th>
<th>(a)*</th>
<th>(b)*</th>
<th>(c)*</th>
<th>(d)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>275</td>
<td>610</td>
<td>790</td>
<td>5500</td>
</tr>
<tr>
<td>10</td>
<td>590</td>
<td>1800</td>
<td>1200</td>
<td>9600</td>
</tr>
</tbody>
</table>

*a* Range for 50% mortality from air blast (m)

*b* Range for 50% mortality from thermal burns (m)

*c* Range for 4 Gy initial nuclear radiation (m)

*d* Range for 4 Gy fallout in first hour after blast (m) (downwind)


4. A “sleeper” is a planted agent who lives a normal life in the host country until activated years later. The only sleeper in America over the past century was Soviet Colonel Vilyam Fisher (aka Rudolf Abel) who was arrested in the late 1950s and exchanged in 1962 for CIA spy pilot Francis Gary Powers (shot down over the USSR and captured in May 1960). Former counterterrorism czar Richard Clarke (Against All Enemies: Inside America’s War [New York: Free Press, 2004]) and former CIA director George Tenet (At the Center of the Storm: My Years at the CIA [New York: HarperCollins, 2007]) continue to claim that the U.S. is awash in sleeper cells—a sentiment that is widely echoed in the media: “The law of averages would indicate the near certainty of sleeper cells in the United States,” according to Arnaud de Bourchave, “Terror Wars: The Missing Sleeper Cells,” United Press International (online), May 3, 2007.

5. German Interior Minister Wolfgang Schaeuble in an interview with Der Spiegel, July 9, 2009, http://www.spiegel.de/international/germany/0,1518,493364,00.html.


8. (B = .08, SE = .03, t = 2.69, P = .007).

9. (B = .06, SE = .02, t = 3.05, P = .002).

10. (B = .07, SE = .02, t = 3.25, P = .001).


NO

1. This article updates, develops, and draws upon material in Mueller 2006.
CHAPTER 6: Should the United States or the International Community Aggressively Pursue Nuclear Nonproliferation Policies?


YES

8. For a comprehensive assessment of states that have abandoned prior nuclear weapons aspirations, see Ariel E. Levite, “Never Say Never Again: Nuclear Reversal Revisited,” International Security 27, no. 3 (Winter 2002/2003). Table 1 is updated from this source.

NO

1. States currently possessing nuclear weapons include the United States, Russia, Great Britain, France, China, Israel, India, Pakistan, and North Korea. South Africa, Kazakhstan, Belarus, and Ukraine acquired and then relinquished them.
2. See Waltz’s chapters in Sagan and Waltz 2003 for an in-depth discussion of these claims.
3. See Sagan and Weddle’s chapter in this volume.
4. It should be noted that in his book, *The Limits of Safety* (1993, 11–13), Sagan quite explicitly acknowledges the difficulty of evaluating the risk of an event that has never happened.

5. Indeed, shortly after the September 11, 2001, terrorist attacks, the United States reportedly offered technical nuclear assistance to Pakistan in an effort to prevent its nuclear weapons from falling into terrorist hands (Sanger and Broad 2007).

6. Elsewhere I have argued for precisely such a policy (Sechser 1998).

7. Universal nonproliferation may still be preferable, of course, if one believes that permitting some states to have nuclear weapons would undermine efforts to prevent U.S. adversaries from acquiring them.

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**CHAPTER 7: Is Foreign Military Intervention Justified by Widespread Human Rights Abuses?**


#### YES

1. These and other treaties can be found at http://www2.ohchr.org/english/law/. Up-to-date data on ratification can be found at http://www2.ohchr.org/english/bodies/ratification/index.htm.


#### NO


15. ICISS, Responsibility to Protect, 54–55.


19. Corfu Channel case.


23. Annan, “Address to the General Assembly.”

24. ICISS, Responsibility to Protect.


27. Michael Evans, “Conflict Opens ‘Way to New International Community’: Blair’s Mission,” *The (London) Times*, April 23, 1999. The five criteria were: Are we sure of our case? Have we exhausted all diplomatic options? Are there military options we can sensibly and prudently undertake? Are we prepared for the long term? And do we have national interests involved?

**CHAPTER 8: Can International Regimes be Effective Means to Restrain Carbon Emissions?**

**YES**

2. Kyoto Protocol Art. 2, Sec. 1(a).


15. See George Packer, “Knowing the Enemy; Can Social Scientists Redefine the ‘War on Terror?’” *New Yorker*, December 18, 2006.


1. A “cap-and-trade” system is an innovative way of reducing pollution while providing companies the freedom to find the most cost-effective means of improving their environmental performance, offering incentives to exceed conventional emissions standards if there are cost-effective opportunities to do so. The idea was first adopted in the 1990 Clean Air Act amendments, and while it was highly controversial at the time, it has proven to be quite successful in that context, leading many people to assume—perhaps falsely—that it is the ideal mechanism for reducing greenhouse-gas emissions. The basic idea is simple: Set an overall emissions limit for a given pollutant and industry—say, the total amount of sulfur dioxide emissions that electric power plants on the East Coast can emit—and a target for how much that pollutant should be reduced in order to meet environmental standards. Distribute “emissions credits”—the right to emit a given amount of pollution—to each power plant, and then reduce the number of credits available to plants each year until the desired target is met. Plants that have affordable opportunities to reduce their emissions will do so, freeing up credits that can be sold to other power plants that cannot economically reduce their own emissions. The end result is that overall pollution targets are met while giving companies the flexibility to find the most cost-effective opportunities to cut their...
emissions. The Clean Air Act’s emissions trading system has been effective at reducing the pollutants that cause smog; the analogous system established under the Kyoto Protocol by European nations has not been effective, for complicated reasons having to do with the scale of the system, the technological and economic limitations on companies’ ability to substantially reduce their greenhouse-gas emissions, the difficulty in allocating credits and verifying the value of projects certified to earn emissions-reduction credits, and the lack of meaningful enforcement mechanisms to ensure that countries meet their emissions targets.


4. Ibid, 2.

5. Some people have advocated the use of trade sanctions as a means of compelling participation—by either the United States or China, for example—in an emissions-control regime. Such an approach would, of course, tread on dangerous ground. It is far from clear that such an effort would be legal under the terms of the World Trade Organization; even if the WTO did sanction carbon tariffs, the result could well be a “green trade war” that could do significant damage to free trade without producing the desired effect.


8. The value of the CDM program itself has also been questioned, as there is evidence that many of the credits it issued were essentially fraudulent; see, for instance, Michael W. Wara and David G. Victor, *A Realistic Policy on International Carbon Offsets* (Working Paper #74, Program on Energy and Sustainable Development, Stanford University), http://pesd.stanford.edu.

9. It is actually possible to remove carbon dioxide from the atmosphere, a technique commonly referred to as “air capture”; Professor Klaus Lackner of Columbia University’s Earth Engineering Center has built a prototype of a machine to do just that. This sort of technology may, however, be many decades from being economically feasible for application on a scale sufficient to significantly lower the level of greenhouse gases in the atmosphere.


12. Bjorn Lomborg’s 2007 book, Cool It: The Skeptical Environmentalist’s Guide to Global Warming (New York: Alfred A. Knopf, 2007), provides a detailed and approachable exposition of this argument. Lomborg calls for all nations to spend 0.05 percent of their GDP on research and development of carbon-free energy technologies. This would amount to $25 billion a year in funds for research—a vast increase in spending on this field, while still seven times cheaper than Kyoto, and vastly cheaper than Kyoto’s likely successor.


10. M. Ragwitz and C. Huber, Feed-In Systems in Germany and Spain and a Comparison (Karlsruhe, Germany: Fraunhofer Institut für Systemtechnik und Innovationsforschung, 2005); ranking based on Bradford, op. cit. note 33.


Ministry of External Relations, September 25, 2007).

CHAPTER 10: Should the Wealthy Nations Promote anti-HIV/AIDS Efforts in Poor Nations?

YES

5. To date, the Global Fund has committed US$7.7 billion in 136 countries to support aggressive interventions against all three diseases.
6. PEPFAR provides intensive support in 15 focus countries, mostly in Africa—Botswana, Côte d’Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Vietnam, and Zambia—but also offers lower-level assistance in numerous other countries.
13. Ibid.
18. PEPFAR was authorized under the United States Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003 (Public Law 108-25).


26. Ibid.

27. Ibid.


33. Chin, *AIDS Pandemic*.


35. Ibid.


40. PBS *Frontline*, “Age of AIDS.”

42. Over, “Prevention Failure.”

NO

1. S. Lewis, Race against Time (Toronto: Anansi, 2005).
5. A recent report has pointed out that, within the European Union, funding for health dropped from 7 percent of Overseas Development Assistance in 1996 to 5 percent in 2005, and that “only one third of these commitments were actually disbursed.” Action for Global Health, “An Unhealthy Prognosis: The EC’s Development Funding for Health,” May 2007.
6. See African Union, “Abuja Declaration on HIV/AIDS, Tuberculosis and Other Infectious Diseases, April 2001,” which pledged to set a target of “at least 15% of our annual budgets to the improvement of the health sector.”
9. D. Werner and D. Sanders, Questioning the Solution: The Politics of Primary Health Care and Child Survival (Palo Alto, Calif.: HealthWrights, 1997). The concept of primary health care, which originally rested in human rights, has been starved of imagination and funds. In South Africa, the concept has been perverted and now refers to “health centres” or “clinics” that are “close to the community” but underfunded, ill-equipped, understaffed, and rarely involved in community health promotion. Not surprisingly, a 2007 report by the South African Human Rights Commission (SAHRC) found that “many patients are by-passing clinics and going straight to hospitals. This seems to indicate that despite clinics being geographically accessible, they are unable to meet patient needs.”
12. Ibid., Executive Summary, 12–13.