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LENGTH: 16618 wordsLATCRIT X: CRITICAL APPROACHES TO ECONOMIC IN/JUSTICE: ARTICLE: **Deconstructing the Mythology of Free Trade:** Critical Reflections on Comparative Advantage**NAME:** Carmen G. **Gonzalez*****BIO:** * Associate Professor, Seattle University School of Law. The author would like to thank Amy Sinden, Jack Kirkwood, and Mark Chinen for helpful comments on earlier drafts of this article.**SUMMARY:**

... In September 2003, the Fifth Ministerial meeting of the World Trade Organization (WTO) in Cancun, Mexico, collapsed abruptly as a consequence of bitter disputes between the wealthy, industrialized countries of the North and the less affluent countries of the South over agricultural subsidies. ... " The World Bank report goes on to argue that agricultural trade liberalization in both the North and the South will enable the South to combat poverty and to promote economic development by capitalizing on its comparative advantage in agricultural production. ... For example, one of the consequences of the North American Free Trade Agreement (NAFTA) was a substantial increase in the amount of cheap, subsidized U.S. corn exported to Mexico, which produced a 70 percent decline in Mexican corn prices. ... On the contrary, my work has consistently decried the devastating impact of Northern agricultural subsidies and import barriers on small farmers in the global South, and has called for agricultural trade liberalization in the North as the necessary prerequisite to poverty alleviation in the South. ... By labeling the consequences of trade liberalization as inconvenient "externalities," the proponents of neoliberal orthodoxy trivialize the significant social and environmental consequences associated with the shift of "modern" industrial agriculture from the North to the South as the elimination of Northern subsidies makes agricultural production in the North more expensive. ...

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Introduction

In September 2003, the Fifth Ministerial meeting of the World Trade Organization (WTO) in Cancun, Mexico, collapsed abruptly as a consequence of bitter disputes between the wealthy, industrialized countries of the North and the less affluent countries of the South over agricultural subsidies. ⁿ¹ Claiming that the \$ 300 billion annual subsidies paid by the North to the world's wealthiest farmers undermine the livelihoods of millions of poor farmers in the South, delegates from [*66] Asia, Africa, Latin America and the Caribbean walked out of the negotiations to protest the unwillingness of the United States and the European Union to curtail their massive agricultural subsidies. ⁿ² The negotiations did not resume until the U.S. and the E.U. agreed to curb agricultural protectionism. ⁿ³

Two years later, in November 2005, over 30,000 demonstrators faced chain link fences, police and tear gas at the Summit of the Americas in Mar del Plata, Argentina, to oppose the hemisphere-wide free trade agreement known as the Free Trade Area of the Americas (FTAA). ⁿ⁴ The summit ended without clear agreement among the 34 leaders of Western Hemisphere nations on when and how to resume the stalled FTAA negotiations. ⁿ⁵

These events highlight the growing dissatisfaction in the global South with the rules governing international trade and, more broadly, with the neoliberal economic model promoted through U.S. foreign policy and through multilateral institutions such as the World Bank, the International Monetary Fund (IMF) and the WTO. ⁿ⁶ Popularly known as the "Washington Consensus," this economic model [*67] seeks to open the markets of the global South to foreign competition by imposing a standard package of economic reforms, including, inter alia, trade liberalization, privatization of industry and public services, deregulation, curtailment of government expenditures, elimination of barriers to direct foreign investment, financial liberalization, and enforcement of private property rights. ⁿ⁷

One of the chief criticisms of the neoliberal economic reforms imposed by multilateral trade and financial institutions is that these reforms systematically disadvantage the South by allowing the North to protect its industries while requiring market openness in the nations of the South.ⁿ⁸ Nowhere is this more apparent than in the agricultural sector. While the United States and the European Union lavishly subsidize their farmers and utilize tariffs to protect domestic producers from Southern competitors, the trade rules in the WTO Agreement on Agriculture and the structural adjustment programs mandated by the World Bank and the IMF require Southern nations to open their markets to ruinous competition from highly subsidized U.S. and E.U. producers.ⁿ⁹ The health and safety standards that exclude the agricultural products of the South from Northern markets exacerbate these inequities.ⁿ¹⁰ In other words, "free trade" is a misnomer. The legal regime governing [*68] international agricultural trade institutionalizes a highly uneven playing field by permitting protectionism in the North while requiring Southern nations to open their markets to highly subsidized foreign competition.ⁿ¹¹

As a consequence of this double standard, the United States and the European Union are currently rendering small farmers destitute in Asia, Africa, and Latin America by dumping agricultural products on world markets at below the price of production.ⁿ¹² For example, the U.S. exports cotton at prices 47 percent below the cost of production; wheat at prices 28 percent below the cost of production; rice at prices 26 percent below the cost of production; and corn and soybeans at prices 10 percent below the cost of production.ⁿ¹³ According to a report by the International Food Policy Research Institute, Northern subsidies and import barriers cost Southern countries \$ 24 billion per year in foregone agricultural and agro-industrial income.ⁿ¹⁴ It is hardly surprising that agriculture continues to be one of the most explosive issues in the WTO negotiations.

Many proponents of the neoliberal economic model would accept the above analysis, but would argue that the solution is to "level the playing field" by requiring the North to eliminate agricultural subsidies so as to enable Southern countries to reap the benefits of their "comparative advantage" in agricultural production.ⁿ¹⁵ In other words, the claim is that agricultural trade liberalization, if implemented in an even-handed manner in both the North and the South, would raise living standards and alleviate poverty in the countries of the global South.ⁿ¹⁶ Furthermore, these free [*69] market reforms would also improve environmental quality by eliminating the subsidies that promote the over-exploitation of land and the excessive use of fertilizers and pesticides.ⁿ¹⁷

There is no question that the South would benefit in the short term from the elimination of Northern subsidies and import barriers.ⁿ¹⁸ The phasing-out of protectionism in the United States and the European Union would raise the incomes of Southern farmers, and would give Southern farmers access to lucrative Northern markets.ⁿ¹⁹

However, it would be a mistake to regard trade liberalization in the North as sufficient to address the inequities in the global trading system that maintain the subordinate status of the global South. Applying the same rules to poor countries and wealthy countries will only reinforce the economic dominance of the latter in the absence of efforts to grapple with deeper structural inequities in the global trading system that have their genesis in colonialism.ⁿ²⁰ As explained in Part IV below, the declining terms of trade for agricultural products relative to manufactured goods will perpetuate poverty in agro-exporting Southern countries even if Northern agricultural subsidies and import barriers are eliminated. In order to ensure that specialization and trade genuinely benefit the South, trade liberalization in the North must be accompanied by modifications in the rules governing international trade in order to allow Southern governments to utilize the protectionist tools historically used by the North to achieve economic diversification and industrialization. Rather than being consigned to patterns of agro-export specialization imposed during the colonial period and maintained after political independence, Southern countries must be permitted to utilize tariffs, subsidies and other forms of state intervention in order to promote those industries most likely to contribute to long-term national welfare. In other words, only an asymmetrical set of rules requiring market openness in the North and permitting protectionism in the South can begin to provide redress for the inequities caused by colonial exploitation of the South and by Northern protectionism. These and other recommended reforms of the legal regime governing international trade are discussed at greater length in Part V below.

The notion that "leveling the playing field" by liberalizing trade will benefit both the North and the South is often justified on the basis of the central tenet of neoclassical trade theory: the theory of comparative advantage.ⁿ²¹ This article draws [*70] upon orthodox and heterodox economic analysis in order to highlight some of the limitations of the theory of comparative advantage as applied to the agriculture sector and to explain why "leveling the playing field" by liberalizing agricultural trade in both the North and the South is necessary but not sufficient to address problems of Southern poverty and natural resource degradation. In so doing, the article contributes to the LatCrit literature on globalization and economic injustice,ⁿ²² to the critical literature on economic development,ⁿ²³ and to the broader effort to develop a progressive law and economics literature compatible with the promotion of social justice.

Many of the points made in this article about agricultural trade could easily be translated to other economic sectors. However, I have chosen to focus on agricultural trade because it is central to the economies of the poorest nations in the global South and because it is one of the key issues that threaten to derail the Doha Round of WTO negotiations. Many of the article's observations about the limits of the theory of comparative advantage will be familiar to economists. My goal is not to break new ground in economic theory, but to apply the insights of economists to contemporary debates over agricultural trade policy in a way that is accessible to those with little or no economic training.

The article does not purport to address all of the limitations of the theory of comparative advantageⁿ²⁴ or to critique all of the proponents of neoclassical trade theory.ⁿ²⁵ Rather, the article takes aim at the myths and misconceptions about the [*71] theory of comparative advantage that underlie the neoliberal policy prescriptions of the IMF, World Bank and the WTO (the "Bretton Woods Institutions") in the context of agricultural trade and production.

Part I explains the pivotal role of the theory of comparative advantage in justifying the mythology of free trade. Part II places agricultural trade policy in context by explaining the economic, ecological, and cultural importance of the agricultural sector in the global South. Part III describes the benefits of specialization and trade and discusses two of the most common objections to the trade liberalization agenda of the Bretton Woods Institutions. Part IV critiques certain assumptions underlying the theory of comparative advantage that are particularly relevant to agricultural trade and production. Part V draws upon the critique in Part IV to argue that elimination of Northern protectionism is necessary but insufficient to address the problem of Southern poverty and natural resource degradation. Part V concludes with a discussion of alternative economic strategies designed to enhance the welfare of the global South.

I. Comparative Advantage: Pillar of Free Trade Mythology

The theory of comparative advantage serves as the theoretical justification for the neoliberal economic model advocated by the IMF and the World Bank and promoted by the WTO.ⁿ²⁶ According to the theory of comparative advantage, each country should produce those goods for which it is relatively best suited by virtue of natural or historic circumstances and should trade such goods for those that the country produces less efficiently.ⁿ²⁷ Thus, countries with abundant natural resources and little capital should capitalize on their "comparative advantage" in agricultural production and should trade with other countries for manufactured goods.ⁿ²⁸ Economic specialization, export-oriented trade policy, and the elimination of trade-distorting subsidies and import barriers will promote economic efficiency and will permit each nation to maximize both economic output and aggregate income.ⁿ²⁹ [*72] Neoclassical trade theory thus posits an even playing field, where every country, rich or poor, can benefit from international trade as long as government intervention in the market is either strictly prohibited or limited only to exceptional circumstances.ⁿ³⁰

The theory of comparative advantage plays a central role in legitimizing both the ideology of free trade and the legal edifice erected under the auspices of the WTO to implement that ideology.ⁿ³¹ The underlying assumption of the proponents of trade liberalization is that government intervention in trade and production distorts price signals, thereby leading a country to specialize in products for which it does not have a comparative advantage.ⁿ³² Thus, the two basic principles of WTO/GATT doctrine - the "most favored nation" principle in GATT Article I and the "national treatment" principle in GATT article III - are designed to scale back state intervention in the market by ensuring equal treatment of traded goods regardless of their country of origin.ⁿ³³ Similarly, the GATT's reduction of tariff and non-tariff barriers and prohibition of quotas are designed to promote efficiency by allowing market forces to dictate the flow of goods.ⁿ³⁴

While both neoclassical and heterodox economists have examined the ways in which market failures distort comparative advantage,ⁿ³⁵ proponents of the neoliberal economic model nevertheless embrace the theory of comparative advantage with a quasi-religious fervor.ⁿ³⁶ The mythology of free trade, as embodied in neutral-sounding GATT legal principles, makes trade liberalization seem natural and inevitable, and constrains our ability to envision different economic arrangements designed to promote the interests of the global South. It is therefore imperative for progressive legal scholars to question this dogma in order to promote open debate about alternatives to the neoliberal economic order. In the context of agricultural trade policy, deconstructing the mythology of free trade must begin with an analysis of the economic, ecological, and cultural importance of agricultural production in the global South.

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II. The Role of the Agricultural Sector in the Global South

Many countries in the global South depend on agricultural production as a source of food, income, employment, and foreign exchange earnings. Approximately 2.5 billion rural dwellers in the South rely on agriculture for their livelihoods.ⁿ³⁷ Over 50 Southern nations depend on the export of three or fewer agricultural products for a substantial portion

of their foreign exchange earnings.ⁿ³⁸ Agricultural production is economically significant even in Southern nations with highly diversified economies. In Mexico, for example, corn production alone utilizes 60 percent of the country's cultivated land, provides employment for approximately 3 million farmers (8 percent of the Mexican population and 40 percent of agricultural workers), and supplies the staple food of the Mexican diet.ⁿ³⁹

Agriculture also plays a vital role in the conservation of the biological diversity necessary to safeguard the health and resilience of the world's food supply.ⁿ⁴⁰ The biodiverse cultivation systems characteristic of many small farms throughout the global South preserve countless indigenous crop varieties, promote natural resistance to pests and disease, conserve soil fertility, minimize dependence on harmful agrochemicals, reduce the risk of catastrophic crop failure in the event of a blight, and improve human nutrition by providing a rich array of plants and animals for human consumption.ⁿ⁴¹ Even though thousands of crops have been cultivated since the dawn of agriculture, the world's food supply is currently dangerously dependent on approximately 100 species of food crops.ⁿ⁴² Unsustainable farming practices that erode genetic diversity can lead to irreversible biological losses that destroy the reservoir of genetic resources necessary to recover from serious environmental disturbances.ⁿ⁴³

In addition to producing food, conserving biodiversity, and preserving the long-term resilience of the world's food supply, the biodiverse traditional farming systems of the South provide valuable ecosystem services to local communities. These ecosystem services include water purification, flood protection, wildlife conservation and aesthetically pleasing landscapes.ⁿ⁴⁴

Furthermore, agricultural production plays an important cultural and social role in many Southern nations.ⁿ⁴⁵ For example, corn has been cultivated for thousands of years in Mesoamerica, and is widely used in traditional medicine, religious [*74] ceremonies, and the cuisine of local and indigenous communities.ⁿ⁴⁶ Indeed, cultural diversity and biological diversity are often closely intertwined.ⁿ⁴⁷ All over the world, traditional farmers innovate, experiment and adapt agricultural practices to local conditions while preserving and passing on specialized knowledge about the medicinal, nutritional and other qualities of the diverse plants and plant varieties used by their communities.ⁿ⁴⁸

However, agricultural production also generates significant human health and environmental hazards, particularly when it uses the chemical-intensive, monocultural farming techniques ("industrial agriculture") prevalent in the North and increasingly common in the South.ⁿ⁴⁹ These hazards include exposure to toxic agrochemicals, contamination of water supplies by pesticide and fertilizer runoff, depletion of aquifers, deforestation, erosion of biological diversity, and soil degradation.ⁿ⁵⁰

In short, agricultural production serves important ecological, economic, and social functions. Regrettably, neoclassical trade theory often treats agricultural products as mere commodities and disregards the positive environmental and social externalities of sustainable farming techniques as well as the negative environmental and social externalities of industrial agriculture.ⁿ⁵¹ Furthermore, the proponents of trade liberalization often fail to take into account the ways in which countries that specialize in agro-export production are increasingly marginalized in the global economy.ⁿ⁵² These issues are discussed in greater detail in Part IV below.

III.

"Leveling the Playing Field": A Preliminary Critique

The theory of comparative advantage is theoretically sound when it argues that there are benefits to economic specialization and trade. In general, the theory of comparative advantage is correct that global efficiency is increased when countries produce the goods for which they are relatively best suited and import goods produced more efficiently elsewhere.ⁿ⁵³

However, as a practical matter, reducing state intervention in the market in order to promote specialization and trade in accordance with "comparative advantage" will not necessarily maximize efficiency or improve aggregate social welfare. As explained in Part IV below, specialization and trade can decrease global [*75] efficiency when markets fail to internalize the ecological and social costs of production, when markets are unstable or are subject to monopolistic abuse, when the costs of adjusting to market-induced shifts in production patterns outweigh the benefits, and when countries are obliged to specialize in traditional export products rather than being permitted to elect economic specializations designed to capitalize on contemporary market opportunities. Indeed, unregulated market activity will aggravate Southern poverty and reinforce North/South inequality when world market prices for traditional Southern exports (such as agricultural products and textiles) decline over the long term in relation to the price of imports.

Before elaborating on these examples of market failure and explaining their relevance to contemporary debates about agricultural trade policy, it is useful to highlight two broad critiques of the trade liberalization agenda of the IMF, the World Bank and the WTO. One of the critiques is theoretical. The other is empirical. Both critiques inform the more agriculture-specific market failure discussion in Part IV, but they are also broadly applicable to trade in goods generally.

Drawing upon the insights of critical race theory, the first critique is that free trade orthodoxy perpetuates the subordination of the South under the guise of formal equality.ⁿ⁵⁴ In other words, "leveling the playing field" by promoting free market reforms in both the North and the South is necessary but insufficient to address the problem of Southern poverty. Formal equality among nations with vastly unequal economic power will only reinforce the dominance of the North by failing to address the entrenched economic imbalances rooted in centuries of Northern colonial exploitation and decades of Northern protectionism (most notably in agriculture, steel and textiles).ⁿ⁵⁵ Indeed, some critics have referred to this neoliberal vision of international trade as "international Lochnerism."ⁿ⁵⁶ It seeks to forbid the state from intervening in the "free market" in order to subsidize particular industries or to provide favorable treatment to any particular trading partner - much as Lochnerism forbade the state from interfering with "freedom of contract" in order to limit the hours that employees could be required to work.ⁿ⁵⁷ Thus, the critics contend, a regime of formal equality imposed upon conditions of substantive inequality will inevitably serve the interests of the dominant group at the expense of the subordinated groupⁿ⁵⁸ and will reinforce the privileged position of Northern economic actors in international trade.ⁿ⁵⁹

This critique is consistent with the "structuralist" or "dependency" critiques of certain early postcolonial development scholars based primarily in the global [*76] South.ⁿ⁶⁰ As explained in Part IV below, Northern countries industrialized their economies through the use of subsidies, tariffs and other forms of state intervention while most Southern countries remained locked into poverty as a consequence of the colonial division of labor that relegated them to the production of raw materials for the benefit of the North.ⁿ⁶¹ Postcolonial development scholars advocated state intervention to promote economic diversification and industrialization, pointing out the disadvantages of agro-export specialization.ⁿ⁶² However, once Northern countries diversified and industrialized their economies, they became staunch opponents of state intervention in economic activity.ⁿ⁶³ Thus, even though the North achieved economic prosperity through protectionist means, neoliberal mythology now posits "free trade" as the one and only path to "development." In so doing, neoliberalism uses formal equality ("leveling the playing field" by liberalizing trade in both the North and the South) to perpetuate the economic advantages gained as a result of the colonial division of labor and of the North's current and historic use of economic protectionism. Part IV draws upon this insight in its discussion of static versus dynamic comparative advantage.

A second critique of neoliberal orthodoxy demonstrates through empirical evidence that trade liberalization has exacerbated global inequality by increasing the income gap between the world's poorest and wealthiest denizens.ⁿ⁶⁴ Trade liberalization has had a particularly devastating impact on small farmers in the global South. According to studies conducted by the United Nations Food and Agriculture Organization (FAO) and various non-governmental organizations, agricultural trade liberalization has benefited large export-oriented agricultural enterprises at the expense of small farmers, exacerbated rural poverty and unemployment, and accelerated migration from rural areas.ⁿ⁶⁵ In addition, the export-oriented economic [*77] strategy favored by neoclassical trade theory has imposed serious environmental costs on the South, including the erosion of agrobiodiversity, greater pesticide-related illness, agrochemical contamination of groundwater and surface waters, depletion of local aquifers, deforestation, and soil degradation.ⁿ⁶⁶

Proponents of trade liberalization would assert, however, that its negative effects in the agricultural sector are due to the high levels of agricultural protectionism in the North and in certain countries of the South.ⁿ⁶⁷ Indeed, a recent report published by the World Bank candidly acknowledged that "a development strategy based on agricultural commodity exports is likely to be impoverishing in the current agricultural policy environment in which policymakers in many countries have mercantilist and protectionist reflexes that, when aggregated, compromise world trade in agricultural and food products."ⁿ⁶⁸ The World Bank report goes on to argue that agricultural trade liberalization in both the North and the South will enable the South to combat poverty and to promote economic development by capitalizing on its comparative advantage in agricultural production.ⁿ⁶⁹

This position, in a nutshell, is what the remainder of this article seeks to refute. While this article emphatically agrees that eliminating Northern protectionism is essential to the economic well-being of the South, it argues that additional reform of the rules governing international trade is necessary in order to address the underlying structural inequities that perpetuate Southern poverty and promote environmental degradation. In particular, this article argues that Southern countries must be permitted to diversify and industrialize their economies using the same protectionist instruments historically employed by the North to achieve economic prosperity. Furthermore, the rules governing interna-

tional trade in agricultural products must address market distortions caused by the domination of agricultural trade by a handful of multinational corporations. Finally, the rules governing international trade must be harmonized with legal obligations arising under international environmental and human rights treaties - particularly the obligation to preserve biodiversity and the fundamental right to food.

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IV. Deconstructing Neoclassical Trade Theory: the Limits of Comparative Advantage

Contrary to the assertions of the World Bank, an economic strategy based on "comparative advantage" in agricultural production will not alleviate poverty or bring prosperity even if Northern subsidies and import barriers are lifted. Indeed, trade liberalization in the North is likely to accelerate the degradation of the natural resource base necessary for agricultural production, and intensify Southern poverty in the long run for the six reasons discussed below.

First, countries that rely on their "comparative advantage" in agro-export production are disadvantaged in the global economy as a consequence of the declining terms of trade for agricultural products vis-a-vis manufactured goods and the historic volatility of agricultural commodity markets.ⁿ⁷⁰ Second, neoclassical trade theory frequently relegates the nations of the global South to economic specialization in their traditional exports - even if this specialization was imposed rather than chosen and even if it is disadvantageous under current market conditions.ⁿ⁷¹ By focusing on static rather than dynamic comparative advantage and by precluding governmental intervention in the market to create new comparative advantages, the predominant interpretation of the theory of comparative advantage deprives the South of the state interventionist tools used by Northern nations to diversify and industrialize their economies.ⁿ⁷² Third, the theory of comparative advantage assumes perfect competitionⁿ⁷³ and thereby fails to take into account market distortions caused by the dominant role of transnational corporations in global agricultural trade.ⁿ⁷⁴ Fourth, the failure of market prices to reflect social and environmental externalities results in a mis-identification of comparative advantage and in an international division of labor that exacerbates poverty and environmental degradation.ⁿ⁷⁵ Fifth, neoclassical trade theory frequently underestimates the costs of adjusting to the economic dislocations caused by shifting patterns of economic specialization.ⁿ⁷⁶ Finally, the economic specialization promoted by neoclassical trade theory is inherently incompatible with the biological diversity necessary to promote agroecosystem health.ⁿ⁷⁷

A. Volatility and Long Term Decline in the Terms of Trade for Agricultural Commodities

The deterioration in the terms of trade for agricultural products in relation to manufactured goods, described approximately 50 years ago by economists Raul [*79] Prebisch and Hans Singer, and confirmed by subsequent data,ⁿ⁷⁸ has generated severe economic losses and mounting debt in much of the global South.ⁿ⁷⁹ For example, the terms of trade between agricultural commodities and manufactured goods declined by more than forty percent between 1980 and 1998, and agricultural prices fluctuated significantly during this period.ⁿ⁸⁰ As a result, countries that specialize in agro-export production were deprived of the stable and steady revenue streams necessary for productive investment and for the purchase of goods not produced domestically.ⁿ⁸¹

Economic specialization in agro-export production is closely correlated with poverty and undernourishment.ⁿ⁸² The most food insecure countries in the global South are those that divert prime agricultural lands to export production and rely on a small number of agricultural exports to generate the foreign exchange earnings necessary to import the foods required for domestic consumption.ⁿ⁸³ Approximately 43 countries in sub-Saharan Africa, Latin America and the Caribbean depend on agricultural exports for over fifty percent of export revenues, and depend on a single agricultural commodity to generate over twenty percent of total foreign exchange earnings.ⁿ⁸⁴ These countries are far more vulnerable to market-related and weather-induced economic shocks than countries with highly diversified economies. Poor harvests, adverse weather conditions, market volatility and declining agricultural prices can interfere with the ability of these countries to purchase food and other essential items on world markets.ⁿ⁸⁵ Economic diversification and industrialization are thus necessary to promote food security and poverty alleviation.ⁿ⁸⁶

Notwithstanding the economic vulnerability associated with agro-export specialization, the structural adjustment programs imposed by the World Bank and the IMF on debtor nations have promoted comparative advantage in agricultural production as a means of earning the revenue with which to service debt, thus [*80] impeding economic diversification and industrialization.ⁿ⁸⁷ Ironically, structural adjustment has depressed the export earnings of debtor nations by glutting world agricultural markets and causing agricultural commodity prices to decline.ⁿ⁸⁸ The emphasis by the World Bank and the IMF on agro-export specialization has been disastrous for the global South. In sub-Saharan Africa, for

example, the terms of trade for agricultural products have been declining at an alarming rate since 1980, resulting in deteriorating balance of payments, quadrupling of debt, declining standards of living, and growing hunger.ⁿ⁸⁹

Regrettably, the World Bank continues to endorse agro-export specialization as a viable economic strategy, provided that both the North and the South eliminate agricultural subsidies and import barriers.ⁿ⁹⁰ In the recent World Bank report discussed in Part III of this article,ⁿ⁹¹ the World Bank acknowledges that most successful developing countries do not rely on agro-export production to finance economic development, and even concedes that an agro-export-led development strategy is likely to be impoverishing in the current protectionist economic climate.ⁿ⁹² The report, however, does not address the World Bank's historic role in promoting the very agro-export specialization that the report now finds impoverishing; nor does the report discuss the declining terms of trade for agricultural commodities in relation to manufactured goods. It is unclear whether the authors of the World Bank report believe that agricultural trade liberalization will reverse the long-term decline in the terms of trade for agricultural commodities or whether the failure to address this issue is an analytical oversight. Since the elimination of agricultural protectionism will not address the factors cited in the economics literature for the long-term decline in agricultural commodity prices relative to manufactured goods, it appears unlikely that the agro-export specialization advocated by the World Bank will prove to be a viable economic strategy.ⁿ⁹³ The World Bank report is a classic example of the neoliberal orthodoxy that this article seeks to deconstruct.

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B. Static Versus Dynamic Comparative Advantage: Reinforcing the Colonial Legacy

The patterns of trade and production that produce poverty and undernourishment in the global South have their origins in colonialism.ⁿ⁹⁴ Postcolonial development scholars have long pointed out that European economic prosperity was predicated on the "underdevelopment" of the non-European world via conquest, colonial domination, and exploitation of the peoples and resources of the conquered societies.ⁿ⁹⁵ The transfer of raw materials from the colonized "periphery" (South) to the colonizing "core"(North) created economic prosperity in the North and economic stagnation in the South.ⁿ⁹⁶ The penetration of capitalism "underdeveloped" the South by extracting indigenous resources, disrupting indigenous social, economic and political systems, and transforming self-reliant subsistence economies into economic satellites of the North that were dependent on exporting raw materials and importing manufactured goods.ⁿ⁹⁷ After political independence, this regime continued; many countries in the global South continued to specialize in agro-export production and to import manufactured goods.ⁿ⁹⁸

From this postcolonial critical perspective, the agricultural trade liberalization advocated by the World Bank may benefit the South in the short run, but will ultimately perpetuate the economic dominance of the North by reinforcing agro-export specialization rather than promoting economic diversification and industrialization. Rather than encouraging Southern countries to employ state intervention to create new comparative advantages in industries that promise long-term rewards under contemporary market conditions, the World Bank report appears to endorse a static conception of comparative advantage that would replicate patterns of production imposed during the colonial era.ⁿ⁹⁹

Specifically, the World Bank's endorsement of agricultural trade liberalization fails to take into account the concessions that the South will likely have to make in order to persuade the United States and the European Union to phase out agricultural subsidies and tariff barriers. For example, in the WTO negotiations on non-agricultural market access, the North is pressing the South to substantially reduce tariffs on manufactured goods.ⁿ¹⁰⁰ Indeed, India and Brazil recently agreed to open their markets to Northern manufactured goods and services in exchange for **[*82]** additional liberalization of Northern agricultural markets.ⁿ¹⁰¹ Such concessions may deprive the South of badly needed tariff revenues, while exposing the South to de-industrialization and loss of jobs if goods produced by local industries are unable to compete with Northern imports.ⁿ¹⁰²

In essence, the objective of trade liberalization is to limit the ability of states to protect or promote domestic industries on the theory that state intervention distorts comparative advantage and produces inefficiency.ⁿ¹⁰³ The proponents of trade liberalization attribute the economic success of the North to liberalized trade and financial flows, and argue that these policies will likewise benefit the South.ⁿ¹⁰⁴ However, the historical record suggests otherwise.ⁿ¹⁰⁵ Contrary to the free market prescriptions of the IMF, the World Bank and the WTO, nearly all Northern countries (including the United States, Germany, France, Japan, and the United Kingdom) successfully diversified and industrialized their economies through a broad array of interventionist industrial, trade, and financial measures that included tariffs, subsidies, state financing of important industries, and even state-sponsored acquisition of intellectual property through industrial espionage.ⁿ¹⁰⁶ Most recently, the Newly Industrializing Countries of South Korea and Taiwan created new comparative advantages in high productivity industries through the use of tariffs, subsidies, technology transfer requirements, and regu-

lation of foreign investment.ⁿ¹⁰⁷ All over the global South, the countries that rapidly industrialized in the aftermath of the Second World War (such as Brazil, Chile, Mexico, India, and China) did so through selective industrial policy - the use of a combination of state intervention and market incentives in order to promote those industries most likely to contribute to long-term national economic welfare.ⁿ¹⁰⁸

Under the guise of "leveling the playing field," the free market reforms advocated by international trade and financial institutions threaten to exacerbate Southern poverty by prohibiting or phasing out the protectionist instruments historically used by the North and by certain middle-income countries in the South to achieve economic prosperity. The justification for these free market reforms is a static notion of comparative advantage that would consign much of the South to traditional agro-export production even though it is highly disadvantageous for the reasons noted in the preceding section. In order to develop policy alternatives designed to promote the economic welfare of the global South, it is important to [*83] replace the static version of comparative advantage with a dynamic version that is responsive to present day market conditions and is grounded in historical fact rather than popular myth about how the North acquired its economic might. In short, the South must be permitted to intervene in the economy in order to promote those industries most likely to enhance long-term national economic welfare based on contemporary market opportunities (as opposed to historically imposed patterns of raw material production) and based on each country's unique endowment of natural and human resources.ⁿ¹⁰⁹

C. Distortions in Market Prices Caused by Monopolistic and Quasi-Monopolistic Practices

Neoclassical trade theory assumes perfect competition and may therefore neglect to account for distortions in market prices resulting from the monopolization of trade and production in certain industries.ⁿ¹¹⁰ Agricultural trade is not conducted by countries or farmers.ⁿ¹¹¹ Rather, vertically integrated corporations dominate almost every aspect of the production and distribution of agricultural products - from the sale of inputs (seeds, fertilizers, pesticides and equipment) to the processing, shipping and marketing of agricultural output.ⁿ¹¹² For example, over seventy-five percent of the global pesticide market is controlled by five agrochemical companies.ⁿ¹¹³ Five grain trading corporations control over 75 percent of the world's cereals trade.ⁿ¹¹⁴ Similar market concentrations exist for other commodities, including coffee, cocoa, tea, bananas, sugar, and pineapples.ⁿ¹¹⁵ The market power of these corporations allows them to extract high prices for key agricultural inputs and to dictate prices for agricultural outputs - to the detriment of small farmers who are essentially price-takers trapped between powerful transnational enterprises.ⁿ¹¹⁶ Thus, market prices reflect the power of these transnational actors rather than the true costs of production in the North or the South.

In its recent report on agricultural trade and developing countries, the World Bank quantifies the benefits of agricultural trade liberalization, and analyzes the likely distribution of these benefits between the North and the South.ⁿ¹¹⁷ Concluding that virtually all of the anticipated income gains in the South from agricultural trade liberalization will be due to the removal of Northern tariff barriers, the World Bank report identifies Southern farmers as the likely beneficiaries of greater access to Northern markets.ⁿ¹¹⁸ However, since transnational corporations and large domestic agro-exporters control most of this export trade, it is unclear how much of the benefit will be retained by these large trading enterprises and how much will actually trickle [*84] down to small farmers and to governments in the global South.ⁿ¹¹⁹ For example, in the banana industry, the European-based banana marketing corporations earn approximately 12 dollars for every one dollar earned by Caribbean countries on banana exports.ⁿ¹²⁰ In short, neoclassical trade theory presents a misleading picture of the benefits of agricultural trade liberalization in the global South to the extent that it fails to account for the domination of agricultural trade (on both the input and output end) by a handful of transnational corporations.

In addition, the neoliberal economic reforms promoted by the World Bank, the IMF, and the WTO deprive Southern governments of the ability to mitigate the power of transnational agribusiness because these reforms prohibit or restrict the use of subsidies and import barriers to nurture domestic agro-export enterprises and to protect domestic farmers from foreign competition.ⁿ¹²¹ The agricultural trade liberalization promoted by the proponents of neoliberalism serves to reinforce the economic dominance of transnational agribusiness, by ignoring the market distortions caused by the domination of agricultural trade by a handful of transnational corporations and by depriving the South of important tools to mitigate the power of these enterprises.

D. Failure to Incorporate Environmental and Social Externalities

Neoclassical trade theory distorts comparative advantage by failing to take into account the environmental and social costs of production. For example, one of the consequences of the North American Free Trade Agreement (NAFTA) was a substantial increase in the amount of cheap, subsidized U.S. corn exported to Mexico, which produced a 70 percent

decline in Mexican corn prices.ⁿ¹²² The increase in exports was so dramatic that by the year 2000, Mexico had become the second most important export market for U.S. corn after Japan.ⁿ¹²³

For the United States, the increase in corn exports was accompanied by an increase in serious environmental externalities not reflected in the price of corn, including soil erosion, high levels of agrochemical use, water pollution due to pesticide and fertilizer runoff, unsustainable water utilization for irrigation, loss of biodiversity resulting from the conversion of grasslands and wetlands to agricultural use, and risks associated with the increased cultivation of genetically modified corn.ⁿ¹²⁴

For Mexico, the most significant social externality was the increase in rural poverty and unemployment resulting from the precipitous drop in corn prices, which, in turn, accelerated migration from rural areas and threatened the integrity of [*85] indigenous and local farming communities.ⁿ¹²⁵ The most significant environmental externality was the threat to agrobiodiversity resulting from the out-migration of the farmers who cultivate Mexico's enormously diverse indigenous corn varieties and the displacement of these traditional rain-fed corn varieties by other crops or by commercially available, non-native corn varieties.ⁿ¹²⁶ An additional threat to agrobiodiversity was the possibility that genetically modified corn crops might cross-pollinate with Mexico's indigenous varieties, thereby producing genetic contamination potentially detrimental to Mexican corn or to beneficial organisms in the ecosystem.ⁿ¹²⁷ Mexico responded to this threat by declaring a moratorium on the planting of genetically modified corn seeds in 1998.ⁿ¹²⁸ Nevertheless, genetically modified corn has been found in Mexican fields, sparking widespread scientific debate and public alarm about genetic contamination.ⁿ¹²⁹

The commercial price for U.S. corn underestimates the true social costs of corn production by failing to internalize the environmental costs discussed above. Conversely, the commercial price for Mexican corn fails to internalize the social and environmental benefits of traditional corn cultivation, including the well-being of Mexico's indigenous and traditional farming communities and the importance for Mexico and for the world's food supply of conserving Mexico's diverse corn varieties.

Economist James Boyce has referred to this phenomenon as the "globalization of market failure."ⁿ¹³⁰ Market failures in the United States interact with market failures in Mexico to create a price structure that misidentifies the United States as the most efficient corn producer, thereby increasing environmental damage in the United States, undermining the sustainable livelihoods of local and indigenous communities in Mexico, and jeopardizing an irreplaceable public good - Mexico's reservoir of genetic diversity.ⁿ¹³¹ Liberalized trade based on commercial [*86] prices rather than on true social and environmental costs can thus promote global inefficiency - a result that exacerbates both poverty and environmental degradation.

E. Failure to Fully Account for the Costs of Adjusting to Dislocations Caused by Trade Liberalization

Some economists advocate neoliberal economic reforms on the assumption that countries can easily adjust to economic dislocations occasioned by trade liberalization (such as loss of jobs, firms, and entire industries) because the overall benefits of trade liberalization will outweigh the costs.ⁿ¹³² Thus, they argue, Mexican farmers rendered destitute by falling corn prices should migrate to the cities and find alternative employment. As the World Bank emphasizes, liberalization of agricultural commodity markets will inevitably produce winners and losers and will require the losers to find alternative ways of earning a living.ⁿ¹³³ According to the theory developed by neoclassical economists Eli Heckscher and Bertil Ohlin, increased trade should bring increased demand for goods that use inputs in which a country has a comparative advantage.ⁿ¹³⁴ In countries where unskilled labor is relatively abundant, trade liberalization should produce an increase in demand for this labor, thereby producing greater opportunities for those displaced from agricultural production.ⁿ¹³⁵

Regrettably, these assumptions fail to take into account the consequences of the enormous transformation that has taken place in the rural areas of the South in recent decades.ⁿ¹³⁶ The remainder of this section explains this rural transformation and discusses its implications for the Heckscher-Ohlin theory.

The Green Revolutionⁿ¹³⁷ and the export-oriented agricultural policies adopted by many countries in the global South to service the foreign debt have driven billions of farmers off the land and into urban slums.ⁿ¹³⁸ Both the Green Revolution and the export-oriented policies favored by advocates of the theory of comparative advantage tend to benefit large agro-exporting enterprises at the expense of small farmers because they require expensive inputs such as synthetic fertilizers, chemical pesticides, and irrigation equipment unaffordable to most small [*87] producers.ⁿ¹³⁹ In addition, the surplus agricultural production resulting from the Green Revolution's high-yielding varieties tended to depress agri-

cultural commodity prices and to deprive small farmers of the income needed to purchase agricultural inputs, pay taxes, and purchase goods not produced on the farm - causing many to abandon the land.ⁿ¹⁴⁰

By contrast, wealthy farmers generally benefit from policies that favor export-oriented production because they have better access to capital and are often provided with tax breaks, subsidized credit, and other economic incentives designed to promote cash crop production.ⁿ¹⁴¹ As cash crop production causes land values to rise, landowners raise rents, evict squatters, and terminate tenancy and sharecropping arrangements in order to expand the land under cash crop cultivation - by either growing the crops themselves or by leasing the land to more affluent farmers who can produce these lucrative crops.ⁿ¹⁴² The rise in land values creates incentives for wealthy farmers to expand their landholdings by acquiring land from poor farmers who lack the capital required for export production.ⁿ¹⁴³ Finally, to the extent that bilateral and multilateral trade agreements and IMF and World Bank loan conditionalities require Southern countries to relax restrictions on foreign land ownership, transnational corporations often participate in the land grab, thereby accelerating the exodus of poor farmers from the countryside.ⁿ¹⁴⁴

The exodus from rural areas in recent decades has been so great that unemployment in the global South is rising rather than falling and real wages continue to decline.ⁿ¹⁴⁵ Even in Mexico, a middle-income Southern country, job creation in the manufacturing sector has not kept pace with the post-NAFTA exodus from agriculture, thereby negating the beneficial effects on of trade liberalization on employment and wages predicted by the Heckscher-Ohlin theory.ⁿ¹⁴⁶ As the Mexican example illustrates, trade liberalization has failed to deliver the promised wage and employment benefits in the global South. This failure underscores the limitations of de-contextualized economic theories (such as the Heckscher-Ohlin theory) that neglect to consider historical contexts and real-world economic and political dynamics.ⁿ¹⁴⁷

Unfortunately, the World Bank continues to prescribe agro-export production based on comparative advantage as a way of "modernizing" agricultural [*88] production in the South.ⁿ¹⁴⁸ Ignoring the real-world impact of "modern," export-oriented agricultural production, the World Bank's recommendations will exacerbate rural inequality and will perpetuate the exodus of poor farmers to the cities.ⁿ¹⁴⁹ This, in turn, is likely to overwhelm the capacity of Southern governments to provide jobs and housing, accelerating migration to the North.

F. Biodiversity and the Problem of Export Monocultures

As explained in Part II of this article, biological diversity is necessary for the resilience of the world's food supply and for the health of local ecosystems.ⁿ¹⁵⁰ Industrial agriculture (as opposed to both traditional and modern farming systems that cultivate diverse crops and diverse varieties of a particular crop) increases susceptibility to pests and disease, depletes the soil of vital nutrients, promotes reliance on chemical pesticides and fertilizers, increases the risk of catastrophic crop failure in the event of ecological disturbances (such as droughts and blights), and impairs human nutrition by reducing the variety of foods consumed.ⁿ¹⁵¹ Thus, economic policies that directly or indirectly promote monocultural production techniques jeopardize the biological diversity necessary for ecosystem health.

Neoclassical trade theory promotes economic specialization in goods in which a particular country possesses a comparative advantage. For countries well-suited to agricultural production, neoclassical trade theory would counsel specialization in a handful of primary agricultural commodities and importation of manufactured goods produced in other countries.ⁿ¹⁵² By extending the principle of specialization from the factory to the field, neoclassical trade theory runs afoul of the biological diversity necessary to preserve the health and long-term productivity of agroecosystems.ⁿ¹⁵³ While it is understandable that David Ricardo, writing in the early 19th century, might not be familiar with the contemporary principles of ecology, it is alarming that the dominant model of agricultural production in the 21st century in the North (and increasingly in the South) is one that breeds uniform, high-yielding crops utilizing enormous amounts of agrochemicals in monocultural farming systems.ⁿ¹⁵⁴

The Northern agricultural model was extended to the South in successive stages. Export-oriented agricultural production was introduced in Asia, Africa and Latin America during the colonial period as a means of supplying the colonizing powers with raw materials, and it remained in place in much of the South after political independence.ⁿ¹⁵⁵ In the aftermath of World War II, the Green Revolution extended monocultural production techniques from cash crops to food crops, and [*89] encouraged farmers throughout the South to abandon traditional biodiverse cultivation techniques in favor of uniform seeds that produced high yields in conjunction with synthetic fertilizers, chemical pesticides, and irrigation.ⁿ¹⁵⁶ Finally, the export-oriented agricultural trade and production strategies mandated by the IMF and the World Bank beginning in the 1980s to boost the foreign exchange earnings available to service the foreign debt played an important role in the rapid expansion of industrial agriculture in the South.ⁿ¹⁵⁷ The spread of industrial agriculture from the

North to the South has resulted in the loss of thousands of traditional crop varieties, higher levels of pesticide-related illness, agrochemical contamination of water supplies, and depletion of aquifers.ⁿ¹⁵⁸

The World Bank acknowledges that agricultural trade liberalization will result in a shift of agricultural production from the North to the South.ⁿ¹⁵⁹ The World Bank applauds this development and argues that the additional revenue resulting from trade liberalization will boost rural incomes and provide developing countries with the means to "modernize farming practices."ⁿ¹⁶⁰ Unfortunately, the expansion of "modern" industrial agriculture in the South is likely to be accompanied by the negative environmental externalities described in this section and by the negative social externalities (greater poverty and inequality) described in the preceding section, neither of which will be reflected in commodity prices. It would therefore be a mistake to view this shift in production as "efficient" or "welfare-enhancing."ⁿ¹⁶¹

V. Beyond Trade Liberalization: An Agenda for the South

The foregoing critique of the theory of comparative advantage, as applied to the agricultural sector by the proponents of neoliberal economic orthodoxy, must not be construed as a defense of Northern protectionism. On the contrary, my work has consistently decried the devastating impact of Northern agricultural subsidies and import barriers on small farmers in the global South, and has called for agricultural trade liberalization in the North as the necessary prerequisite to poverty alleviation in the South.ⁿ¹⁶² Agricultural trade liberalization is necessary to advance the interests of [*90] the global South, but it is by no means sufficient to overcome the economic dislocation produced by centuries of colonial exploitation and decades of Northern protectionism.ⁿ¹⁶³

The critique of comparative advantage forth in this article underscores the importance of grounding economic theory in history rather than myth and making certain that it responds to contemporary challenges, including extreme economic inequality, severe environmental damage, and the enormous economic power of transnational corporations.

The advocates of the neoliberal economic model are engaged in a relentless battle to erase history - both the history of the South's economic subordination and the history of the North's use of protectionist instruments to achieve economic prosperity. It is therefore vitally important for progressive legal scholars to explain that the South's "comparative advantage" in agricultural production was imposed rather than chosen and that it leads inexorably to poverty rather than prosperity as a consequence of the declining terms of trade for agricultural products. Similarly, it is important for progressive legal scholars to shatter the myth that the North's economic dominance is the product of free trade and free capital flows. Such mythology is very dangerous in that it obscures the colonial and postcolonial plunder of the South's resources and justifies depriving the South of the ability to promote economic diversification and industrialization through the very same protectionist instruments used by the North achieve economic prosperity.

Without historical context, the neoliberal call for "leveling the playing field" by liberalizing agricultural trade in both the North and the South possesses the inherent appeal of formal equality. Without historical context, the neoliberal prescription that the South capitalize on its comparative advantage in agricultural production likewise appears logical and pragmatic. However, the historical context makes it evident that trade liberalization in the North, while beneficial to Southern farmers in the short term, will ultimately reinforce Southern poverty if unaccompanied by measures designed to mitigate the advantage conferred on the North by the colonial enterprise and by decades of agricultural and industrial protectionism. These measures should consist of some combination of economic reparations (such as unconditional debt forgiveness) as well as the right of Southern countries to utilize protectionism to promote those industries most likely to enhance long-term national economic welfare based on contemporary market conditions.

The advocates of the neoliberal economic model are also at war with contemporary social and ecological reality. By labeling the consequences of trade liberalization as inconvenient "externalities," the proponents of neoliberal orthodoxy trivialize the significant social and environmental consequences associated with the shift of "modern" industrial agriculture from the North to the South as the elimination of Northern subsidies makes agricultural production in the North more expensive. These consequences include disruption of traditional and indigenous farming communities, massive unemployment, migration to urban areas ill-equipped to absorb displaced rural dwellers, loss of biological diversity, soil degradation, increased human exposure to toxic agrochemicals, contamination of water supplies by pesticides and fertilizers, and depletion of local aquifers.

[*91] As explained in Part IV of this article, trade liberalization will not promote efficiency as long as the environmental and social costs of production are not reflected in market prices. Furthermore, the economic specialization promoted by the theory of comparative advantage must be reconciled with the ecological imperative of preserving biodiversity to foster long-term agricultural productivity. Finally, the economic specialization advocated by neoclassical trade theory must be reconciled with the social and political reality. The Green Revolution and the agro-export-oriented

policies promoted by the World Bank and the IMF provoked such an exodus from the countryside in many countries of the global South that the beneficial effects of trade liberalization predicted by Heckscher and Ohlin have failed to materialize.

Rather than recommending further trade liberalization in accordance with abstract theories and one-size-fits-all economic models, it is important to tailor policy recommendations to the concrete social and ecological challenges facing the global South. For example, countries with a large rural population and an abundance of unskilled labor may be better served by labor intensive ecologically sustainable agricultural production than by "modern" capital-intensive ecologically harmful industrial agriculture. In addition to generating rural employment and protecting the natural resource base necessary for food production, environmentally friendly farming techniques have demonstrably boosted food production in Asia, Africa and Latin America.ⁿ¹⁶⁴

Finally, by seeking to limit government intervention in the economy without addressing the distortions in global agricultural markets caused by transnational corporations, neoliberal orthodoxy perpetuates the domination of agricultural trade by transnational agribusiness. Trade liberalization, even if applied in an even-handed manner in the North and the South, limits the ability of Southern governments to use subsidies and tariffs to protect domestic farmers and promote domestic agro-export industries. In so doing, trade liberalization reinforces the economic power of transnational agribusiness at the expense of governments and small farmers in the global South. A legal strategy designed to mitigate the economic power of the North must necessarily target the concentration of corporate power that can lead to monopolistic abuse.

Based on the foregoing analysis, it is possible to develop three general recommendations that will advance the interests of the global South in the ongoing Doha Round of WTO negotiations.

First, reform of international trade policy must begin by recognizing the multi-functionality of the agricultural sector. Agricultural production provides food, income, employment, and foreign exchange earnings for billions of rural dwellers in the global South. It also provides important ecosystem services (such as water purification, flood protection and wildlife conservation), and plays an important role in the conservation of the biological diversity essential to the integrity of the world's food supply. Indeed, biological diversity and cultural diversity are often closely linked due to the important role of local and indigenous farming communities in the [*92] conservation of the world's agrobiodiversity.

Because agricultural production plays an important role in meeting basic human rights (such as the right to food and the right to cultural diversity) and in protecting biodiversity, it is important to reconcile the rules governing international trade in agricultural products with environmental law and human rights law. For example, the right to food is recognized as a basic human right in the Universal Declaration of Human Rightsⁿ¹⁶⁵ and in the Covenant on Economic, Social and Cultural Rights.ⁿ¹⁶⁶ The obligation of states to protect biodiversity and to protect and preserve the traditional practices and lifestyles of indigenous and local communities is enshrined in the Convention on Biological Diversity.ⁿ¹⁶⁷ The right to cultural diversity is also recognized in the International Covenant on Civil and Political Rightsⁿ¹⁶⁸ and in the International Labor Organization Convention (No. 169) Concerning Indigenous and Tribal Peoples in Independent Countries.ⁿ¹⁶⁹ International trade law must be harmonized with these and other legal obligations, and Southern countries must continue to insist that food security, rural development, cultural integrity, and biodiversity protection be central rather than peripheral considerations in the Doha Round of WTO negotiations.

Second, food security and poverty alleviation in the South require economic diversification and industrialization. Eliminating agricultural protectionism in the North is an important first step in a larger reform agenda, but it will not be sufficient to advance the interests of the global South unless restrictions on both industrial and agricultural protectionism are lifted for the benefit of Southern countries. Rather than impeding the ability of Southern governments to intervene in the market in order to create their comparative advantage, the rules governing global trade must encourage the South to utilize subsidies, tariffs and other forms of state intervention in order to nurture infant domestic industries, promote food security, protect the environment, preserve the livelihoods of local and indigenous rural communities, and forge dynamic links between foreign investment and the local economy.

Third, the rules governing international trade should address distortions in global agricultural markets caused by the concentration of market power in a handful of transnational corporations. By ignoring the distortions caused by market concentration in the agricultural sector while limiting the ability of developing countries to utilize tariffs and subsidies to protect domestic farmers or to promote infant agro-export industries, the rules governing international agricultural trade currently reinforce the economic dominance of transnational agribusiness at the expense of the South, particularly the Southern poor.

[*93]

Conclusion

This article has employed insights from neoclassical and heterodox economics to critique the theory of comparative advantage as applied to the agricultural sector by certain proponents of the neoliberal economic model. The article has argued that progressive legal scholars need to draw upon economic theory in order to deepen their critique of the free market fundamentalism that underlies the policy prescriptions of the IMF, the World Bank, and the WTO, and in order to develop alternative economic and legal strategies designed to promote social justice and environmental protection. While the article uses agriculture as an example, its basic approach is broadly applicable to other economic sectors.

Legal Topics:

For related research and practice materials, see the following legal topics:

International Law Authority to Regulate Anticompetitive Activities International Trade Law Imports & Exports Duties, Fees & Taxes General Overview International Trade Law State Legislation General Overview

FOOTNOTES:

n1. See e.g., Elizabeth Becker, *Poorer Countries Pull Out of Talks Over World Trade*, NY Times, Sept. 15, 2003, at A1. The terms North and South are used in this article to refer to wealthy, industrialized countries and poor, developing countries, respectively. The article deliberately adopts the South-North distinction in lieu of the more conventional division of the world between developing countries and developed countries in order to avoid the negative connotations of the discourse of "development." Since its emergence in the aftermath of World War II, "development" discourse and "development" projects and institutions have been used to justify and to perpetuate the economic and political dominance of the North over the South. Indeed, the very notion of the South as less "developed" and in need of Northern "development assistance" implies inferiority and inadequacy without a reference to the histories of Northern colonization and exploitation that have produced poverty, social dislocation, and natural resource degradation in many Southern countries. See, e.g., Arturo Escobar, *Encountering Development: The Making and Unmaking of the Third World* 22-24 (1995); Ruth E. Gordon & Jon H. Sylvester, *Deconstructing Development*, 22 WIS. INT'L L.J. 1 (2004); Tayyab Mahmud, *Postcolonial Imaginaries: Alternative Development or Alternatives to Development?*, 9 *Transnat'l L. & Contemp. Probs.* 25 (1999). However, like all binaries, the South/North distinction is imprecise and obscures the enormous heterogeneity of the countries that constitute the global South. Nevertheless, the South/North distinction is analytically useful due to certain important historic and contemporary commonalities among the countries of the global South. First, nearly all Southern nations experienced the ravages of colonialism. Second, nearly all Southern countries are burdened by debt service to the North and have adopted export-oriented economic policies that rely on agricultural production to generate foreign exchange earnings. See, e.g., Peter & Susan Calvert, *The South, The North and the Environment* 5-15 (1999). Third, Southern countries are disproportionately affected by natural resource degradation, which threatens to impede efforts to combat poverty, disease, and hunger. United Nations Millennium Ecosystem Assessment 16-17, 90-99 (2005), available at <http://www.millenniumassessment.org>. Finally, multilateral trade and environmental agreements frequently prescribe different obligations depending on whether a country is classified as "developed" or "developing." This distinction is therefore necessary in order to describe and analyze the negotiation and implementation of these agreements. See, e.g., Christopher D. Stone, *Common But Differentiated Responsibilities in International Law*, 98 Am. J. Int'l L. 276, 279-80 (2004); Peter Lichtenbaum, *"Special Treatment" vs. "Equal Participation": Striking a Balance in the Doha Negotiations*, 17 Am. U. Int'l L. Rev. 1003, 1007-09 (2002).

n2. See Becker, *supra* note 1, at A1; Gretchen Peters, *In Cancun, a Blow to World Trade*, Christian Science Monitor, Sept. 16, 2003, at 6; Teo Ballve, *Globalizing Resistance in Cancun*, 37 *Nacla Report on the Americas* 16-19 (Nov/Dec. 2003). Opposition to the WTO negotiations had been building in the South since the 2001 WTO Ministerial meeting in Doha, Qatar, where developing countries were pressured into adopting a Ministerial Declaration that they had no role in drafting. Only two weeks before the Ministerial meeting in Cancun, the North hastily sidestepped one of the most contentious WTO issues by agreeing to ease access to cheap generic drugs to poor nations in order to address public health emergencies. With the drug issue off the table, the conflict over agricultural subsidies took center stage. Tensions escalated when the United States and the European Union made reductions in agricultural subsidies contingent on Southern concessions in the areas of investment, government procurement, competition policy, and trade facilitation. The Ministerial meeting collapsed as outraged trade delegates from the global South refused to negotiate these new issues without first resolving the impasse over agricultural subsidies. See Ballve, *supra*, at 16-19.

n3. See Elizabeth Becker, *Trade Group to Cut Farm Subsidies for Rich Nations*, N.Y. Times, Aug. 1, 2004, at 8; Elizabeth Becker, *U.S. Will Cut Farm Subsidies in Trade Deal*, N.Y. Times, July 31, 2004, at B1. Notwithstanding the July 2004 agreement by the U.S. and the EU to cut farm subsidies, the December 2005 WTO Ministerial in Hong Kong proved disappointing to many developing countries. While the U.S. and the EU agreed to eliminate agricultural export subsidies by 2013, there was no agreement on the reduction of domestic subsidies or the lowering of agricultural tariffs. These omissions are significant because export subsidies constitute only a minor cause of the distortions in world agricultural trade attributable to Northern protectionism. Domestic farm subsidies and agricultural tariffs are far more market-

distorting. See Keith Bradsher, Trade Officials Agree to End Subsidies for Agricultural Exports, *N.Y. Times*, Dec. 19, 2005; Don Lee, Delegates Eke Out a Trade Deal, *L.A. Times*, Dec. 19, 2005.

n4. See Larry Rohter & Elisabeth Bumiller, Hemisphere Summit Marred by Violent Anti-Bush Protests, *N.Y. Times*, Nov. 5, 2005; Bush's Argentine Visit Ignites Violent Protests, *Seattle Times*, Nov. 5, 2005, at A1.

n5. See Larry Rohter & Elisabeth Bumiller, Hemisphere Meeting Ends Without Trade Consensus, *N.Y. Times*, Nov. 6, 2005; Jonathan Wheatley, Bush Searches for Positives in Brazil After Summit of Americas Disarray, *Financial Times* (London), Nov. 7, 2005, at 6. Several Latin American nations, including Argentina and Brazil, expressed concern over the U.S. practice of subsidizing its farmers while demanding that other countries open up their markets to foreign competition. See *Seattle Times*, supra note 4, at A1.

n6. The adoption of the neoliberal economic model in much of the global South has resulted in a significant slowdown in economic growth, greater poverty and inequality, and growing social and political unrest. See William Finnegan, *The Economics of Empire: Notes on the Washington Consensus*, *Harper's*, May 1, 2003, at 42, 45-50 (describing the elements of the neoliberal model, discussing its consequences and explaining the popular backlash in Latin America and elsewhere to the U.S. free trade agenda); Cecilia Lopez Montano, *People First: Standing Up to the Washington Consensus*, 37 *Nacla Report on the Americas* (Nov/Dec 2003) (enumerating the elements of the neoliberal economic model, explaining its social consequences and discussing the efforts of elected political leaders to introduce flexibility into IMF and World Bank policy prescriptions in order to achieve other social goals); see Ballve, supra note 2, at 16 (describing the growing opposition in the global South to the current WTO rules); Fred Rosen, *Changing the Terms of the Debate: A Report from Antigua*, 37 *Nacla Report on the Americas* 24-28 (Nov/Dec 2003) (describing efforts among development economists, development practitioners and political activists to devise an alternative to the neoliberal model). See also Joseph E. Stiglitz, *Globalization and its Discontents* 18-20 (2002) (concluding that IMF policy prescriptions increased poverty in the developing world and fueled social and political unrest).

n7. See *Latin American Adjustment: How Much Has Happened?*, at 18 (John Williams, ed. 1990) (outlining the elements of the neoliberal economic model).

n8. See Finnegan, supra note 6, at 49-51; Oxfam, *Rigged Rules and Double Standards: Trade, Globalisation and the Fight Against Poverty* 5-6, 25-27 (2002).

n9. See Carmen G. Gonzalez, *Trade Liberalization, Food Security and the Environment: The Neoliberal Threat to Sustainable Rural Development*, 14 *Transnat'l L. & Contemp. Probs.* 419, 457-60, 463-64; Oxfam, supra note 8, at 95-121; Carmen G. Gonzalez, *Institutionalizing Inequality: The WTO Agreement on Agriculture, Food Security, and Developing Countries*, 27 *Columbia J. Envtl. L.* 433, 446-49, 459-68 (2002). Agricultural policy in the North has long been characterized by high levels of protectionism while Southern countries historically taxed agriculture in order to finance industrialization. See *The Gatt Uruguay Round: A Negotiating History* (1986-1992) 125, 141, 154-157 (Terence P. Stewart, ed. 1993). However, it is the combination of structural adjustment in response to the debt crisis of the 1980s and trade liberalization under the WTO Agreement on Agriculture beginning in the mid-1990s that institutionalized the double standard that plagues the agricultural sector to this day. First, agricultural policy came to be characterized by market openness in the South and high levels of protectionism in the North, because structural adjustment was imposed only on the South. See Gonzalez, *Trade Liberalization, Food Security and the Environment*, supra, at 457-458. Second, the WTO Agreement on Agriculture reinforced this double standard by permitting the North to continue to use certain trade-distorting agricultural subsidies (subject to reduction over time) while prohibiting Southern countries that did not employ these subsidies from doing so in the future. See Gonzalez, *Institutionalizing Inequality*, supra, at 463-468. Finally, the Agreement was riddled with ambiguities that enable the North to evade its commitments to reduce both subsidies and tariffs. See *id.*, at 459-468. Total subsidies in the North actually increased after the WTO Agreement on Agriculture went into effect, and tariff levels remain high. See *id.* By contrast, much of the South had already adopted free market reforms pursuant to structural adjustment programs. See *id.* at 460-463; *Experience with the Implementation of the Uruguay Round Agreement on Agriculture: Developing Country Experiences* para. 5 (U.N. Food & Agric. Org. (FAO), *FAO Symposium on Agriculture, Trade and Food Security*, Paper No. 3, 1999), available at <http://www.fao.org/DOCREP/meeting/x3065E.htm>.

n10. See Anita Regmi et al., *Emerging Trade Issues for Developing Countries*, *Agric. Outlook*, April 2000, at 23 (Economic Research Service/USDA).

n11. See Gonzalez, *Institutionalizing Inequality*, supra note 9, at 459-68.

n12. See Oxfam, *Rigged Rules And Double Standards*, supra note 8, at 114-17; Sophia Murphy Et Al., *Inst. For Agric. and Trade Policy, WTO Agreement on Agriculture: A Decade Of Dumping 1* (2005), available at <http://www.tradeobservatory.org/library.cfm?RefID=48532>.

n13. See Murphy Et Al., supra note 12, at 2. Indeed, Brazil recently mounted as successful WTO challenge to the United States' cotton subsidies. See Appellate Body Report, *United States - Subsidies on Upland Cotton*, WT/DS267/20 (Mar. 24, 2004). However, as a practical matter, few Southern countries have the resources to engage in such challenges, and few can afford to risk important trade and diplomatic relationships with the U.S. See Murphy Et Al., supra, at 7.

n14. See Int'l Food Policy Research Inst., *How Much Does it Hurt? The Impact of Agricultural Trade Policies on Developing Countries 2* (2003), available at <http://www.agradepolicy.org/output/resource/IFPRI.pdf>.

n15. For example, in a series of editorial published in 2003 and 2004, the New York Times denounced the devastating impact of industrialized country protectionism on farmers in the developing world. However, the editorials advocated free market reforms in the United States and other developed nations as the solution in order to promote "a fairer playing field." The editorials are available at <http://www.nytimes.com/harvestingpoverty>.

n16. See Dominique van der Mensbrugge & John C. Beghin, *Global Agricultural Reform: What is at Stake?*, in *Global Agricultural Trade and Developing Countries 116* (M. Ataman Aksoy & John C. Beghin, eds. 2004) (estimating the global gains from trade liberalization in both developed and developing countries at \$ 385 billion, of which \$ 265 billion corresponds to the reform of agricultural and food trade policy). Curiously, the models used to forecast the benefits of trade liberalization currently yield more modest estimates than they did just a few years ago. Indeed, the estimated benefits of trade liberalization derived from the leading trade models are both smaller and more skewed toward Northern countries. Many estimates of the benefits of trade liberalization yield figures no higher than \$ 100 billion, and many yield figures much lower. These forecasts raise serious questions about the expected contribution of trade liberalization to economic well-being and poverty alleviation in the global South. See Frank Ackerman, *The Shrinking Gains from Trade: A Critical Assessment of Doha Round Projections* (Global Dev. & Env't Inst., Working Paper No. 05-01, 2005), available at <http://ase.tufts.edu/gdae> (examining the empirical limitations of the computable general equilibrium models of world trade and questioning the expected contribution of trade liberalization to economic development in the South).

n17. See Michael R. Redclift et al., *International Trade, Environment and the CAP: Complex Relationships*, in *Agriculture and World Trade Liberalisation: Socio-Environmental Perspectives on the Common Agricultural Policy 2-3* (Michael R. Redclift et al., eds. 1999); Frederick M. Abbott, *GATT Law on Agricultural Trade in Light of the United Nations Conference on Environment and Development*, in *GATT and Trade Liberalization in Agriculture 101* (Masayoshi Honma et al., eds. 1993).

n18. See Gonzalez, *Trade Liberalization, Food Security and the Environment*, supra note 9, at 488-89.

n19. See *id.* However, enhanced export opportunities are likely to exacerbate both poverty and environmental degradation unless complemented by domestic policies designed to promote sustainable farming practices and support small farmers. This is because export-oriented production tends to demand more capital and less labor and to utilize monocultural, chemical-intensive, environmentally destructive cultivation techniques. *Id.* at 469-70, 488-89.

n20. See *id.* at 489-95 (discussing the limitations of formal equality in an unequal world).

n21. See, e.g., Michael H. Davis & Dana Neacsu, *Legitimacy, Globally: The Incoherence of Free Trade Practice, Global Economics and Their Governing Principles of Political Economy*, 69 *UMKC L. Rev.* 733, 751, 755 (2001); Paul Samuelson, *Economics* 630 (11TH ed. 1980).

n22. See, e.g., articles by Steve Ramirez, Ruth Gordon, and Kristin Sheeran in this volume. Charles R. P. Pouncy, *Institutional Economics and Critical Race/LatCrit Theory: The Need for a Critical "Raced" Economics*, 54 Rutgers L. Rev. 841 (2002); Claire Moore Dickerson, *Northern Individualism Meets Third Generation Human Rights*, 54 Rutgers L. Rev. 865 (2002); Ibrahim J. Gassama, *Confronting Globalization: Lessons from the Banana Wars and the Seattle Protests*, 81 Or. L. Rev. 707 (2002); Carmen G. Gonzalez, *Beyond Eco-Imperialism: An Environmental Justice Critique of Free Trade*, 78 Denver Univ. L. Rev. 979 (2001); Elizabeth M. Iglesias, *Global Markets, Racial Space, and the Role of Critical Race Theory in the Struggle for Community Control of Investments: An Institutional Class Analysis*, 45 Vill. L. Rev. 1037 (2000); Sylvia R. Lazos Vargas, *Globalization or Global Subordination?: How LatCrit Links the Local to the Global and the Global to the Local*, 33 U.C. Davis L. Rev. 1429 (2000); Chantal Thomas, *Globalization and the Reproduction of Hierarchy*, 33 U.C. Davis L. Rev. 1451 (2000); Gil Gott, *Critical Race Globalism? Global Political Economy and the Intersections of Race, Nation and Class*, 33 U.C. Davis L. Rev. 1503 (2000); Timothy A. Canova, *Global Finance and the International Monetary Fund's Neoliberal Agenda: The Threat to the Unemployment, Ethnic Identity, and Cultural Pluralism of Latina/o Communities*, 33 U.C. Davis L. Rev. 1547 (2000); Elizabeth M. Iglesias, *Human Rights in International Economic Law*, 28 U. Miami Inter-Am. L. Rev. 361 (1996-1997); Enrique R. Carrasco, *Opposition, Justice, Structuralism, and Particularity: Intersections between LatCrit Theory and Law and Development Studies*, 28 U. Miami Inter-Am. L. Rev. 313 (1996-1997).

n23. See, e.g., Escobar, *supra* note 1; Gordon & Sylvester, *supra* note 1; Mahmud, *supra* note 1.

n24. The theory of comparative advantage assumes immobility of land, labor and capital, full utilization of domestic resources, and perfect competition. Economists have long recognized that the utility of Ricardo's theory is contingent on the degree to which these assumptions conform to the reality of the particular economy under study. James M. Cypher & James L. Dietz, *The Process of Economic Development* 119 (1997). While a full discussion of these assumptions is beyond the scope of this paper, this article will highlight several assumptions that are especially problematic in the context of agricultural trade.

n25. Neoclassical trade theory has been in great flux since the 1970s, and many "new trade theorists" are explicitly emphasizing certain features that traditional trade theory leaves out, such as imperfect competition, technological change, and the role of history in determining patterns of trade. See, e.g., Paul R. Krugman, *Rethinking International Trade* (1994). Indeed, contrary to the views espoused by the IMF and the World Bank, some of these theorists demonstrate that state intervention in the market can be beneficial, and even reconcile such intervention with the theory of comparative advantage. See, e.g., Paul R. Krugman, *Strategic Trade Policy and the New International Economics* (1988). Because the focus on this article is on the policies of the Bretton Woods Institutions (the World Bank, the IMF, and the WTO), an analysis of the work of these "new trade theorists" is beyond the scope of this endeavor.

n26. See Davis & Neacsu, *supra* note 21, at 755; Samuelson, *supra* note 21, at 630.

n27. See David Ricardo, *On the Principles of Political Economy and Taxation* 133-34 (3rd ed. 1821), reprinted in 1 *The Works and Correspondence of David Ricardo* 1, 133-34 (Piero Sraffa, ed. 1953). Ricardo's theory of comparative advantage explains why it may be beneficial for two countries to engage in trade even though one of the countries may be able to produce every item it consumes more cheaply than the other country. Ricardo demonstrated that the more productive country benefits by importing goods that it produces relatively less efficiently and exporting goods in which it enjoys a relative advantage. In other words, what matters is not the absolute cost of production, but the relative or comparative costs of producing different goods. For an excellent illustration of the theory of comparative advantage, see Alan O. Sykes, *Comparative Advantage and the Normative Economics of International Trade Policy*, 1 J. Int'l. Econ. L. 49, 50-53 (1998).

n28. See Fred P. Gale, *Economic Specialization Versus Ecological Diversification: The Trade Policy Implications of Taking the Ecosystem Approach Seriously*, 34 *Ecological Economics* 285, 288-89 (2000).

n29. See William J. Baumiol & Alan S. Blinder, *Economics: Principles and Policy* 801 (7th ed. 1998); J.M. Migai Akech, *The African Growth and Opportunity Act: Implications for Kenya's Trade and Development*, 33 N.Y.U. J. INT'L L. & POL. 651, 657-58 (2001); Alan S. Gutterman, *Japan and Korea: Contrasts and Comparisons in Regulatory Policies of Cooperative Growth Economies*, 8 Int'l Tax & Bus. Law 267, 283 (1991).

n30. See Davis & Neacsu, *supra* note 21, at 757, 763, 775-76.

n31. See *id.* at 733-34, 743, 749-50; Avi Gesser, Canada's Environmental Choice Program: A Model for a "Trade Friendly" Eco-Labeling Scheme, 39 *Harv. Int'l L. J.* 501, 518 (1998); G. Richard Shell, Participation of Nongovernmental Parties in the World Trade Organization: The Trade Stakeholders Model and Participation by Non-state Parties in the World Trade Organization, 17 *U. Pa. J. Int'l Econ. L.* 359, 367 (1996); Joel P. Trachtman, Trade in Financial Services under GATS, NAFTA and the EC: Regulatory Jurisdiction Analysis, 34 *Colum. J. Transnat'l L.* 37, 98 (1995).

n32. See Ha-Joon Chang & Ilene Grabel, *Reclaiming Development* 56-57 (2004).

n33. See Davis & Neacsu, *supra* note 21, at 752-53; 762-63.

n34. See *id.* at 753.

n35. See Robin Hahnel, *The ABCs of Political Economy: A Modern Approach* 175-190 (2002); Andrea Maneschi, Comparative Advantage in International Trade 9 (1998); Brian McDonald, *The World Trading System: The Uruguay Round and Beyond* 17 (1998); Jeffrey Simser, GATS and Financial Services: Redefining Borders, 3 *Buff. J. Int'l L.* 33, 41-43 (1996).

n36. See Davis & Neacsu, *supra* note 21, at 756.

n37. See U.N. Food & Agric. Org., *The State of Agricultural Commodity Markets 2004 6* (2004) [hereinafter, *Fao Soacm 2004*].

n38. See *id.* at 6.

n39. See Alejandro Nadal, *The Environmental and Social Impacts of Economic Liberalization on Corn Production in Mexico* 4, 11, 43 (2000), available at http://www.oxfam.org.uk/what_we_do/issues/livelihoods/corn_mexico.htm.

n40. See Lori Ann Thrupp, *Cultivating Diversity: Agrobiodiversity and Food Security* 5 (1998).

n41. See *id.* at 5-18.

n42. See *id.* at 1-2.

n43. See *id.* at 5.

n44. See Jules N. Pretty, *Reducing Food Poverty by Increasing Sustainability in Developing Countries*, 95 *Agric., Ecosystems & Env't* 217, 219 (2003).

n45. See Escobar, *supra* note 1, at 167-71.

n46. See Gisele Henriques & Raj Patel, Americas Program, Interhemispheric Resource Center, Nafta, Corn, and Mexico's Agricultural Trade Liberalization 5 (Feb. 13, 2004), available at <http://americas.irc-online.org/pdf/reports/0402nafta.pdf>.

n47. See Thrupp, *Cultivating Diversity*, *supra* note 40, at 18-19.

n48. See *id.* at 18-19.

n49. See Brian Halweil, *Farming in the Public Interest*, in *The Worldwatch Inst., State of the World 2002*, 51, 53-56 (2002).

n50. See *id.*

n51. See, e.g., Alejandro Nadal & Timothy A. Wise, *The Environmental Costs of Agricultural Trade Liberalization: Mexico-U.S. Maize Trade Under NAFTA* (Working Group on Development and Environment in the Americas, Discussion Paper. No. 4, 2004), available at <http://ase.tufts.edu/gdae/WorkingGroup.htm>.

n52. See, e.g., Cypher & Dietz, *supra* note 24, at 120-21.

n53. See Hahnel, *supra* note 35, at 176-81; Cypher & Dietz, *supra* note 24, at 86; Sykes, *supra* note 27, at 50-53.

n54. See Chantal Thomas, *Critical Race Theory and Postcolonial Development*, 9 *Transnat'l L. & Contemp. Probs.* 1, 3-4 (1999).

n55. See *id.* at 4-5; Gonzalez, *Trade Liberalization, Food Security and the Environment*, *supra* note 9, at 464, 489-94.

n56. See Davis & Neacsu, *supra* note 21, at 775-76, referring to the U.S. Supreme Court decision in *Lochner v. New York*, 198 U.S. 45 (1905), which struck down legislation prescribing maximum working hours.

n57. See *id.* at 744-45, 763, 775-76.

n58. In the colorful words of Anatole France, "the law, in its majestic equality, forbids the rich as well as the poor from sleeping under bridges, begging in the streets, and stealing bread." Davis & Neacsu, *supra* note 21, at 763 (quoting Anatole France, *The Red Lily* (*Le Lys Rouge*) 106 (Calmann Levy 1961) (1894)).

n59. See Thomas, *supra* note 54, at 4; Gonzalez, *Trade Liberalization, Food Security and the Environment*, *supra* note 9, at 464, 489-94.

n60. See Fernando Henrique Cardoso & Enzo Faletto, *Dependency and Development in Latin America* (1979); Andre Gunder Frank, *The Development of Underdevelopment* (1966); Raul Prebisch, *Towards a New Trade Policy for Development* (1964).

n61. See Gonzalez, *Trade Liberalization, Food Security and the Environment*, supra note 9, at 433-35, 492-94.

n62. See Cypher & Dietz, supra note 24, at 170-179.

n63. Ha-Joon Chang, *Kicking Away The Ladder: Development Strategy in Historical Perspective* 125-29 (2002). Neoliberalism developed in conscious opposition to the interventionist policy prescriptions of structuralist as well as Keynesian economics. See Richard Peet, *Theories of Development* 48-49 (1999).

n64. See, e.g., U.N. Development Programme, *Human Development Report 1999*, 2-3 (Oxford Univ. Press 1999), available at http://hdr.undp.org/reports/global/1999/en/pdf/hdr_1999_full.pdf (examining the impact of trade liberalization on poverty and inequality); Chang & Grabel, supra note 32, at 20-21; Frances Stewart, *Income Distribution and Development*, in UNCTAD X: *High Level Round Table on Trade and Development: Directions for the Twenty-First Century* 16-18 (United Nations: Geneva 2000), available at http://www.unctad.org/en/docs/ux_tdxrt1d1.en.pdf (acknowledging the contribution of trade liberalization and globalization in general to the growing global income disparities); Peter Evans, *Economic Governance Institutions in a Global Political Economy: Implications for Developing Countries*, in UNCTAD X: *High Level Round Table on Trade and Development: Directions for the Twenty-First Century* 8, 13, available at http://www.unctad.org/en/docs/ux_tdxrt1d5.en.pdf (United Nations: Geneva 2000) (discussing the need to address the "growing First World/Third World disparities).

n65. See *Experience with the Implementation of the Uruguay Round Agreement on Agriculture: Developing Country Experiences*, supra note 9, at para. 18; John Madeley, *Trade and Hunger: An Overview of Case Studies on the Impact of Trade Liberalization on Food Security*, 4 *Globala Studier* (Forum Syd, Stockholm, Sweden), Oct. 2000, at 8, 15, 34-35, 72, available at <http://www.grain.org/docs/T&Hunger.pdf>. Studies on the impact of NAFTA in the Mexican agricultural sector have reached similar conclusions. See John Audley et al., *NAFTA's Promise and Reality: Lessons from Mexico for the Hemisphere* 76-77 (2003), available at

<http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=1390&prog=zgp&proj=zted>; OXFAM, *Dumping Without Borders: How U.S. Agricultural Policies are Destroying the Livelihoods of Mexican Corn Farmers* 6, 17 (Oxfam Briefing Paper No. 50, 2003), available at http://www.oxfam.org.uk/what_we_do/issues/trade/bp50_corn.htm; Nadal, supra note 39, at 3, 7-8.

n66. See *Structural Adjustment Participatory Review Int'l Network (SAPRIN), The Policy Roots of Economic Crisis and Poverty: A Multi-Country Participatory Assessment of Structural Adjustment* 124-25 (2002), available at http://www.saprin.org/SAPRI_Findings.pdf; Lori Ann Thrupp, *Bittersweet Harvests for Global Supermarkets: Challenges in Latin America's Agricultural Export Boom* 17-18, 94-96, 102, 106-08, 112 (1995); Michael Conroy et al., *A Cautionary Tale: Failed U.S. Development Policy in Central America* 13-14, 18-19, 124-25, 138-39 (1996); *Structural Adjustment, the Environment, and Sustainable Development* 17, 314 (David Reed, ed. 1996).

n67. See M. Ataman Aksoy & John C. Beghin, *Introduction and Overview*, in *Global Agricultural Trade and Developing Countries*, supra note 16, at 5 (explaining that agricultural subsidies depress agricultural commodity prices and thereby reduce the ability of developing countries to expand exports and boost rural incomes).

n68. See *id.* at 3.

n69. See *id.*

n70. See Hahnel, supra note 35, at 182-83.

n71. See *id.* at 182-84.

n72. See *id.*; Chang & Grabel, *supra* note 32, at 60-62.

n73. See Cypher & Dietz, *supra* note 24, at 119.

n74. See Sophia Murphy, Inst. for Agric. and Trade Policy, *Managing the Invisible Hand: Markets, Farmers and International Trade* 21-29, 32 (2002), available at http://www.tradeobservatory.org/library/uploadedfiles/Managing_the_Invisible_Hand_2.pdf.

n75. See Hahnel, *supra* note 35, at 181-82.

n76. See *id.* at 183.

n77. See Gale, *supra* note 28, at 288-90.

n78. See FAO SOACM 2004, *supra* note 37, at 10, 12-13; Cypher & Dietz, *supra* note 24, at 86. See generally, Hans Singer, *Terms of Trade and Economic Development*, in *The New Palgrave: Economic Development* 323-328 (John Eatwell et al., eds. 1989); Hans Singer, *The Terms of Trade Controversy*, in *Pioneers in Development* 275-303 (Gerald Meier & Dudley Seers, eds. 1984); Raul Prebisch, *The Economic Development of Latin America and Its Principal Problems* (1950).

n79. See FAO SOACM 2004, *supra* note 37, at 12, 20-21.

n80. See Yon Fernandez de Larrinoa Arca & Maternae Maetz, *Trends in World Agriculture and Trade*, in U.N. Food & Agric. Org. (FAO), *Multilateral Trade Negotiations on Agriculture: A Resource Manual*, Vol. I, 12-13 (2000), available at <http://www.fao.org/DOCREP/003/X7351E/X7351E00.HTM>.

n81. See Peter Robbins, *Stolen Fruit: The Tropical Commodities Disaster* 2-3; 7-15 (2003); Cypher & Dietz, *supra* note 24, at 86; U.N. Food & Agric. Org. (FAO), *The State of Food Insecurity in the World 2004* 12-13 (2004), available at <http://www.fao.org> [hereinafter FAO, SOFI 2004]; E.M. Young, *World Hunger* 41-42 (1997).

n82. Eric S. Reinert, *Increasing Poverty in a Globalized World: Marshall Plans and Morgenthau Plans as Mechanisms of Polarization of World Incomes*, in *Rethinking Development Economics* 470 (Ha-Joon Chang, ed. 2003).

n83. See Christopher Stevens et al., *The WTO Agreement on Agriculture and Food Security* 14 (2000); U.N. Econ. Comm'n on Latin Am. and the Caribbean (ECLAC), *Social Panorama of Latin America* 22-30 (2002-2003).

n84. See U.N. Food & Agric. Org. (FAO), *The State of Food Insecurity in the World 2003* 17 (2003), available at <http://www.fao.org> [hereinafter FAO, SOFI 2003].

n85. Robbins, *supra* note 81, at 2-3, 7-15.

n86. Reinert, *supra* note 82, at 470; Jean Dreze & Amartya Sen, *Hunger and Public Action*, reprinted in Amartya Sen & Jean Dreze, *The Amartya Sen and Jean Dreze Omnibus 76-77, 168-70* (1999).

n87. See Howard Stein, *Rethinking African Development*, in *Rethinking Development Economics*, *supra* note 82, at 153, 156.

n88. John Madeley, *Food for All: The Need for a New Agriculture 91-92* (2002); Belinda Coote, *The Trade Trap 34-35* (1992); Susan George, *A Fate Worse Than Debt: The World Financial Crisis and the Poor 60-61* (1990).

n89. See Stein, *supra* note 87, at 156-58.

n90. See Aksoy & Beghin, *supra* note 67, at 2-3.

n91. See *supra* notes 68-69 and accompanying text.

n92. See Aksoy & Beghin, *supra* note 67, at 1, 3; M. Ataman Aksoy, *The Evolution of Agricultural Trade Flows*, in *Global Agricultural Trade and Developing Countries*, *supra* note 16, at 17.

n93. The principal reasons cited in the economics literature for the long-term decline in agricultural commodity prices are three-fold. First, the demand for manufactured goods expands with rising income, whereas the demand for agricultural products generally does not. Second, manufactured goods produced in the North reflect technological innovation and thus have more value-added than agricultural products. Third, labor productivity is higher in the North as a consequence of the higher wages and prices generated by tighter labor markets and by limited competition among exporters. See, e.g., H.J. Bruton, *A Reconsideration of Import Substitution*, 36 *J. Econ. Lit.* 903-36 (1998).

n94. See Young, *supra* note 81, at 41-42.

n95. See Peet, *supra* note 60, at 107-08. See, e.g., Andre Gunder Frank, *Dependent Accumulation and Underdevelopment in Latin America* (1979); Andre Gunder Frank, *Capitalism and Underdevelopment in Latin America* (1969); Cardoso & Faletto, *supra* note 60; Celso Furtado, *The Economic Growth of Brazil* (1963). See also Walter Rodney, *How Europe Underdeveloped Africa* (1981).

n96. See Peet, *supra* note 63, at 107-108; Eric R. Wolf, *Europe and the People Without History 140-41, 310-41* (1997) (describing the world-side specialization in the export of raw materials and agricultural commodities).

n97. See Peet, *supra* note 63, at 108-10.

n98. See Young, *supra* note 81, at 41.

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n99. See Hahnel, *supra* note 35, at 183-84 (discussing static versus dynamic comparative advantage).

n100. See Oxfam International, *Oxfam International Contribution Regarding NAMA Negotiations*, April 25-29, 2005 (WTO, Geneva), available at http://www.oxfam.org.uk/what_we_do/issues/trade/downloads/sub_nama.pdf.

n101. See Graham Bowley, *Group of 7 Is Still Split on Subsidies*, *NY Times*, Dec. 4, 2005, at A6.

n102. See Oxfam International, *supra* note 100; Friends of the Earth International, *What You Need to Know About NAMA*, October 2004, available at <http://www.foei.org/publications/pdfs/NAMAenvironmentFINAL.pdf>.

n103. See Chang & Grabel, *supra* note 32, at 54-57.

n104. See *id.* at 7-10.

n105. See *id.* at 10-13.

n106. See Chang, *Globalisation, Economic Development, and the Role of the State* 258-59, 276-77 (2003); Paul Bairoch, *Economics and World History: Myths and Paradoxes* 44-55 (1993); Ha-Joon Chang, *Kicking Away the Ladder*, *supra* note 63, at 19-51; 59-66; Ha-Joon Chang, *The Market, the State and Institutions in Economic Development*, in *Rethinking Development Economics*, *supra* note 82, at 43.

n107. See Ha-Joon Chang, *The East Asian Development Experience*, in *Rethinking Development Economics*, *supra* note 82, at 111-17.

n108. See Alice H. Amsden, *The Rise of "The Rest": Challenges to the West From Late Industrializing Economies* 8-13; 125-60 (2001); Chang & Grabel, *supra* note 32, at 70-75.

n109. See Chang & Grabel, *supra* note 32, at 70-80.

n110. See Cypher & Dietz, *supra* note 24, at 119.

n111. See Murphy, *Managing the Invisible Hand*, *supra* note 74, at 8-9.

n112. See *id.* at 28-29; John Madeley, *Food for All*, *supra* note 88, at 121-23; Halweil, *supra* note 49, at 51, 68 (Table 3-2).

n113. See Halweil, *supra* note 49, at 68 (Table 3-2).

n114. See *id.*

n115. See *id.*

n116. See Murphy, *Managing the Invisible Hand*, *supra* note 74, at 21-29, 30; Madeley, *Food for All*, *supra* note 88, at 121-23.

n117. See van der Mensbrugge & Begin, *supra* note 16, at 115-16.

n118. See *id.* at 120.

n119. See FAO, *SOFI 2004*, *supra* note 81, at 30-31; Murphy, *Managing the Invisible Hand*, *supra* note 74, at 8-9; Coote, *supra* note 88, at 61.

n120. See Holman W. Jenkins, Jr., *Yes, We Have No Banana Policy (Can We Borrow Yours?)*, *Wall St. J.*, Feb. 10, 1999, at A23.

n121. See Gonzalez, *Trade Liberalization, Food Security and the Environment*, *supra* note 9, at 464-66, 479-80.

n122. See OXFAM, *Dumping Without Borders*, *supra* note 65, at: 9-17, 20-22 (explaining how U.S. subsidies depress the price of corn and discussing the impact on Mexican farmers of burgeoning U.S. corn exports).

n123. See Nadal & Wise, *supra* note 51, at 6.

n124. See *id.* at 7-15.

n125. See *id.* at 20-21, 25; OXFAM, *Dumping Without Borders*, *supra* note 65, at 6, 17; Nadal, *supra* note 39, at 3, 7-8, 90; Hubert C. de Grammont, *The Agricultural Sector and Rural Development in Mexico: Consequences of Economic Globalization*, in *Confronting Development: Assessing Mexico's Economic and Social Policy Changes 350, 376-79* (Kevin J. Middlebrook & Eduardo Zepeda, eds. 2003).

n126. See Nadal & Wise, *supra* note 51, at 20-25.

n127. See Alejandro Nadal, *Corn in NAFTA Eight Years After: Effects on Mexican Biodiversity*, in *Greening NAFTA: The North American Commission for Environment Cooperation 152, 159-68* (2003); Claire Hope Cummings, *Risking Corn, Risking Culture*, *World-Watch* (Nov./Dec. 2002) at 13. The consequences of genetic contamination are uncertain. Most of the genetically modified corn produced in the U.S. is engineered to contain a natural insecticide, *bacillus thuringiensis* ("Bt"). The main risk associated with the spread of Bt-containing corn is harm to non-target insects, including those that are highly useful for pest control. An additional risk is that insects will increasingly develop resistance to Bt, thus causing serious economic harm to farmers who rely on Bt for organic and semi-organic agricultural production. It is also possible that some of the engineered corn genes might turn out to be detrimental to the survival of their wild or cultivated relatives. Finally, genetic contamination could result in the widespread dissemination of more hazardous types of genetically modified corn - such as varieties cultivated in the U.S. to produce pharmaceuticals (for example, contraceptives) and plastics. See Cummings, *supra*, at 13.

n128. See *id.* at 159-60; Audley et al., *supra* note 65, at 71.

n129. See Audley et al., *supra* note 65, at 71.

n130. See James K. Boyce, *The Political Economy of the Environment* 88-99 (2002).

n131. See *id.* at 98-99; Nadal & Wise, *supra* note 51, at 2-3. In theory, if Mexico and the United States developed environmental regulations that caused agricultural producers to internalize the environmental and social costs of corn production, this market failure could be mitigated. However, it would also be necessary to develop a mechanism for the internalization of the social and environmental benefits associated with traditional corn cultivation.

n132. See, e.g., Chang & Grabel, *supra* note 32, at 59-60.

n133. See Aksoy & Beghin, *supra* note 67, at 3-4.

n134. See Hahnel, *supra* note 35, at 188.

n135. See *id.*

n136. See *id.* at 189.

n137. The Green Revolution was intended to reduce world hunger through the development and dissemination by public sector institutions of new varieties of rice, wheat, and corn that were more responsive than traditional varieties to the application of synthetic fertilizers and controlled irrigation. These new varieties produced dramatic increases in food production in many parts of the global South. By the 1990s, Green Revolution varieties comprised approximately 70 percent of the world's corn, almost 75 percent of the rice produced in Asia, and over half of the wheat cultivated in Asia and Latin America. See Gonzalez, *Trade Liberalization, Food Security and the Environment*, *supra* note 9, at 440-41.

n138. See Hahnel, *supra* note 35, at 189; Gonzalez, *Trade Liberalization, Food Security and the Environment*, *supra* note 9, at 441-45, 465-69 (describing the displacement of small farmers as a consequence of the Green Revolution and of the export-oriented agricultural policies adopted by many Southern countries pursuant to trade agreements and to IMF and World Bank-sponsored structural adjustment programs).

n139. See Gonzalez, *Trade Liberalization, Food Security and the Environment*, *supra* note 9, at 442, 467-68.

n140. See *id.* at 443.

n141. See SAPRIN, *supra* note 66, at 13, 114.

n142. See Conroy et al., *supra* note 66, at 37-38; Thrupp, *Bittersweet Harvests*, *supra* note 66, at 70; Hahnel, *supra* note 35, at 189.

n143. See CONROY ET AL., *supra* note 66, at 38; Thrupp, *Bittersweet Harvests*, *supra* note 66, at 70; Hahnel, *supra* note 35, at 189.

n144. See Hahnel, *supra* note 35, at 189.

n145. See *id.* at 190.

n146. See *id.* In Mexico, trade liberalization under NAFTA failed to create sufficient new manufacturing jobs to offset demographic expansion and to absorb displaced rural dwellers. Moreover, many of the new manufacturing jobs created after 1994 paid low wages and did not provide benefits. As a result, poverty remains widespread in the aftermath of NAFTA, and inequality has increased. See Kevin P. Gallagher & Lyuba Zarsky, *Sustainable Industrial Development? The Performance of Mexico's FDI-Led Integration Strategy 44-47* (Global Development and Environment Institute Working Paper, 2004), available at <http://www.ase.tufts.edu/gdae/Pubs/rp/MEXICOFDIREPORT11-03.pdf>.

n147. See Hahnel, *supra* note 35, at 189.

n148. See Aksoy & Beghin, *supra* note 67, at 1.

n149. See Peter Einarsson, *Forum SYD, Agricultural Trade Policy As If Food Security And Ecological Sustainability Mattered 23* (2000), available at <http://www.agobservatory.org/library.cfm?refID=29994>.

n150. See generally Lori Ann Thrupp, *World Res. Inst., Linking Biodiversity and Agriculture: Challenges and Opportunities for Sustainable Food Security 5-20* (1997).

n151. See *id.* at 26-32; Cary Fowler & Pat Mooney, *Shattering: Food, Politics and the Loss of Genetic Diversity 82-83* (1996).

n152. See Gale, *supra* note 28, at 288-90.

n153. See *id.* at 289-90.

n154. See Thrupp, *Cultivating Diversity*, *supra* note 40, at 21.

n155. See Wolf, *supra* note 96, at 140-141, 310-341.

n156. See Fowler & Mooney, *supra* note 151, at 56-60.

n157. See SAPRIN, *supra* note 66, at 124-26.

n158. See Gonzalez, Trade Liberalization, Food Security and the Environment, *supra* note 9, at 469-70.

n159. Mensbrugge & Beghin, *supra* note 16, at 130.

n160. Aksoy & Beghin, *supra* note 67, at 1.

n161. If the costs of industrial agriculture were fully internalized through stringent environmental regulation, then market prices might favor sustainable farming techniques. Unfortunately, even in the United States, with its considerable resources and decades of environmental experience, environmental regulation of agricultural production is woefully inadequate. See David E. Adelman & John H. Barton, Environmental Regulation for Agriculture: Towards a Framework to Promote Sustainable Intensive Agriculture, 21 *Stan. Envtl. L. L.J.* 3, 17-29 (2002). The United States' failure to internalize the costs of agricultural production is by no means anomalous. An interdisciplinary assessment of the total costs of the environmental and health externalities associated with "modern" agriculture in the United Kingdom concluded that these costs were substantial - equivalent to 89 percent of net farm income. See Jules N. Pretty et al., An Assessment of the Total External Costs of UK Agriculture, 65 *Agric. Systems* 113, 130 (2000).

n162. See Gonzalez, Institutionalizing Inequality, *supra* note 9, at 484-85, 487-88; Gonzalez, Trade Liberalization, Food Security and the Environment, *supra* note 9, at 458-60, 488.

n163. See Gonzalez, Trade Liberalization, Food Security and the Environment, *supra* note 9, at 464, 489.

n164. See Pretty, Reducing Food Poverty by Increasing Sustainability in Developing Countries, *supra* note 44, at 217-234; Jules Pretty & Rachel Hine, The Promising Spread of Sustainable Agriculture in Asia, 24 *Natural Resources Forum* 107-21 (2000); Jules Pretty, Can Sustainable Agriculture Feed Africa? New Evidence on Progress, Processes and Impacts, 1 *Environment, Development and Sustainability* 253-274 (1999).

n165. See Universal Declaration of Human Rights, G.A. Res. 217A, U.N. GAOR, section III, art. 25 (Dec. 10, 1948).

n166. See International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, art. 11, 993 U.N.T.S. 3.

n167. See Convention on Biological Diversity, preamble and art. 8(j), reprinted in 31 *I.L.M.* 818 (1992).

n168. See International Covenant on Civil and Political Rights, Dec. 16, 1966, art. 27, 999 U.N.T.S. 171.

n169. See International Labor Organization Convention (No. 169) Concerning Indigenous and Tribal Peoples in Independent Countries, June 27, 1989, arts. 2, 5, 7, and 8, 28 *I.L.M.* 1382 (1989).