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Globalization: Historical Perspective and Prospects

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ABSTRACT

Economies around the world have become increasingly integrated, thereby enhancing productivity growth and expanding consumer choices. In many nations, globalization has been accompanied by an increase in living standard hardly imagined just a generation ago. But perceived consequences for income distribution, environmental quality, and national sovereignty have also made globalization the focus of widespread controversy. This paper reviews alternative measures of globalization and identifies forces that promote and those that limit globalization. In significant ways, the world economy is now more integrated than even at the height of the previous wave of globalization a century ago. However, history shows that globalization and its benefits are highly vulnerable to political factors. While the Great Depression unleashed protectionist policies in many nations, the backlash to globalization started earlier, during prosperous times, in response to redistributive consequences. Although similar redistributive pressures are evident today, national governments are now better equipped to ensure a politically acceptable sharing of globalization's benefits.

Globalization today confronts a second threat with no close historical parallel. This concerns the setting of social standards and is perceived as an issue of national sovereignty. Although nations remain free to set any standard desired by domestic residents, globalization raises the *cost* of maintaining higher standards than those adopted by trading partners. The prognosis for globalization is therefore mixed. While a major 1930-style reversal remains unlikely, resistance to the encroachment of international integration on domestic social norms will continue. One implication is that the power and authority of multilateral institutions, and especially of the WTO, will remain limited. Another possible implication is that further trade liberalization will be carried out mainly at the regional level, among groups of countries willing to accept shared social norms as a condition of open regional markets.

Globalization: Historical Perspective and Prospects¹

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International commerce now plays a central role in the economic life of most nations. As the new century begins, goods and services move more freely among countries than ever before. The same is true for capital, know-how, and technology. Ongoing declines in the cost of long-distance communication and transportation and in national restrictions on international trade and investment have allowed economies around the world to become increasingly integrated, thereby enhancing productivity growth and expanding consumer choices in every corner of the globe. In parts of the developing world and especially in East Asia, this process of "globalization" has been accompanied by an increase in living standard hardly imagined just a generation ago.

At the same time, globalization has also become the focus of widespread controversy. Its real and alleged consequences for income distribution within and between countries, for environmental quality, and for national sovereignty have fueled policy initiatives that now threaten to turn back the clock. A primary focus of the attacks is the increasing role of market forces and capitalist institutions in the developing and transition economies. Dissatisfaction has centered on the World Trade Organization (WTO), the successor to the General Agreement on Tariffs and Trade (GATT) in fostering multilateral trade liberalization, and the World Bank and International Monetary Fund (IMF), institutions that provide loans and technical assistance to developing countries in conjunction with "market-friendly" structural reforms.

Recent criticism of the IMF has somewhat understandably been tied to its controversial role in the Asian financial crisis that began in 1997. A more noteworthy and troubling

development is the emergence of a popular backlash to globalization in the United States at a time when the country has been enjoying record growth and the lowest unemployment rate in decades. Organized protests aimed at disrupting the December 1999 WTO meeting in Seattle and the April 2000 IMF and World Bank meetings in Washington, as well as widespread though ultimately unsuccessful opposition to U.S. legislation establishing "permanent normal trade relations" with the People's Republic of China, reveal the American public's profound ambivalence toward globalization. And if globalization is so controversial when the U.S. economy is doing well, what can be expected once the nation's long period of expansion finally comes to an end?

This paper examines several dimensions of globalization. It reviews alternative measures of the extent to which today's world economy is indeed globalized and identifies some of the forces that have brought us there, as well as the forces that limit globalization. Data comparing international integration at the end of the twentieth century with corresponding data for the start of the century reveal that much of our recent progress has merely restored international linkages already in place a hundred years ago--but rolled back by the isolationist and protectionist national policies of the 1920s and 1930s and the upheavals of World War I and II. As Keynes described that earlier episode of globalization in *The Economic Consequences of the Peace* (1920):

What an extraordinary episode in the progress of man that age which came to an end in August 1914!...the inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth...he could at the same time and by the same means venture his wealth in the natural resource and new enterprise of any quarter of the world...he could secure forthwith, if he wished it, cheap and comfortable means of transit to any country or climate...most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable."²

Yet while the historical comparison underlines remarkable similarities in terms of some broad indicators, there are also important differences in the nature of postwar global integration. Today's integration goes deeper; it affects more industries, more markets, and thus more lives. What the historical perspective makes clear is that globalization is as much a product of facilitating political conditions as of technological advance. Although the barriers to trade imposed by transportation and communication costs declined more or less steadily throughout the twentieth century, globalization and its associated benefits experienced major setbacks from the start of World War I until the end of World War II. The near-collapse of international trade and finance during the 1930s confirms the enormous power of inward-directed national policies to reverse the tide. For better or worse, globalization is by no means inevitable or irreversible. The final section of the paper considers some of the political conditions necessary to sustain open international markets.

I. How globalized are we now?

Are we globalized? On the verge of globalization? Answering these questions requires a basis of comparison: globalized compared to what? Below we consider two possible benchmarks. The usual approach is to compare indices of international economic integration today with some reference point in the past. This exercise seeks to measure the change in the extent of globalization over time. An alternative approach is to compare the current scope of cross-border transactions with what we would expect to find in a fully integrated global economy, i.e., one with a single (global) government, a single (global) monetary unit, and total absence of internal policy barriers restricting transactions between political sub-units such as states, provinces, or prefectures. Of course, even this idealized global economy would fall short of the economist's model of full integration, which typically assumes away such real-life

influences as cultural and linguistic differences, imperfect information, and the resource costs of transporting goods and services between distant points.

Measuring globalization. Whether in celebrating the benefits or deploring the costs, political discourse and press reports regularly convey the impression that distance and national borders no longer impede flows of goods, services, financial capital, and ideas. Support for this widespread view comes from two types of evidence. The first documents declining technological and policy-imposed barriers: ongoing and in some cases spectacular improvements in the speed and cost of transportation and communication, together with significant progress toward elimination of trade-distorting national policies. Logically, these trends should facilitate the integration of distant markets, and empirical evidence from gravity models of bilateral trade flows confirms their role (e.g., Frankel 1997).

The second type of evidence lies in the large increases in most types of international transactions that have occurred in recent decades, presumably a consequence of those declining barriers. Some comparisons are dramatic. From 1970 to 1990, U.S. merchandise trade grew more than twice as fast as gross domestic product (GDP). For the world as a whole, trade grew 30 per cent faster than output over the same period (Table 1). The increase was even more

(Table 1 about here)

impressive for international investment. Total holdings of foreign assets relative to world product more than tripled between 1980 and 1995 (Table 2). However, closer examination

(Table 2 about here)

suggests that these comparisons both overstate and understate the differences between the world economy of 2000 and that of 1900.

The comparisons above tend to overstate the differences because globalization has not been a monotonic development. The longer view provided by Table 1 does not bear out the story of an unstoppable push toward globalization, at least if we measure advance in terms of merchandise trade relative to GDP. Although these data confirm the impression of growing exposure to trade over the period since World War II, the ratio of merchandise trade to GDP was actually higher just before World War I than by 1998 for Australia, Denmark, Japan, and Great Britain. For the others, the trade ratio in 1998 was only modestly higher than a century before, tempting us to conclude, along with Krugman (1995), that the influence of trade on domestic activity and income distribution can be at most secondary.

Yet the data do confirm a large increase for the United States and a tripling for the world as a whole. The latter implicitly acknowledges the enormously increased role of developing nations in global activity. In 1890 the "backward regions" of Asia, Africa, and Latin America, including many European colonies, participated in global markets mainly as suppliers of primary products. A century later almost all of those colonies have gained independence, and low- and middle-income developing countries are now increasingly important as exporters of manufactured goods (Table 3).

(Table 3 about here)

The ratio of merchandise exports to GDP is a useful measure of a country's exposure to international markets. However, it likely represents a downward-biased indicator of increasing globalization for at least two reasons. The first reason is that it compares trade in merchandise--physical goods--with total domestic value-added over a time period when corresponding domestic production has been shrinking as a fraction of total output. Table 4 compares

(Table 4 about here)

merchandise trade with only the corresponding part of domestic output, i.e., merchandise value-added. This measure shows large increases in international activity for most countries in the group. When sectors are further disaggregated, the growth of trade relative to domestic production or consumption becomes still more apparent. This is especially true for manufactured goods, such as machinery and transportation equipment, which a century ago constituted only a minor fraction of trade (Bordo, Eichengreen, and Irwin 1999). In 1900, agriculture still absorbed a large share of total employment even in the more advanced economies.

Moreover, changes in the ratio of merchandise trade to GDP or to merchandise value-added take no account of the recent growth of services in international transactions. As services have become more important relative to merchandise in domestic production, they have also become a more important part of total trade, i.e., trade in goods *and* services. Table 5 indicates

(Table 5 about here)

that exports of commercial services ranging from the traditional "invisibles" such as transportation and tourism to the increasingly important business services already constitute a substantial share of global transactions. This trade category has grown even more rapidly relative to world output during the postwar period than merchandise trade, along with the relative importance of foreign direct investment in service industries such as banking and insurance (Bordo, Eichengreen, and Irwin 1999).

Globalization or regionalization? The previous section simply documents the expansion of cross-border transactions without attention to the trading partner in any particular transaction. In fact, much of the reduction in trade barriers has occurred within preferential, usually regional, arrangements rather than on a multilateral basis. Some of the especially large period-to-period increases shown in Tables 1 and 4 correspond to the initiation of new regional ties: for Canada,

the free trade agreement with the United States that entered into force in 1989; for Denmark, France, Germany, and Italy, European economic integration.³ Yet these aggregate data should be viewed only as suggestive. Sweden, which did not become a member of the European Union (EU) until 1995, nonetheless experienced an increase in merchandise trade as impressive as that of the earlier joiners.

Econometric researchers use a gravity model to analyze the determinants of trade flows between any two partners. The gravity approach allows the effect of regional ties to be separated statistically from other predictable influences on bilateral trade such as exchange-rate volatility, tariffs, distance, former colonial ties, and common border, language, or currency. Frankel (1997) reports that membership in a regional trading group usually increases the relative importance of bilateral trade between group members even though the members tend to be more open toward nonmembers as well. Of course, even apart from formal preferential trade arrangements, much of observed trade has a regional bias, i.e., countries' trade tends to be concentrated on neighbors. In addition to the effect of formal preferential arrangements, this regional concentration can be explained in terms of trade-promoting factors such as shorter distance (distance is considered to proxy for costs of transportation and communication), common language, common border, and so on. In the late 1990s, U.S. trade with Canada was about the same magnitude as its trade with the much larger European Union. However, Canada was already the largest trading partner of the United States even before the Canada-U.S. trade agreement was signed.

Vertical fragmentation of production. According to the principle of comparative advantage, trade allows countries to specialize in the goods and services that each can produce most efficiently. Declines in transportation and communication costs have taken this international division of labor one step further, allowing each *step* in the production process to be located

according to relative cost. The result is vertical fragmentation or disintegration of production (Feenstra 1998). Changes between the mid-1970s and the mid-1990s in the importance of imported intermediate inputs in manufacturing is shown in Table 6 for four countries. In the

(Table 6 about here)

United States, Canada, and the United Kingdom, the shares increased substantially, confirming the popular impression of an increase in the use of imported intermediates. In Japan, however, the average share fell from an already low level in 1974; only one of the five manufacturing sectors shown increased its use of imported inputs.⁴

Although trade in intermediate inputs also occurs on a contractual basis between independent firms, outsourcing is one rationale for the establishment of foreign subsidiaries by multinationals. Such firms routinely coordinate production activities on a global basis, and empirical studies typically find that foreign subsidiaries of multinational firms import a larger percentage of their intermediate inputs than domestically owned firms in the same industry. This accords with the pattern for Japan versus the United States, Canada, and the United Kingdom seen in Table 6. Japan, which among industrial countries has unusually low inward foreign direct investment, also has lower and slower-growing use of imported intermediates in its manufacturing industries.

The apparent increase in vertical fragmentation has two implications for a discussion of globalization. The first concerns measures of the increase in globalization. The usual indices compare trade measures (numerator) expressed in market value with output measures (denominator) based on value-added. If goods-in-process make a round trip across national borders, vertical fragmentation of production will tend to inflate the index by double-counting the value of traded inputs. For example, if the United States exports auto parts to Canada and then imports an assembled car incorporating the same parts, the value of the outsourced parts has

been counted twice, once as an export and again as an import. Putting it another way, counting the value of the parts in the total price of the assembled car treats the parts as if they represented Canadian rather than U.S. value-added.

A second implication concerns the effect of vertical fragmentation on the elasticity of demand for labor, particularly unskilled labor, within any one country. To the extent that firms have the *option* to locate production stages requiring unskilled labor abroad, this raises the elasticity of their demand for unskilled labor at home (Feenstra 1998).⁵ The result is lower wages and/or employment of unskilled labor at home. Because it is the *opportunity* for outsourcing rather than the extent to which it is exercised that keeps unskilled wages relatively low, the *actual* size of trade flows relative to output is not an appropriate measure of the wage-depressing effect of outsourcing.

Financial integration. Notwithstanding the vivid impression of investors ceaselessly roaming the globe, whether physically or electronically, in search of new opportunities for profit, Feldstein and Horioka (1980) found national saving to be highly correlated with domestic investment. If financial capital were perfectly mobile internationally, national investment should be independent of saving. Table 7 likewise shows that annual net capital flows (the difference

(Table 7 about here)

between national saving and domestic investment) for a number of countries were actually *smaller* relative to GDP in the late twentieth century than in the late nineteenth century. Yet Table 2 shows a dramatic increase in holdings of foreign assets relative to GDP. The reconciliation of these apparently contradictory trends lies in the difference between net and gross flows. Transaction volumes in financial markets are very large today in comparison to

earlier periods, but *net* flows have grown only modestly, if at all, in relation to the overall size of the economy.

As in the case of trade, the range of sectors and countries participating in international asset transactions has been growing over time, not merely since the end of World War II but even relative to the end of the nineteenth century. Long-term bonds and bank loans dominated nineteenth century international capital flows, and those investments financed activity in just a few industrial sectors, primarily railroads and mines. Today's asset transactions include daily trading in portfolio equity issued by companies in all the industrialized nations as well as many developing and transition "emerging market" economies. And although portfolio capital still flows mainly from industrial to developing countries, there is a substantial reverse flow, in some cases representing portfolio diversification, in other cases tax evasion and capital flight. Yet international portfolios still tend to exhibit a high degree of "home bias," i.e., far lower holdings of foreign assets than would be expected on the basis of standard principles of asset diversification.

Foreign direct investment, although already important in the nineteenth century, has grown in relative importance as a share of total capital flows and has, like portfolio investment, become much more diversified in terms of source and destination countries as well as sectors. In the nineteenth century, subsidiaries of multinational firms functioned mainly to assure parents' access to supplies of primary commodities. Recent foreign direct investment has continued to include resource-based activities, but footloose manufacturing operations and service-sector subsidiaries have become much more important. One possible explanation for the changing mix is that subsidiaries established to develop sources of primary commodities are frequently subject to the "eroding bargain" between investor and host government; newly independent host governments may then force multinational parents to sell out their equity interest to a

government agency or preferred local nominee at a bargain price. However, profitability of manufacturing investments often requires ongoing transmission of new technology and know-how. Such investments are therefore less susceptible to the eroding bargain between investor and host government than the traditional resource-based investments.

International mobility of labor. One important feature of a fully integrated global market is that factor rewards, including the wages earned by various types of labor, would be equalized across industries and across countries. To some extent this can occur through trade alone; trade in goods is in effect trade in the embodied services of productive factors.⁶ Historically, however, the main force causing a convergence in factor returns across countries has been the direct movement of capital and labor. Large-scale immigration from Europe to North America in the late nineteenth century resulted in a rapid convergence in living standards on the two sides of the Atlantic (Williamson 1998). The forces of de-globalization after 1914 included not only increased the trade barriers and capital controls discussed above, but also restrictive immigration policies, especially in the "new world," that were imposed as a direct response to downward pressure on wages.

While multilateral negotiations have helped to reduce tariffs and other trade barriers in the period since World War II, there have been no similar multilateral efforts in the area of immigration policy. Rather, immigration restrictions have continued to be formulated at the national level or, in the case of the European Union, at the regional level. In Europe and the United States, "guest workers" and illegal immigrants supply an increasing share of unskilled labor, thus effectively capping the earnings of native-born unskilled workers.⁷ A more recent problem is a pervasive shortage of high-technology workers. As a temporary solution, larger numbers of technology professionals have been allowed to join the European and U.S. workforce

on special visas. In practice, many of these workers are foreign nationals who have stayed on after completing technical degrees.

Theoretical benchmarks of globalization. The indices conventionally used to measure the increase in globalization are almost always quantity measures such as the ratio of trade to GDP. Yet the theoretical description of a fully integrated global economy is not usually expressed in terms of the volume or total value of trade. Rather, full integration is characterized by price relationships, specifically that the price of any given good, service, or factor will be equalized across all agents, regardless of location. This in turn implies an efficient global allocation of resources in production and consumption, the benchmark against which actual relationships can be evaluated.⁸

Despite growing trade in goods, services, and assets, the tendency for the prices of specific goods to be equalized across countries is often surprisingly weak. Transport costs limit arbitrage between markets, whether between or within countries. The large declines in cost of shipping during the late nineteenth century produced a corresponding convergence in the British and U.S. prices of many commodities (Bordo, Eichengreen, and Irwin 1999). But even where transport costs are low, other factors--tariffs and quotas, cost of information, and exchange-rate movements--may allow substantial price differences to persist across markets in different countries. Where goods are differentiated rather than homogenous, as with many types of manufactures, still larger price differences due to price discrimination may be maintained indefinitely.

In general, the price-equalization condition for full market integration does not correspond to any specific level of trade flows. In some cases, only the *potential* for such flows would be required to maintain equality of prices across markets. With additional assumptions

about the nature of goods and consumer preferences, it is possible to predict the volume of trade for special situations. Following a popular theoretical model of trade in differentiated products, assume that each country produces unique goods that are imperfect substitutes for goods produced elsewhere, and that consumers everywhere have the same homothetic tastes and value variety. In the absence of any transport costs, trade barriers, and so on, consumers everywhere will spend the same share of their incomes on a given country's goods. Thus, if a country produces a share s of world output, it will export all but a fraction $1-s$ of its own production, in exchange for an equal volume of goods produced elsewhere.

For the United States, which accounts for about 25 per cent of gross world product, this model would predict an export/GDP and import/GDP ratio of 75 per cent (for goods and services), in comparison to the actual value of around 12 per cent (Frankel 2000). However, any modification in the direction of greater realism reduces the predicted ratio. Significant transport costs are one reason to expect "home bias" in consumption and therefore lower trade. Predicted trade in a fully integrated global economy would also be reduced if several countries produce some identical goods or if consumers differ across countries and each country tends to produce the types of goods that are preferred on average by their own residents.

A similar analysis for asset holdings predicts that households everywhere will hold a proportional share of the global market portfolio. This implies that most of any new asset issue would be sold abroad. Actual holdings of foreign assets are minor relative to this theoretical benchmark, with the shortfall explained at least in part by exchange-rate considerations, information costs, and legal restrictions imposed on institutional investors.

II. Determinants of globalization

The growth in trade flows documented above can be attributed to the balance of factors making international transactions cheaper and easier, and those having the opposite effect. While the "technology" of long-distance commerce has improved steadily since the mid-nineteenth century, the role played by national policy has been more complex, in some periods retarding or even reversing the expansion of international transactions.

Transport and communication costs. Dramatic improvements in the technologies of transportation and communication made possible the era of globalization that ended with World War I. Transportation by both water and land became faster and cheaper; the international telegraph reduced communication times from weeks to minutes (Baldwin and Martin 1999). Further reductions in cost and increase in speed of transportation and communication likewise encouraged the postwar expansion of international transactions, including foreign direct investment. For traditional means of transport, an organizational improvement, containerization, led to significant cost savings. Further cost/speed improvements have come about through the introduction of new transportation options. By the late 1990s nearly a third of U.S. merchandise exports traveled by air, up from 14 per cent in 1970 (Frankel 1999). In the 1990s, e-mail and fax replaced older forms of communication at a tiny fraction of the earlier cost, facilitating all types of trade and making new forms of services trade possible for the first time.

Commercial policy. Average tariffs in the industrial countries increased slowly until the end of the 1920s, then leaped upward at the onset of the Great Depression as countries sought unsuccessfully to export unemployment to their neighbors. Most countries also enacted quotas, exchange controls, and capital controls. In the postwar period, successive rounds of multilateral

negotiations within the GATT and more recently the WTO have gradually brought tariff rates in the major industrial countries to low average levels.⁹ Table 8 illustrates the rise and subsequent

(Table 8 about here)

fall in average rates for manufactured goods. Even more dramatic policy changes have been undertaken in much of the developing world, especially East Asia and Latin America, as many countries shifted toward outward-oriented strategies for promoting economic development.

Yet some important sectors, most notably textiles and apparel and agriculture, have proved highly resistant to multilateral liberalization efforts. Global trade flows in these categories, while large and even growing, are still highly distorted by a variety of national policies. Moreover, at the same time that straightforward trade taxes have been reduced and quantitative trade restrictions eliminated by most countries for most goods, newer types of trade-restricting policies have begun to play an important role. Procedural or contingent protection, especially in the form of antidumping investigations, has become a pervasive influence on trade flows. Restriction of trade via antidumping action, once used mostly by the United States and the EU, has more recently been emulated by a number of developing countries (Prusa 1999), thereby adding to the cost and uncertainty of international transactions in steel and other affected industries.

Exchange-rate regimes. The era of globalization preceding World War I coincided with the reign of the international gold standard. Although subject to crises, at most times the system provided traders with the equivalent of a single currency acceptable anywhere in the world. The postwar Bretton Woods gold-exchange standard was intended to provide the same benefits, but without crises or the need to endure the costs of domestic deflation in order to maintain currency convertibility. But the Bretton Woods system never performed as intended. It collapsed in the

early 1970s, to be succeeded by a free-for-all system in which each country was permitted to select its own currency arrangements. Abandonment of the Bretton Woods system was followed by unprecedented movements in relative currency values. Yet the associated fluctuations in real exchange rates did not appear to slow the growth of trade, perhaps due to the concomitant growth of opportunities for hedging currency risk.

Rose's (1999) gravity-model analysis of bilateral trade from 1970 to 1990 confirms a negative but small effect of exchange-rate volatility on bilateral trade. However, Rose's estimate of the effect on bilateral trade volume of a common currency is surprisingly large; two countries sharing the same currency trade *three times* as much as they would if using different currencies, even after taking account of other factors such as common language, common border, or shared colonial ties. This suggests that the already large trade relationship between the United States and Canada would be subject to significant further expansion if Canada and the United States were to adopt a common North American dollar, and likewise significant further expansion of intra-European trade flows following full adoption of the Euro. Rose's results also offer one possible explanation for findings by McCallum (1995) and Engel and Rogers (1996) of a large "border effect" depressing trade and increasing price differences between Canada and the United States in comparison to internal trade and prices within either country. A further implication is that the vibrant globalization of the pre-World War I period may have owed something to the international gold standard, which maintained a degree of exchange-rate stability not matched under any post-World War II arrangement.

Although more important for international capital flows than for trade in goods and services, exchange controls and capital controls have continued to restrict the international transactions of some developing countries, especially in sub-Saharan Africa. Most industrial nations had eliminated exchange controls and capital controls by the end of the 1950s. Although

the IMF has encouraged developing countries to do likewise, progress has been much slower. Moreover, the international financial crises of the 1990s reopened the debate on whether temporary capital controls can be a useful policy instrument, at least in the developing world.

III. Can globalization be sustained?

A growing body of evidence suggests that globalization and growth go together, that countries which are more open to international transactions also tend to grow faster (e.g., Sachs and Warner 1995, Crafts 2000). Although traditional economic theory helps to explain how international transactions raise efficiency, it offers no direct link of openness to growth rates. However, newer theories that encompass imperfect competition, scale economies, and technical change do suggest channels by which openness may increase the rates of innovation and growth. Political-economy analysis likewise provides supplementary insights that help to explain the observed trade-growth link. For example, minimizing the extent of sector-specific intervention is likely to reduce the diversion of productive resources into rent-seeking.

Of course, higher efficiency and faster growth are not ends in themselves. They simply increase the total resources potentially available to achieve society's preferred goals. Likewise, policies to facilitate globalization, i.e., to achieve greater openness and international integration, do not by themselves ensure progress toward social goals. Critics of WTO, World Bank, and IMF efforts to promote trade liberalization in developing countries argue that the poor do not benefit from any resulting increase in growth. Yet recent World Bank research shows precisely the opposite: on average, openness to foreign trade benefits the poor to the same extent that it improves overall economic performance (Dollar and Kraay 2000). Improvements in rule of law and fiscal discipline, also targets of multilateral agency programs, are likewise found to benefit the poor to the same extent as the economy as a whole.

To be sure, much of the recent backlash to globalization is simply the expression of private interests. As with any important advance in technology, the gains achieved through globalization are accompanied by powerful redistributive consequences associated with the restructuring of firms, industries, and entire economies. Moreover, it is usually easier to predict who will be the losers from trade liberalization than who will be the winners. Those who expect to find themselves on the losing end of globalization have good reason for concern. Democratic systems give these potential losers the power to hold change hostage, to insist on protection or compensation as the price of their assent.

For reasons of both fairness and political feasibility, maintaining the momentum of efficiency-promoting change requires a mechanism for ensuring that the gains are broadly shared. Rodrik (1997) documents a positive relationship between government spending and openness in the OECD countries. He interprets this pattern as indicating that greater exposure to external market forces requires a more active government role to cushion losers and thus ensure a socially and politically acceptable sharing of gains.¹⁰ Likewise, Bordo, Eichengreen and Irwin (1999) suggest that safeguard provisions in trade agreements, often criticized as protectionist loopholes, serve as economic shock absorbers that may be politically necessary if national governments are to liberalize access to their domestic markets.

What of the "race to the bottom" in terms of labor standards and environmental protection that some allege to be an inevitable consequence of globalization? Although the labor and environment issues are usually lumped together in discussions of globalization, it is more useful to consider them separately. Costs of maintaining high environmental standards in production are usually a tiny part of total production cost. Thus, decisions about location of production, whether within a country or between countries, is determined almost entirely by factors other

than environmental policy. Even in a world of total mobility of manufacturing capital, there is no persuasive empirical evidence of a "race to the bottom."

In contrast, labor costs on average constitute about two-thirds of total production cost, and still more for many products. Footloose manufacturing industries such as footwear and apparel therefore do locate where *labor costs*¹¹ are expected to be low; an increasing share of labor-intensive manufacturing operations has relocated from the OECD countries to various areas of the developing world. As already noted above, the mere possibility of doing this tends to raise the elasticity of demand for low-skilled labor in the remaining industrial-country operations. At the same time, earnings in the preferred locations tend to increase along with new skills, often to the extent that low-end manufacturing activities are no longer profitable in the original offshore location and must move on to a country less advanced in the development process.

Both issues do raise the same fundamental problem, i.e., that desired social policies are determined largely by a country's income level. Just as with food, clothing, shelter, health care, and education, income levels determine what the population and its government feel the nation can afford. In the industrial countries, labor standards and environmental protection have steadily risen along with per capital income; these are social goods with high income elasticity. Child labor, seen as repugnant by most Americans at the end of the twentieth century, was the norm at the end of the nineteenth, even though per capita income in the United States was already well above that in many parts of the developing world today. Nothing remotely resembling today's legal protections for workers was enacted in Europe or the United States until the 1930s. With regard to environment, growth of production and consumption does tend to increase environmental degradation and especially natural resource use. However, endogenous domestic policy changes to protect the environment begin to be enacted once an economy

reaches a per capita income of around \$3500 per year. This pattern of rising labor and environmental standards, familiar from the economic development of the United States, Europe, and Japan, has more recently been observed in Asia and Latin America.

By promoting growth and thereby raising per capita income in the developing world, globalization gradually raises the labor and environmental standards of low-income countries. But as long as differences exist, globalization also makes explicit the costs of maintaining higher standards. Nothing in current international agreements prevents countries from maintaining the high standards that their own residents prefer and are willing to pay for. However, some critics of globalization would like to dictate that other countries do likewise but are not prepared to pay the cost.

To the extent that globalization entails redistribution among countries as well as within them, provision of social insurance only at the national level may be inadequate. The European Union's successful expansion of an integrated multinational market has required a mechanism for sharing benefits across as well as within national boundaries. Rodrik (2000) goes much further, suggesting that the gains from globalization are so great that nations will eventually be willing to cede authority to a global federation in order to maintain them. Perhaps a more likely outcome is further liberalization along regional lines. As competing regional groups form, they may offer alternative approaches to balancing efficiency gains from integration with mechanisms for ensuring an acceptable division of benefits among members.

IV. Concluding Comments

The preceding sections offer strong evidence that the world economy has indeed become increasingly integrated since the end of World War II. In important ways, it is also more integrated even than at the height of the previous wave of globalization a century ago.

Moreover, recent developments aren't merely more of the same. One important difference, implied in the discussion of vertical disintegration, is that business enterprises are increasingly managed from a global perspective. Where international transactions were once a peripheral consideration for most firms, they may now be central to every aspect of corporate planning, from research and development through production to sales and service. As a consequence of the private sector's increasingly global management strategy, decision-making by governments must also take a global perspective. "Domestic" policies in areas such as taxation, labor standards, environmental protection, and competition are now likely to have important implications for international trade, investment, and immigration, which in turn influence policy effectiveness at home.

An important thread in the discussion is the potential for a policy backlash that could reverse current trends toward greater integration. We learn from the experience of a century ago that despite its significant contribution to national economic performance, globalization is highly vulnerable to political factors. It is surely no coincidence that the Great Depression unleashed protectionist policy changes in the most important nations around the world. But it is instructive to recognize that the backlash actually began much earlier, during prosperous times, as a political response to the redistributive consequences of increased international integration. Today the same kinds of redistributive pressures are evident. However, national governments are better equipped to maintain the viability of openness by ensuring a politically acceptable sharing of its economic benefits within nations and even within regions.

The forces of globalization today confront a second issue that has no close parallel in the earlier period. This concerns the setting of social standards and is widely perceived as an issue of national sovereignty. The ability of any individual nation to set and maintain domestic social standards is necessarily eroded in a particular sense by international integration. Even though

sovereign nations are free to set any standard desired by domestic residents, the cost of maintaining higher-than-"average" standards increases with the degree of international integration. In effect, domestic consumers and taxpayers must pay to opt out of any global race to the bottom. Empirical evidence suggests that the price is low in the case of environmental protection but substantial in the case of labor standards.

If the wealthiest and most powerful countries are not prepared to have domestic social standards set on an international basis, what are the alternatives? Some recent initiatives would force the international community to adopt social standards that are consistent with the domestic preferences and incomes of the wealthiest countries. But unless countries wishing to universalize high standards are also willing to pay the associated cost,¹² it seems unlikely that international organizations representing countries at all income levels will become the agents of a meaningful multilateral move in this direction. A second possibility is that richer countries will accept the increasing cost of maintaining higher-than-average standards. For example, wage or production subsidies would allow individual countries to maintain high wages and benefits, especially for workers whose labor is highly substitutable with that readily available in countries with lower standards, and yet maintain free trade in goods and services (but not free immigration). Or goods could be labeled to indicate to consumers the conditions of their production. This approach would make the cost of high standards transparent to the taxpayers who must finance subsidies and the consumers who must pay higher prices. The third possibility, and the most likely one under current conditions, is that high-standard countries will limit the extent of their integration into international markets as a means to reduce at least the visible costs. Most do this already through draconian limits on immigration and severe restrictions on imports of the most labor-intensive products, notably apparel.

Based on this logic, the prognosis for globalization is mixed. We should expect to see no major 1930-style reversal. However, it is likely that foot-dragging and passive resistance to the encroachment of international integration on domestic social norms will continue. One implication of the latter is that the power and authority of multilateral institutions, and of the WTO in particular, will remain limited. Another possible implication is that trade liberalization will continue to be carried out at the regional level, among groups of countries willing to accept shared social norms as a condition of open regional markets.

Table 1. Merchandise Trade in Relation to GDP
(per cent)

	1890	1913	1960	1970	1990	1998
Australia	15.7	21.0	13.0	11.5	13.4	14.7
Canada	12.8	17.0	14.5	18.0	22.0	35.0
Denmark	24.0	30.7	26.9	23.3	24.3	26.7
France	14.2	15.5	9.9	11.9	17.1	20.9
Germany	15.9	19.9	14.5	16.5	24.0	25.4
Italy	9.7	14.4	10.0	12.8	15.9	20.7
Japan	5.1	12.5	8.8	8.3	8.4	9.5
Norway	21.8	25.5	24.9	27.6	28.8	26.1
Sweden	23.6	21.2	18.8	19.7	23.5	37.2
United Kingdom	27.3	29.8	15.3	16.5	20.6	21.6
United States	5.6	6.1	3.4	4.1	8.0	8.6
World	6.0	9.0	8.0	10.0	13.0	18.8

Sources: Feenstra (1998), Crafts (2000), *World Development Report 1999-2000*, Tables 1 and 20.

Notes: Merchandise trade is measured as an average of imports and exports (exports only for 1998). See Feenstra for additional notes.

Table 2. Foreign Asset Holdings in Relation to Gross World Product
(per cent)

Year	
1870	6.9
1900	18.6
1914	17.5
1930	8.4
1945	4.9
1960	6.4
1980	17.7
1995	56.8

Source: Crafts (2000), Table 2.3.

Table 3. Share of Manufactures in Merchandise Exports
(per cent)

	1960	1965	1983	1990	1997
Low income	21	31	42	54	75
China and India		58		73	
Other low-income	9	11		29	
Middle income	11	25	41	50	64
Lower middle income	4	16		38	
Upper middle income	16	32	48	57	72
Low and middle income		26	42	50	66
East Asia and Pacific		32	52	69	78
Europe and Central Asia					51
Latin America and Caribbean		7	25	32	50
Middle East and North Africa		4		16	16
South Asia		37	53	70	75
Sub-Saharan Africa		7	12	8	
High Income	66	69	72	82	81
World		58	66	75	78

Sources: *World Development Report* 1983, 1992, 1999/2000.

Table 4. Merchandise Exports in Relation to Merchandise Value-Added
(per cent)

	1890	1913	1960	1970	1980	1990
Australia	27.2	35.6	24.4	25.6	32.4	38.7
Canada	29.7	39.4	37.6	50.5	65.6	69.8
Denmark	47.4	66.2	60.2	65.9	90.0	85.9
France	18.5	23.3	16.8	25.7	44.0	53.5
Germany	22.7	29.2	24.6	31.3	48.5	57.8
Italy	14.4	21.9	19.2	26.0	43.1	43.9
Japan	10.2	23.9	15.3	15.7	25.8	18.9
Norway	46.2	55.2	60.0	73.2	70.9	74.8
Sweden	42.5	37.5	39.7	48.8	72.9	73.1
United Kingdom	61.5	76.3	33.8	40.7	52.6	62.8
United States	14.3	13.2	9.6	13.7	30.9	35.8

Source: Feenstra (1998).

Notes: Merchandise trade is measured as an average of exports and imports. Merchandise value-added combines agriculture, mining, and manufacturing for the United States and these sectors plus construction and public utilities for other countries. See Feenstra for additional notes.

Table 5. Exports of Commercial Services in Relation to Merchandise Exports
(per cent)

	1983	1997
Low income	12	15
China	11	13
India	35	26
Middle income	13	24
Lower middle income		31
Upper middle income	21	21
Low and middle income	14	22
East Asia and Pacific	13	20
Europe and Central Asia		31
Latin America and Caribbean	14	16
Middle East and North Africa		29
South Asia	30	24
Sub-Saharan Africa	13	15
High Income	23	25
Australia	20	33
Canada	11	14
Denmark	31	32
France	35	26
Germany	14	14
Italy	24	33
Japan	13	18
Norway	39	36
Sweden	23	21
Switzerland	33	33
United Kingdom	30	34
United States	25	34
World	20	25

Source: *World Development Report 1999/2000*.

Notes: Commercial services include transportation, tourism, communication, and business services (excluding services of governments and international organizations). Percentage for 1997 is value of 1997 service exports relative to estimated 1998 merchandise exports.

Table 6. Share of Imported to Total Intermediate Inputs in Manufacturing
(per cent)

	United States		Canada		United Kingdom		Japan	
	1975	1995	1974	1993	1974	1993	1974	1993
Chemical products	3.0	6.3	9.0	15.1	13.1	22.5	5.2	2.6
Leather products	5.6	20.5	12.6	21.8	15.0	35.6	3.6	2.6
Industrial machinery	4.1	11.0	17.6	26.6	16.1	31.3	2.1	1.8
Electric/electronic equipment	4.5	11.6	13.2	30.9	14.9	34.5	3.1	2.9
Transportation equipment	6.4	15.7	29.1	49.7	14.3	32.1	1.8	2.8
Total manufacturing	4.1	8.2	15.9	20.2	13.4	21.6	8.2	4.1

Source: Campa and Goldberg (1997), Tables 1, 3, 5, 7.

Table 7. Annual Net Capital Flows in Relation to GDP
(per cent)

	1870- 1889	1890- 1913	1914- 1918	1919- 1926	1927- 1931	1932- 1939-	1940- 1946	1947- 1959	1960- 1973	1974- 1989	1990- 1996
Argentina	18.7	6.2	2.7	4.9	3.7	1.6	4.8	2.3	1.0	1.9	2.0
Australia	8.2	4.1	3.4	4.2	5.9	1.7	3.5	3.4	2.3	3.6	4.5
Canada	7.0	7.0	3.6	2.5	2.7	2.6	3.3	2.3	1.2	1.7	4.0
Denmark	1.9	2.9	5.1	1.2	0.7	0.8	2.3	1.4	1.9	3.2	1.8
France	2.4	1.3	--	2.8	1.4	1.0	--	1.5	0.6	0.8	0.7
Germany	1.7	1.5	--	2.4	2.0	0.6	--	2.0	1.0	2.1	2.7
Italy	1.2	1.8	11.6	4.2	1.5	0.7	3.4	1.4	2.1	1.3	1.6
Japan	0.6	2.4	6.8	2.1	0.6	1.0	1.0	1.3	1.0	1.8	2.1
Norway	1.6	4.2	3.8	4.9	2.0	1.1	4.9	3.1	2.4	5.2	2.9
Sweden	3.2	2.3	6.5	2.0	1.8	1.5	2.0	1.1	0.7	1.5	2.0
U.K.	4.6	4.6	3.1	2.7	1.9	1.1	7.2	1.2	0.8	1.5	2.6
U.S.	0.7	1.0	4.1	1.7	0.7	0.4	1.1	0.6	0.5	1.4	1.2
All	3.7	3.3	(5.1)	3.1	2.1	1.2	(3.2)	1.8	1.3	2.2	2.3

Source: Obstfeld and Taylor (1997).

Note: Based on mean absolute value of current account from annual data. Parentheses indicate average without France and Germany.

Table 8. Average Tariffs on Imported Manufactured Goods
(per cent)

	1875	1913	1931	1950	Pre- Uruguay Round	Post- Uruguay Round
France	12-15	20	30	18		
Germany	4-6	17	21	26		
Italy	8-10	18	46	25		
United Kingdom	0	0	n.a.	23		
European Union					5.7	3.6
Canada	n.a.	26	n.a.		9.0	4.8
United States	40-50	44	48	14	4.6	3.0

Source: Bordo, Eichengreen, and Irwin (1999).

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NOTES

¹ Revised version of a paper presentation at the 26th Pacific Trade and Development Conference, "Globalization in the New Millennium," June 14-16, 2000, Seoul, Korea. Comments and suggestions from the discussants and other conference participants are gratefully acknowledged.

² This evocative passage, apparently rediscovered by Sachs and Warner (1995), is now mandatory in all writing on the "new" phenomenon of globalization. To produce a twenty-first century version, we need only substitute laptop for telephone, latte for tea, and cheap *or* comfortable for cheap *and* comfortable.

³ Does it matter whether increased trade is concentrated on a few neighbors? Both efficiency benefits and income redistribution within countries are likely to be smaller from opening only on a preferential basis rather than through multilateral liberalization. The final section of the paper suggests that regional liberalization may provide a workable compromise between openness and maintenance of preferred domestic social standards.

⁴ Data do not allow a longer-term comparison along the lines of Table 6. However, Bordo, Eichengreen, and Irwin (1999) report for the United States a rise in the Grubel-Lloyd index of intra-industry trade from 0.53 in 1909 to 0.78 in 1995. This increase in the extent of intra-industry trade is consistent with a rise in vertical fragmentation, since the latter is a particular variety of intra-industry trade.

⁵ The option to outsource is thus analytically similar to the option to adopt a new labor-saving technology.

⁶ The Stolper-Samuelson and factor-price equalization theorems spell out the necessary conditions.

⁷ In the United States, representatives of labor-intensive manufacturing industries and low-end service providers routinely lobby for liberalization of immigration restrictions.

⁸ This does not, however, imply that any situation with lower price variation between markets is necessarily superior to one with more price variation. In comparing a fixed exchange rate or single-currency situation with a flexible rate, Engel and Rogers (2000) point out that the former may be associated with bigger swings in output and may thus represent a less efficient situation overall.

⁹ In the United States, the process of rolling back the destructive rates enacted in the infamous Smoot-Hawley tariff of 1930 began as early as 1933, when Franklin Roosevelt became president. By the end of World War II, bilateral negotiations with a variety of trading partners had already reduced average tariff rates by 44 per cent of their 1930 levels (Husted and Melvin 1998).

¹⁰ Rodrik is concerned that, in a world of freely mobile capital, the higher taxes required to finance social insurance will fall increasingly heavily on labor. Globalization thus offers yet another reason for countries to abandon factor-income taxes in favor of consumption taxes.

¹¹ This is not the same as wages because it also reflects labor skills, motivation, and other factors affecting productivity.

¹² For example, countries opposed to child labor could provide transfer payments and/or educational loans to indigent families.