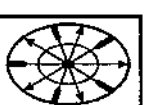


Trade Strategies for a New Era

Ensuring U.S. Leadership in a Global Economy

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involvement in trade policy formulation has increasingly been relegated to adopting fast-track procedures and later approving large, complicated agreements with a single up-or-down vote. This is a practical and necessary way of handling the authorization and approval of trade agreements. More congressional participation is needed, however, to ensure that America's trade laws, policies, and negotiating positions meet changing national needs. This might be accomplished through oversight of the operation of trade agreements and the functioning of the WTO; monitoring of the implementation of U.S. trade laws; more frequent and intensive hearings on new problems in international trade such as bribery and private restraints of trade; better coordination and organization of trade-supporting institutions, including the Export-Import Bank and the Overseas Private Investment Corporation; and more congressional interactions with U.S. negotiators and site visits to negotiating venues.

CONCLUSION

For the last half century, America's natural resources, population growth, and entrepreneurial spirit sustained U.S. economic growth and gave it the strength to win the Cold War. Trade and economic cooperation with Europe and Japan certainly helped, but the drive fueling the nation's greatness came from within its shores. The next century, however, will see a different formula for national economic success. America's course for the future must be navigated through the turbulent waters of the rapidly changing global economy. If the nation is to retain its position of preeminence in the world, the United States must combine sound domestic policies of deficit reduction, education, health care, and welfare reform with a visionary trade and foreign policy.

These, then, are the challenges to U.S. domestic and international economic policies: to boost productivity and national income; to stimulate high-wage, high-skilled job opportunities; and, at the same time, to maintain a healthy employment environment for the nation's competitive manufacturing industries.

Rebuilding bipartisan trust in executive branch trade policy on Capitol Hill will be, at best, a difficult assignment. When national economic priorities and foreign policy credibility are at stake—and they most certainly will be in the coming debate—free traders, whether Democrats or Republicans, must rise to the challenge.

Chapter 3

U.S. Performance and Trade Strategy in a Shifting Global Economy

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Trade has become increasingly important to the American economy, both in terms of the overall proportion of national output and consumption that is tied to it, and in terms of its critical role in stimulating growth and improvements in the standard of living. The proportion of trade to domestic output, a measure of the openness of the economy, more than doubled between 1970 and 1995, from 10 percent to 24 percent, the largest such increase for any developed economy in that period.

More than at any time before in American history, trade is having a measurable impact on the performance and income not only of the very largest American firms but also of medium-size and small firms. Not surprisingly, given the large growth in trade, firms tied to exports have been doing very well. Empirical data shows that firms connected with exports, their workers, and the communities in which they live are enjoying greater income growth and stability than firms, workers, or communities with no stake in exports. Conversely, firms and workers tied to import-competing industries have had to make significant economic and social adjustments.

As a result of the market-driven adjustments the American economy has gone through, the United States is extremely well-positioned to take advantage of expanded global trade and investment opportunities. Policies that have kept the American economy

open to international competition and have fostered the removal or reform of outdated government regulations have given American firms a new competitive vitality and have once again placed the United States at the top in many competitiveness rankings. The flexibility and innovative capacity of American firms and workers gives the U.S. economy the capacity to respond to new competitive challenges in the global marketplace and to reduce the risks to them posed by greater exposure to global competition.

The fact that the United States is in a relatively strong competitive position overall in terms of its productivity, its capacity to apply new technologies, and its ability to respond to market shifts does not mean that the nation is equally competitive in all industrial, service, and commodity sectors. Increasingly, the United States has a strong comparative advantage in subsectors or niches that are technology- and skill-intensive. Interestingly, this is the case even in sectors such as textiles, footwear, and glassware, industries in which the United States had experienced a strong erosion of comparative advantage in previous decades. At the same time, the United States retains a strong comparative advantage across a wide range of agricultural products and other natural resources, although even in this area there appears to be a trend toward high-value specialty products.

A regional analysis of data on comparative advantage indicates a significant regional variation in the comparative advantage of U.S. exports, but it is not clear whether that is due to geographic considerations or to differences in the ability of exporters from different countries that are U.S. competitors to deal with local regulatory and business practices. In a number of cases, a weak U.S. export performance in particular regions can be correlated with known difficulties concerning the regulatory regime in the countries involved. This weak performance might be explained by a greater reluctance of American firms, or legal inhibitions imposed on U.S. firms by U.S. law, to circumvent restrictive regulations or business practices. This fact raises the possibility that negotiated reforms in such regimes could enable the United States to capture a larger share of such markets.

The benefits of trade do not come without costs. One of those costs is that firms producing goods or services competing with imports, and their typically less-skilled employees, have been losing income. This, in turn, has had a negative impact on communities that host such firms. Trade, together with technology, has contributed to a

growing income inequality between educated and skilled workers and the entrepreneurially minded on one hand and less educated workers on the other. In turn, this has fostered public uncertainty about the advantages of expanded trade. The challenge for trade policy in the new economic environment is to spread the gains from expanded trade and investment more widely in the population. The first task is to deliver the large gains to be achieved from further global integration. Then, these gains must be distributed fairly within and across countries to achieve both internal political support and external consensus on a package of new and continuing liberalizations. Neither of these challenges can be met without overcoming the overwhelming misunderstanding of the issues involved.¹

THE U.S. STAKE IN TRADE

Over the last two decades, the importance of trade relative to the U.S. economy as a whole has grown significantly. American trade, as measured by imports and exports combined, grew by a whopping 1,261 percent in nominal terms between 1970 and 1994, far exceeding the 566 percent increase in nominal national output. In 1970, export and import transactions constituted about 11 percent of gross domestic product. By 1994, this amount had increased to 24 percent, an increase of 118 percent. And even though most countries significantly increased their openness, the U.S. increase is unmatched by that of any of its major trading partners. International trade has indeed become an ever more important influence on the U.S. domestic economy.

The same increased openness is also seen at the finest level of disaggregation. In the United States, for example, both the number of firms with export sales and the intensity of those sales has surged in the past 10 years. Small-firm export participation has grown strikingly, and small-firm exports have grown just as fast as exports of the top 50 U.S. exporters. Table 3.1 illustrates this point.

SECTORAL PRODUCTIVITY, COMPETITIVENESS, AND COMPARATIVE ADVANTAGE

Over the past 25 years, sectoral productivity shifts have radically altered U.S. competitiveness, giving the nation strong performance in high-technology, skill-intensive niches in the industrial structure. These productivity-based trends are far more important than more traditional indicators of sectoral competitiveness such as unit labor costs and industry investment would suggest. Productivity-based niche competition is the source of the strong U.S. position in the coming global economy.²

The movement in the rankings of industries with respect to their labor productivity level also has been significant. This can be observed in Table 3.2, which ranks various industry sectors according to their productivity (measured by value added per employee) in two periods, 1972 and 1993.

The large productivity growth figures in a number of industries, combined with the ranking shifts shown in Table 3.2, suggest that the United States is beginning to specialize in high-productivity growth sub-industries while simultaneously abandoning many low-productivity growth sub-industries. Roughly speaking, low-value-added production is being replaced with high-value-added production and low-productivity jobs are being replaced with high-productivity ones. Workers as well as employ-

Table 3.1. EXPORT PARTICIPATION AND INTENSITY
BY SMALL AND LARGE U.S. FIRMS

	1987	1992
Small Plants ^a (less than 250 employees)		
Participation (% of all plants)	12	19
Intensity (% of sales)	10	12
Large Plants ^a (more than 250 employees)		
Participation (% of all plants)	49	59
Intensity (% of sales)	10	14
Very Largest Exporters (top 50 firms)		
Intensity (% of sales)	14	16

^a Manufacturers only.

Source: J. David Richardson and Karin Rindal, *Why Exports Matter: More!* (Washington, DC: Institute for International Economics and the Manufacturing Institute, 1996), pp. 15, 17, based on U.S. Census of Manufacturers and *Fortune* magazine.

ers and shareholders reap these gains. And to the extent that global integration is the agent force in this niche specialization, the gains displayed should be credited to it.

EXPORTS AND PRODUCTIVITY AT THE PLANT LEVEL

The lesson that global engagement creates significant opportunity for gains applies not just "in the large," but on the plant floor too. One of the most surprising empirical regularities to be discovered in the past 20 years is the strong correlation between export engagement and a myriad of corporate and workforce performance indicators.³

Among other things, export engagement is strongly correlated with labor productivity. This finding, in turn, helps to explain why the gains from global integration today seem to involve productivity gains as well as the more conventional efficiency gains.⁴

The productivity gap between export-engaged workers and others in the United States is striking.⁵

Table 3.2. PRODUCTIVITY RANKINGS OF MANUFACTURING SECTORS

Industry	1993 Rank	1972 Rank
Telephone communications	1	20
Steel	2	16
Commercial banks	3	9
Cotton & synthetic broadwoven fabrics	4	15
Petroleum refining	5	8
Hydraulic cement	6	12
Farm & garden machinery	7	3
Agricultural chemicals	8	17
Household furniture	9	6
Dairy products	10	18
Paints and allied products	11	11
Grain mill products	12	19
Men's & boy's suits and coats	13	5
Industrial inorganic chemicals	14	10
Hotels and motels	15	2
Crude petroleum & natural gas production	16	1
Motor vehicles and equipment	17	14
Structural clay products	18	7
Tobacco products	19	13
Bakery products	20	4

- Exporting plants had higher average labor productivity in 1992 than nonexporting plants, as was also true in 1987. Exporters thus enjoyed a productivity "premium."
- The crude average productivity premium is quite large. The productivity premium for exporting (relative to nonexporting) plants is almost 40 percent on average for plants of all sizes, locations, and industries. Of course, some of that raw premium is due to the fact that exporting plants typically are larger and located in high-productivity industries and states. But the productivity premium turns out to be still quite large for exporting plants that are comparable to nonexporters in size, industry, and location, as follows.
- Value-added per employee in 1992, one measure of productivity, was almost one-sixth higher in exporting plants than in comparable nonexporting plants.
- Small exporters enjoyed a 1992 productivity premium of the same magnitude relative to comparable small nonexporters. This figure is up from a premium of one-seventh in 1987 between comparable small plants. (This is, of course, not as impressive as the raw average differences, which are due largely to exporters on average being in high-productivity industries.)
- Large exporters were even more productive in 1992. Their productivity premium relative to comparable nonexporters was almost one-fifth in 1992, up from less than one-sixth in 1987. (The raw average differences are, of course, again even larger.)

Trade provides an interpretation of these trends along somewhat unfamiliar lines. Openness to trade implies not just ordinary price competition but quality or "attribute" or productivity competition as well. Global competition between the cream of the quality and productivity competitors, both firms and workforces (and regional polities), inevitably involves their separation from the milk.

This fact has both bad- and good-news aspects. The bad-news aspect is that the low-performing marginal firms will decline and possibly die. The good news is that there is room for the displaced workers in the expanding high-performing marginal firms, although moving may require costly acquisition of new skills and work habits.

The productivity advantage for export-engaged firms, in turn, helps explain why employment growth and employment sta-

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bility are so much more favorable for exporters than for nonexporters.⁶

- Employment growth between 1987 and 1992 at plants that started or continued exporting during that time was up to 18.5 percent greater than at comparable plants that did not export.
- Large plants that started exporting between 1987 and 1992 "grew jobs" 13 percent faster than comparable large plants that did not export at all. Large plants that exported continuously through this period "grew jobs" almost 16 percent faster.
- By implication, exporting plants are better able to cope with unwellcome business slumps through attrition or through slowing the normal hiring process, instead of having to release workers outright.
- By implication, communities with large numbers of export-reliant plants are more likely to enjoy growing tax bases and are less likely to face falling real-estate prices.
- Exporting plants were less likely to close their doors between 1987 and 1992 than comparable nonexporting plants.

REVEALED COMPARATIVE ADVANTAGE INDICATORS

It is apparent that the United States has experienced noticeable structural change over the last two decades. Industries have risen and industries have fallen. To keep jobs and a good standard of living, countries must shift factors of production from the declining industries into the ascendant ones. Labor, capital, and other resources need to move to uses that produce the greatest return, even if that means shrinking some important sectors of the economy.

The reallocation of resources will almost surely reflect America's comparative advantage. The commodity pattern of trade will reflect relative productivity and costs as well as the influence of nonprice factors, such as goodwill, quality, and the availability of servicing and repair facilities.

How does the United States compare to its trading partners in comparative advantage? What do productivity trends contribute to the answers?

TABLE 3.3. U.S. REVEALED COMPARATIVE ADVANTAGE, 1980 AND 1994
(ONE-DIGIT SITC PRODUCT GROUPS)^a

SITC	1980	1994
0 Food and live animals chiefly for food	128.4	137.2
1 Beverages and tobacco	94.8	137.0
2 Crude materials, inedible, except fuels	137.9	141.2
3 Mineral fuels, lubricants and related materials	40.2	41.8
4 Animal and vegetable oils, fats and waxes	135.6	106.3
5 Chemicals and related products, N.E.S.	141.9	140.5
6 Manufactured goods classified chiefly by material	77.1	82.7
7 Machinery and transport equipment	103.1	99.4
8 Miscellaneous manufactured articles	82.2	78.4
9 Commodities & trans. not classified elsewhere	122.9	129.6

^aRCA indicators for 1980 and 1994 vis-à-vis all regions for all one-digit SITC product groups.

A good indicator of trade specialization is an index developed by the late economist Bela Balassa to measure revealed comparative advantage (RCA).⁷ The "revealed" comparative advantage of any country can be indicated by its trade performance with respect to other countries.

RCA measures a country's relative share in the exports of a particular product to a particular region or country. To place small and large countries on the same footing, the number is adjusted to take into account the exporting country's share in the exports of all manufactured goods to the importing country or region involved. Values greater than 100 indicate that a country's exports are relatively specialized in that industry.

The indicator of export specialization helps to identify areas of strength and of weakness, as these are revealed by past export performance. Table 3.3 shows the RCA as reflected in trade between the United States and all regions of the world in 1980 and 1994. The calculation in this table is based on the broadest category of industry groupings, the one-digit Standard Industrial Tariff Classification (SITC) used by the U.S. government. Looking across the sectors at the numbers for 1994, the United States shows a strong comparative advantage in sectors 0 to 3, covering food products and natural resources, basically reflecting traditional trade theory and the relative richness of the nation's natural resources. The United States also clearly shows a comparative advantage in chemicals and related products. In contrast, it shows a comparative disadvantage in manufactures at this most aggregate level, especially for the mis-

cellaneous manufacturing category. U.S. strengths in manufacturing show up at a more disaggregated level of measurement, where the numbers capture U.S. strengths in technology.

Table 3.4 shows more detailed data for SITC product groups 6 to 9, in which the United States does not show a strong overall comparative advantage at the one-digit level. The rank-ordered numbers indicate that at this more detailed level, the United States shows a considerable comparative advantage in many manufacturing products, including products such as glassware, textile fabrics, floor coverings, and specialty fabrics in which the United States might be thought to have lost global competitiveness. Generally, the product categories in which the United States is competitive are products containing high-value content such as advanced technology or up-to-date designs. What would become even more apparent with an analysis of even more disaggregated data is that U.S. competitive strength is increasingly focused on particular product niches containing technology- or skill-intensive inputs.

GEOGRAPHIC COMPETITIVENESS AND COMPARATIVE ADVANTAGE BY REGION

Regional-oriented U.S. trade negotiations involve not just knowing which sectors and types of workers are globally competitive or uncompetitive, they require knowledge of which countries and which sectors therein show the greatest opportunities for U.S. export growth. The most promising negotiating partners today may be very different from the principal trading partners in the past.

A comparison of U.S. trade patterns in the early 1980s and the early 1990s shows a change in the regional revealed comparative advantage of U.S. exports.

- In the early 1980s, three major trading areas accounted for roughly equal "quarters" of U.S. trade: the European Union (EU), Asia, and the border countries of Canada and Mexico. The rest of the world composed the remaining quarter.
- U.S. trade with Asia and the border countries has increased tremendously over the last decade, by roughly 7 percentage points each. Tables 3.5 and 3.6 show that the share of U.S. exports to these groups increased from 21 to 28 and from 23 to

TABLE 3.4. U.S. REVEALED COMPARATIVE ADVANTAGE, 1994
(THREE-DIGIT SITC CATEGORIES)^a

SITC	RCA Value
899 Other miscellaneous manufactured articles	171.6
712 Steam & other vapour power units, steam engines	159.6
896 Works of art, collectors pieces & antiques	146.7
792 Aircraft & associated equipment and parts	144.9
872 Medical instruments and appliances	141.3
721 Agricultural machinery and parts	140.7
711 Steam & other vapour generating boilers & parts	138.0
874 Measuring, checking, analyzing instruments	133.9
892 Printed matter	133.7
741 Heating & cooling equipment and parts	129.6
723 Civil engineering & contractors plant and parts	127.3
659 Floor coverings, etc.	126.7
692 Metal containers for storage and transport	123.5
898 Musical instruments, parts, and accessories	123.2
691 Structures & parts of structures; iron, steel, aluminium	121.6
679 Iron & steel castings, forgings & stampings; rough	119.9
621 Materials of rubber (e.g., pastes, plates, sheets, etc.)	119.9
657 Special textile fabrics and related products	118.3
742 Pumps for liquids, liquid elevators and parts	114.1
728 Machine & equipment specialized for particular industry	114.1
714 Engines & motors, nonelectric	114.1
745 Other nonelectrical machine tools, apparatus & parts	112.6
727 Food processing machines and parts	112.5
744 Mechanical handling equipment and parts	112.2
776 Thermionic, cold & photo-cathode valves, tubes, parts	109.3
882 Photographic & cinematographic supplies	105.9
665 Glassware	104.6
743 Pumps & compressors, fans & blowers, centrifuges	103.4
656 Tulle, lace, embroidery, ribbons, & other small wares	102.9
893 Articles of materials described in division 58	101.4
695 Tools for use in hand or in machines	100.8
651 Textile yarn	98.5
736 Machine tools for working metal or metal carbon parts	98.1
	96.3

^a RCA indicators for 1994 vis-à-vis all regions for selected three-digit SITC categories within one-digit product categories 6 to 9. Arranged in descending RCA values.

30 percent respectively, while U.S. imports from them increased from 29 to 40 percent and 23 to 27 percent respectively. As a result, in the early 1990s the Asian countries, as a group, became the Unit-

TABLE 3.5. U.S. EXPORT GEOGRAPHIC STRUCTURAL CHANGE

	1980-82 Average	1992-94 Average
Total Market ^a	100.0	100.0
Border Countries	23.0	30.0
Canada	17.2	19.6
Mexico	5.9	10.4
Asia ^b	21.2	27.7
Japan	9.7	10.5
Korea	2.3	3.5
Taiwan	1.8	3.4
China	1.5	2.0
Hong Kong	1.1	2.1
European Union ^c	26.7	22.6
United Kingdom	5.8	5.4
Germany	4.9	4.7
France	3.7	3.4
Latin America ^d	6.8	5.1

^a Includes 48 countries; all countries included in the table's regional groupings as well as six East European countries, Australia and New Zealand, Norway and Switzerland, and India, South Africa, Egypt, Israel, and Saudi Arabia.

^b Includes China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand.

^c Includes 15 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

^d Includes Argentina, Brazil, Chile, Colombia, Peru, and Venezuela.

Source: Stats Canada, World Trade Data Base (1995).

ed States' largest trading partner, accounting for more than one-third of U.S. trade; the border countries and the EU account for the second and third largest shares.

Analysis of revealed comparative advantage at a regional level reveals a surprising diversity of sectoral U.S. comparative advantage across trading partners. "Niche" comparative advantage in a particular sub-industry in Europe may be counterposed to U.S. disadvantage in exactly the same niche in North American markets. Strong U.S. growth in European export penetration may be counterposed against weak U.S. export growth in Canadian and Mexican markets in exactly the same niche.

In some cases these regional differences are the result of differences in the inclination or ability of exporters from a particular country to break through restrictive local regulations or

TABLE 3.6. U.S. IMPORT GEOGRAPHIC STRUCTURAL CHANGE

	1980-82 Average	1992-94 Average
Total Market ^a	100.0	100.0
Border Countries		
Canada	23.2	27.3
Mexico	18.8	19.9
Asia ^b	4.3	7.3
Japan	29.0	40.3
Taiwan	14.9	17.4
Hong Kong	3.4	4.3
Korea	2.4	5.0
China	2.3	3.1
European Union ^c	0.7	2.7
United Kingdom	17.8	18.6
Germany	5.0	4.0
France	4.6	5.0
Latin America ^d	2.2	2.7
	5.3	3.6

^a Includes 48 countries, all countries included in the table's regional groupings as well as six East European countries, Australia and New Zealand, Norway and Switzerland, and India, South Africa, Egypt, Israel, and Saudi Arabia.

^b Includes China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand.

^c Includes 15 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

^d Includes Argentina, Brazil, Chile, Colombia, Peru, and Venezuela.

Source: Stats Canada, World Trade Data Base (1995).

business practices or to accommodate to a different cultural, social, or legal environment. In other cases these differences are due to geographic factors, differences in natural endowments, or simply the result of geographically concentrated corporate strategies. Long-standing investment and trading relationships also may help explain why a country's exporters are relatively more successful in penetrating some markets as compared to other markets.

To illustrate these points, we have calculated the RCA indicators for U.S. trade with the major regions.⁸ Table 3.7 provides a regional analysis of revealed comparative advantage at the three-digit level for industry sectors in which the United States has an overall comparative advantage. The table shows substantial regional variation in U.S. trade performance in these sectors. In a number of these sectors there is a strong possibility that American exporters

are less inclined or prevented by U.S. laws from overcoming restrictive government regulations or business practices, or that other countries' exporters have developed long-term investment or trading relationships that enhance their ability to overcome local conditions. At a minimum, sectors showing a large regional variation deserve a closer look.

Table 3.8 shows a somewhat longer list of products at the three-digit level in which the United States does not show a relative comparative advantage vis-à-vis the world as a whole but nevertheless shows considerable competitive strength in some regions. This table illustrates that comparative advantage is less immutably fixed by a specific set of natural endowments and is much more open-ended in today's world, where competitive advantage often depends on technology, design, and managerial skill at the firm level. As noted earlier, a more disaggregated set of data would show that specialization takes place in specific niche products and that trading relationships between mature economies are characterized by extensive two-way trade.

Table 3.9 presents the list of 25 products at the three-digit SITC level for which the United States shows the least revealed comparative advantage in trade with all regions. What is interesting about this list is that in virtually all of these products, the United States shows competitive strength in at least one region of the world.

LIVING-STANDARD DISPERSION INDICATORS AND IMPLICATIONS

The gains from trade seem unequally distributed, no matter how large their overall size. This is a major problem. Increasingly, the gains from global engagement seem concentrated in only some groups within a country and in only some countries.⁹ Others in society gain less, and still others seem to lose.

Economists are confident that the gains to the gainers generally exceed the losses to the losers.¹⁰ But that only guarantees that an economy's mean standard of living rises. The problem is that the economy's median standard of living—the living standard of the most typical income earner in the very middle of the income distribution—may not rise. Defined this way, global integration may not benefit the typical citizen. And the broader economic problem

TABLE 3.7. U.S. REVEALED COMPARATIVE ADVANTAGE WITH KEY REGIONS, 1994
(PRODUCT CATEGORIES WITH STRONG OVERALL ADVANTAGE)^a

SITC	All Regions ^b	EU15 ^c	Border Countries ^d	Japan	Asian Tiger ^e	ASEAN ^f	Latin ^g
723 Civil engineering & contractors plant and parts	127.3	74.3	148.7	21.6	178.7	204.3	134.2
659 Floor coverings, etc.	126.7	65.9	124.0	316.5	196.7	100.7	137.3
692 Metal containers for storage and transport	123.5	80.6	99.4	313.6	101.6	179.5	132.0
898 Musical instruments, parts and accessories	123.2	133.3	115.7	117.5	119.7	169.4	137.8
691 Structures & parts of structures; iron, steel, aluminum	121.6	86.1	92.6	264.2	170.1	200.8	128.6
679 Iron & steel castings, forgings & stampings; rough	119.9	84.8	132.4	144.2	95.6	144.3	82.9
621 Materials of rubber (e.g., pastes, plates, sheets, etc.)	119.9	137.3	115.9	42.1	173.5	42.8	131.9
657 Special textile fabrics and related products	118.3	89.8	124.8	156.3	123.3	84.8	64.3
742 Pumps for liquids, liquid elevators and parts	114.1	88.2	136.0	48.1	173.8	201.4	93.9
728 Machines & equipment specialized for particular industry	114.1	83.6	118.1	99.3	182.2	195.0	140.0
714 Engines & motors, nonelectric	112.6	106.0	83.1	280.0	158.8	195.1	93.5
745 Other nonelectrical machine tools, apparatus & parts	112.5	90.8	132.6	70.1	104.8	197.7	141.1
727 Food processing machines and parts	112.2	70.6	131.3	127.3	167.6	199.8	140.2
744 Mechanical handling equipment and parts	109.3	91.9	104.8	28.0	139.4	198.8	136.6
776 Thermionic, cold & photo-cathode valves, tubes, parts	105.9	132.8	124.3	101.9	107.6	108.7	140.4
882 Photographic & cinematographic supplies	104.6	79.1	112.8	125.3	197.7	125.9	125.0
665 Glassware	103.4	51.5	101.3	343.1	94.2	109.9	122.3
743 Pumps & compressors, fans & blowers, centrifuges	102.9	63.1	132.6	21.4	148.5	145.4	75.6

^a RCA indicators for three-digit SITC product categories selected for their overall comparative advantage.

^b Includes 38 countries: all countries included in the table's regional groupings as well as Australia, New Zealand, China, South Africa, Egypt, and Israel.

^c Only includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

^d Canada and Mexico.

^e Includes Hong Kong, Korea, Singapore, and Taiwan.

^f Only includes Indonesia, Malaysia, Philippines, and Thailand.

^g Only includes Argentina, Brazil, Chile, Colombia, Peru, and Venezuela.

Source: Computed based on Stats Canada, World Trade Data Base (1995).

TABLE 3.8. U.S. REVEALED COMPARATIVE ADVANTAGE WITH KEY REGIONS, 1994
(PRODUCT CATEGORIES WITH WEAK OVERALL ADVANTAGE)^a

SITC	All Regions ^b	EU15 ^c	Border Countries ^d	Japan	Asian Tiger ^e	ASEAN ^f	Latin ^g
695 Tools for use in hand or in machines	98.5	90.4	133.4	63.0	52.7	156.4	110.3
651 Textile yarn	98.1	82.2	96.0	91.0	136.3	47.0	79.0
736 Machine tools for working metal or metal carbon, parts	96.3	77.4	137.2	42.7	135.9	181.1	114.1
871 Optical instruments and apparatus	95.9	126.1	118.3	90.2	76.3	47.5	141.2
716 Rotating electric plant and parts	95.0	91.0	81.1	31.4	114.3	170.0	118.6
663 Mineral manufactures, N.E.S.	95.0	92.5	82.2	69.3	162.1	158.0	97.7
725 Paper & pulp mill machines, machines for manufacture of paper	92.4	52.2	114.7	101.1	196.6	203.9	112.6
718 Other power generating machinery and parts	92.1	52.8	121.1	17.8	194.5	133.0	123.3
713 Internal combustion piston engines & parts	89.7	73.5	106.4	15.8	190.2	202.9	80.9
774 Electric apparatus for medical purposes (radiology)	89.6	57.4	140.4	148.0	217.3	201.9	146.6
793 Ships, boats and floating structures	88.9	51.9	67.1	91.8	57.5	187.2	136.5
773 Equipment for distributing electricity	88.5	139.2	76.9	88.0	65.8	44.9	121.4
778 Electrical machinery and apparatus, N.E.S.	86.3	97.2	96.5	50.7	67.5	95.7	127.3
655 Knitted or crocheted fabrics	86.1	104.0	122.9	180.9	13.9	170.7	126.8
684 Aluminum	85.0	75.5	62.5	261.6	220.3	196.9	35.4
689 Miscellaneous nonferrous base metals employed in metallurgy	83.7	93.9	78.7	227.2	55.5	55.4	24.6
737 Metal working machinery and parts	83.3	41.2	82.8	18.7	107.7	204.8	122.4
764 Telecommunications equipment and parts	80.6	153.8	85.7	54.8	65.4	40.0	144.6
722 Tractors fitted or not with power takeoffs, etc.	80.4	58.8	100.9	15.0	190.1	202.4	131.0
791 Railway vehicles & associated equipment	80.1	85.1	57.4	56.7	220.6	195.8	105.3
761 Television receivers	62.2	142.8	23.7	17.2	77.1	1.2	147.7
662 Clay construction materials & refractory construction materials	60.7	15.1	91.3	89.4	191.9	108.8	45.2
884 Optical goods, N.E.S.	60.5	75.5	133.4	37.6	22.3	58.6	141.3
881 Photographic apparatus and equipment, N.E.S.	59.8	100.0	121.9	22.8	46.3	24.3	143.2
724 Textile & leather machinery and parts	58.8	26.7	155.0	21.3	74.0	194.9	113.6
894 Baby carriages, toys, games and sporting goods	56.7	109.5	100.7	166.7	18.6	12.8	104.4

^a RCA indicators for three-digit SITC product categories selected for their overall weak comparative advantage.

^b Includes 38 countries: all countries included in the table's regional groupings as well as Australia, New Zealand, China, South Africa, Egypt, and Israel.

^c Only includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

^d Canada and Mexico.

^e Includes Hong Kong, Korea, Singapore, and Taiwan.

^f Only includes Indonesia, Malaysia, Philippines, and Thailand.

^g Only includes Argentina, Brazil, Chile, Colombia, Peru, and Venezuela.

Source: Computed based on Stats Canada, World Trade Data Base (1995).

TABLE 3.9. U.S. REVEALED COMPARATIVE ADVANTAGE WITH KEY REGIONS, 1994
(PRODUCT CATEGORIES WITH STRONG OVERALL DISADVANTAGE)^a

SITC	All Regions ^b	EU15 ^c	Border Countries ^d	Japan	Asian Tiger ^e	ASEAN ^f	Latin ^g
666 Pottery							
672 Ingots and other primary forms, of iron or steel	11.7	10.3	93.0	2.5	6.2	1.0	45.5
762 Radio-broadcast receivers	15.4	7.4	53.8	1.5	218.2	203.0	2.1
661 Lime, cement, and fabricated construction materials	20.2	58.4	57.7	15.1	2.4	0.4	27.3
885 Watches and clocks	29.8	4.6	43.2	149.2	101.8	68.4	7.3
897 Jewelry, goldsmiths and other articles of precious metals	31.4	61.3	119.3	28.0	9.5	40.6	99.4
671 Pig iron, spiegeleisen, sponge iron, iron or steel	36.3	18.9	88.2	241.7	39.1	24.8	6.8
674 Universals, plates and sheets, of iron or steel	36.3	29.4	76.2	169.9	227.8	191.4	3.0
677 Iron/steel wire/wireth/rope coated, but not insulated	36.6	5.6	80.4	6.3	22.7	31.7	18.5
654 Textile fabrics, woven, other than cotton/man-made fiber	44.7	12.6	67.6	8.4	24.9	85.3	33.2
697 Household equipment of base metal, N.E.S.	49.5	32.5	93.1	62.2	50.3	71.6	54.3
685 Lead	49.7	33.6	60.5	178.8	14.5	11.7	61.2
673 Iron and steel bars, rods, angles, shapes & sections	50.7	25.4	13.4	238.0	217.2	199.1	24.2
676 Rails and railway track construction material	50.8	10.1	70.5	7.7	72.4	178.4	27.5
667 Pearls, precious & semi-precious stones, unworked/worked	53.7	13.5	81.5	1.6	127.9	186.6	138.4
894 Baby carriages, toys, games and sporting goods	55.4	54.5	116.8	274.7	140.9	52.7	2.3
724 Textile & leather machinery and parts	56.7	109.5	100.7	166.7	18.6	12.8	104.4
681 Silver, platinum & other metals of the platinum group	58.8	26.7	155.0	21.3	74.0	194.9	113.6
881 Photographic apparatus and equipment, N.E.S.	58.9	94.9	49.7	283.9	218.2	61.9	5.0
884 Optical goods, N.E.S.	59.8	100.0	121.9	22.8	46.3	24.3	143.2
662 Clay construction materials & refractory construction materials	60.5	75.5	133.4	37.6	22.3	58.6	141.3
761 Television receivers	60.7	15.1	91.3	89.4	191.9	108.8	45.2
	62.2	142.8	23.7	17.2	77.1	1.2	147.7

^a RCA indicators for three-digit SITC product categories selected for their overall weak comparative advantage.

^b Includes 38 countries: all countries included in the table's regional groupings as well as Australia, New Zealand, China, South Africa, Egypt, and Israel.

^c Only includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

^d Canada and Mexico.

^e Includes Hong Kong, Korea, Singapore, and Taiwan.

^f Only includes Indonesia, Malaysia, Philippines, and Thailand.

^g Only includes Argentina, Brazil, Chile, Colombia, Peru, and Venezuela.

Source: Computed based on Stats Canada, World Trade Data Base (1995).

is that global integration may not benefit middle-class citizens as a group.

The corresponding political problem is that further global integration, by itself, may not be democratically supportable: Globalization could be something shunned by a democracy, not embraced. One solution, of course, is global integration and . . . where the blank describes any companion policies that could compensate groups that otherwise would vote no on global integration. As in AIDS therapy, often "cocktails" of policies taken together have the most impact, more than the sum of their isolated benefits: global integration and, say, middle-class education benefits, enhanced tax relief for the working poor, effective retraining inducements for those with skills of shrinking value, and so on. The challenge is to discover the politically supportable recipes of ingredients.

The same problem also can be described as overly narrow diffusion of the gains from global integration. Both economically and politically, policies that cause large and diffuse increases in living standards are best.¹¹ Diffusion of the gains from trade is as important as realizing them. Gains that are too concentrated are not necessarily good, no matter how large they are on average.

The same problem, and the same potential solutions, exist across countries. The gains from global integration seem especially large for some countries, smaller for others, and possibly negative for a few.¹² Almost all estimates show that gainers gain more than losers lose. But that only guarantees that the average (mean) global standard of living rises. The standard of living of the median country—the one in the middle of World Bank and other income rankings—might not rise much, if at all. So global integration might not benefit the typical country much, nor the vast group of middle- and lower-income countries.

The economic and diplomatic problems are similar. Further global integration may be politically insupportable among, say, all the members of the World Trade Organization. The gains are not diffuse enough. But possible solutions are similar too. Cocktails of policies can, in principle, draw in the countries least benefited. The challenge is to find the winning therapeutic policy mix, which might be different for each country. Global integration and greater technical assistance? . . . environmental grants and technology? . . . tighter security arrangements? . . . educational and cultural exchanges? . . . debt relief?

But what is the evidence that the recent gains from global integration are unequally distributed within and between countries? Are these problems really significant or merely hypothetical?

Diffusion Within Countries

Within countries, income inequality has been rising for the industrial market economies and falling among most others. Global integration's contributing influence is controversial.

A more precise summary is that patterns are diverse but follow clear central trends. For industrial market economies, conventional measures show little trend in the early 1980s and growing inequality in the late 1980s and early 1990s, especially outside of continental Europe.¹³ For nonindustrial countries at all levels, the central trend over the 1980s and 1990s has been declining inequality.¹⁴

With these trends as context, growing dispersion of the within-country gains from global integration would seem to be primarily a problem for Europe and the United States. Since these areas have initiated the most important regional and global market integration over the past half century, this fact poses a particularly serious challenge to the momentum of world trade negotiations.

Within the United States, the role of global integration in these trends is well researched. Both "trade" and technology contribute to wage shifts between skill groups that create these trends. The influence of both is illustrated in Figure 3.1.

The message from the figure is clear. Time is a greater enemy of lower-skilled workers than trade is. First, note that U.S. export industries long have required a larger number of educated workers relative to the number required by import industries. Second, note that export and import industries both have shifted steadily toward requiring a relatively smaller number of less-educated workers. Finally, note that the time effect is much greater than the gap effect. While the relative size of the gap between the two lines grew slightly, both sets of lines shrank by more than half during the 20-year period shown. Both export and import industries reduced by more than half the number of less-educated workers needed for each more-educated worker.

It is remarkable that very similar shifts over time have been observed even in developing countries. There is growing consensus that these shifts reflect skill-biased technological change going on in parallel in a number of countries.¹⁵ Skill-biased technology-



FIGURE 3.1 NUMBER OF LESS-EDUCATED WORKERS REQUIRED FOR EACH MORE-EDUCATED WORKER IN EXPORT AND IMPORT-SENSITIVE INDUSTRIES IN THE UNITED STATES

Source: J. David Richardson and Karin Rinal, *Why Exports Matter More!* (Washington, D.C.: Institute for International Economics and the Manufacturing Institute, 1996), p. 19, based on table 1 of Robert E. Baldwin and Chen G. Cain, "Shifts in U.S. Relative Wages: The Role of Trade, Technology, and Factor Endowments," National Bureau of Economic Research Working Paper No. 3934, February 1997.

ical change is a shift in production methods toward more-skilled labor services and away from those that are less skilled. There may be only small impacts on measures of overall labor productivity, because these cases represent replacement of one worker with another (albeit one who is more skilled). But there will be large impacts on the relative rewards of the skilled successor and the less-skilled displaced worker.

Skill-biased technological change has several possible sources: One is worldwide computerization, another is worldwide outsourcing of intermediate components and business services. Trade, investment, and technology transfer can be vehicles for these technological trends. Computer trade has grown stunningly, and the recent Information Technology Agreement will only make it grow faster. International trade in components and business services continues to grow strikingly. Communications innovation and the declining cost of information make certain forms of skill-biased technological change global instead of local and therefore a source of growing worldwide wage dispersion rather than merely a localized phenomenon.

The compensation gap between export-engaged workers and others in the United States also should be mentioned. In fact, 50 percent of the widening gap in payroll shares between more- and

less-skilled workers in U.S. manufacturing between 1973 and 1987 (and virtually all of the widening wage gap) can be explained by the growth of exporting plants and the shrinkage of plants that do not export.

Diffusion Across Countries

Across countries, income distribution has been characterized by hollowing out, describing two contrasting trends. Upper-middle-income countries are converging on high-income industrial countries in their average (mean) standard of living. But lower-middle-income countries have been slipping behind the higher groups, and some have been falling back toward low-income groups.¹⁶

The degree to which global integration has been responsible for these trends is, of course, controversial.¹⁷ The World Bank's 1996 *Global Economic Prospects*, however, finds a strong correlation between growth in average living standards and integration with the global economy.¹⁸ Indeed the patterns are striking. Whether global integration is measured as an attribute (level of integration) or as a momentum (speed of integration), globally integrated and globally integrating countries enjoy faster growth and more above-average standards of living than do others. The more integration impetus, the better, with the strongest and fastest integrators closing the standard-of-living gap rapidly on the high-income industrial countries. Countries that are moderate, weak, and slow/low integrators into the global economy are not only growing more slowly in living standards, they also are falling farther and farther behind the high-income industrial and industrializing countries, and most are suffering stable or declining living standards. The projection of these trends to 2005 in Figure 3.2 shows no relief except from the absolute decline in the standards of living in those countries that are least globally engaged.

Of course, one response to these trends is that these countries should get on board the globalization train. That was in fact the strong plea used during the Uruguay Round and may contribute to the more optimistic outlook for standard-of-living growth running up toward 2005 (Figure 3.2). But if the gap in gains continues to widen, or, worse, if high-income countries renege on their back-loaded textile/apparel and other Uruguay Round trade opening concessions, how can new global integration possibly be sustained? It could be diplomatically insupportable. Without

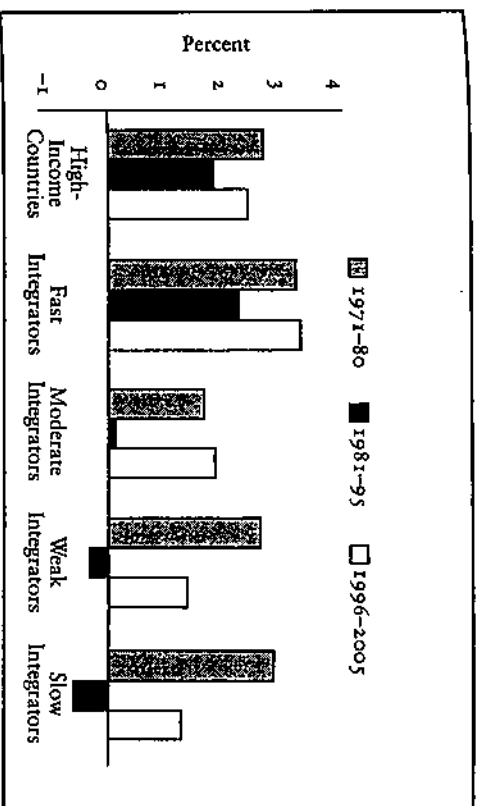


FIGURE 3.2 MEDIAN REAL PER CAPITA GDP GROWTH BY INTEGRATION CATEGORY, 1971-2005

Source: World Bank, *Global Economic Prospects and the Developing Countries* (Washington, D.C.: World Bank, 1996), p. 31.

compensatory agreements on other matters, the gains to the small number of big gainers would in some sense be too big, and the gains to the big number of small gainers would be too small. And what would be the substance of such compensatory agreements? That is the global political challenge.

WHAT IT ALL MEANS

The global economy in the new century offers a different set of opportunities from in the old, and a different set of risks. The new opportunities involve growth-enhancing gains from trade—cheaper, higher-quality components, capital goods, education, and technologies rather than merely cheaper consumer goods. The new risks involve political fallout from misunderstanding and from narrow diffusion of these dynamic gains.

The new gains from global integration reward those who are savvy, agile, and skilled at identifying specialized business niches. Those are workers, firms, and countries. What they identify increasingly in the global economy are those niches in which to specialize their efforts and those in which to depend on the savvy, agility, and skills of others. The former become exported activi-

ties and those that promote investment (and even professional migration) abroad; the latter become sources of imports and inward investment.

The new risks from global integration are the opposite face of the new rewards. Workers, firms, and even countries that reflexively try to preserve traditional competence and protect those who refuse to adapt will face increasingly high costs—of forgone momentum. Forgone momentum will entail sluggish growth, ensuing social instability, unattractive investment opportunities, and reduced rewards to education, experience, and research and development.

But the market does not guarantee wide dispersion of the gains from trade. If they are narrowly distributed, or if enough workers, firms, and countries merely perceive (however mistakenly) that they are, there will be no political support for policies that engage global integration further and no international consensus for new global trade-liberalizing negotiations.

The United States and its trading partners today, therefore, face one large political problem and several related trade-offs. Solving the political problem according to selections made within the trade-offs will necessarily involve creativity, judiciousness, persuasion, and strong leadership.

The Majoritarian Problem

Further steps toward global integration are inevitably political. Not just border policy, but internal policies with cross-border effects will face pressures for rationalization. Yet if the median voter or the middle-income countries are not made better off by further global integration, how feasible is further integration in systems of democracy and consensus (as opposed to systems of meritocracy and coercion)? Deeper still in the same spirit, how then could further global integration be defended as desirable? Arguments that rising tides lift all the boats are inherently suspect anyway, but all the more so when the majority of boats seem anchored so far up river, out of range of the benefits of global integration, that the tide never reaches them. The problem is to make a majority of the boats ocean-going.

The Big Emerging Trade-Offs

Without solutions to this problem, unsavory trade-offs emerge. One trades off the dynamic gains from trade and their distribution, for-

ing countries to choose between productivity and growth impetus and avoiding marginalization or hollowing out of the middle class. This trade-off confronts industrial countries especially, since in others, global integration seems to have equalizing internal distributional effects.

There is a closely related trade-off between current generations and future generations. Failure to engage in further global integration may make economic prospects slightly more promising and secure for today's middle-age, middle-class households in industrial countries and for the poor among them. But as a result, the next generation may pay a high price 20 years from now.

More constructively, the most promising bequests that current generations can leave to their offspring are the skills, savvy, corporate culture, and social infrastructure necessary to engage the global marketplaces of the new millennium: cultural and language skills; technological, geographical, and scientific competence; workplace adaptability, mobility, and flexibility; and so on. Like all bequests, this one also costs current generations. But if this account of global integration is accurate, it can be persuasively defended in terms of intergenerational equity.¹⁹

Possible Policy Approaches

From this assessment of the economic context of U.S. trade policy, three promising directions for trade strategy emerge.

- *Therapeutic cohabitation.* Global integration is most likely to succeed when trade policy is paired with other issues that allow for exchanges of concessions that pull peripheries in. Political reciprocity is naturally built into such negotiating cocktails. Between countries, companion issues might include debt relief or environmental technology grants. Within countries, companion issues almost surely should include adjustment policies such as corporate rationalization (and privatization), worker mobility and retraining, and regional-national revenue sharing.²⁰

- *Innovative Adjustment.* The adjustment agenda has been seriously neglected. Sectoral safeguards need reviving and rationalization, including credible means to lift safeguards over time. More thought needs to be put into voluntary buyouts of those adversely affected by trade, financed perhaps by special but temporary taxes on international transactions. Some of these buyouts might be arranged even on a cross-country basis.

• *Constructive Regionalism*. Regional trade liberalization initiatives should result in gains that diffuse widely within and between the participating countries.²¹ That can best be accomplished through geographically contiguous groupings that facilitate the mobility and adaptability of the resources needed for adjustment. These regional trade groupings also should focus on economic sectors that will generate widely shared benefits.

NOTES

1. Economic misunderstanding among the populist public is one obvious side of this. But economists are guilty of misunderstanding too. They often have misunderstood their populist opposition. Economists have demonized protectionism so successfully that they now religiously refuse to have any serious exchange with devils who worry about the effect of globalization on community, rights, fairness, or the environment. "Those things are important," they say, "but border barriers to markets are neither their cause nor wise instruments to encourage them." As often is the case, demonization is the enemy of understanding. For a careful account of these themes, see Chapters 4 and 14 and Dani Rodrik, *Has Globalization Gone Too Far?* (Washington, DC: Institute for International Economics, 1996).
2. Although the focus here is on industrial sectors because the data are richer, the same opportunities for niche-based gains exist for trade in services, trade in corporate control (foreign direct investment), and trade in technology, whether protected by intellectual property protection or not. Opportunities for niche-based gains are not merely due to export potential. The gains from niche-determined imports of outsourced and other components are just as large as export gains and show up as productivity gains (again) for the firms that purchase them from abroad—imported components, business services, management prowess, and technology.
3. For a detailed summary of this evidence for the United States and cites for the corresponding research for Israel, Bulgaria, and Australia, see J. David Richardson and Karin Rindal, *Why Exports Really Matter!* (Washington, DC: Institute for International Economics and the Manufacturing Institute, 1995) and their *Why Exports Matter: More!* (Washington, DC: Institute for International Economics and the Manufacturing Institute, 1996). The evidence for the United States comes from a number of sources: researchers such as Bernard and Jensen at the Census Bureau's Center for Economic Studies, using the U.S. manufacturing censuses and annual surveys; the exhaustive U.S. exporter data base compiled at the U.S. Commerce Department by William Kolarik and summarized in William F. Kolarik and Scott G. Ellsworth, *A Profile of United States Exporters: Initial Findings from the Exporter Data Base* (Washington, DC: U.S. Department of Commerce, ITA, Office of Trade and Economic Analysis, September 1993); surveys such as Paul Swaminath, "Export Induced Manufacturing Plant Characteristics" (unpublished ms., 1995, compiled by the Manufacturing Institute of the National Association of Manufacturers and others). The evidence for other countries can be found in Arye Bregman, Melvyn Fuss, and Haim Regev, "High Tech and Productivity: Evidence from Israeli Industrial Firms," *European Economic Review* 35 (1991), pp. 1199-1221; Simeon Djankov and Bernard Hoekman, "Trade Re-Oriented and Post-Reform Productivity Growth in Bulgarian Enterprises" (unpublished ms., August 28, 1996); and Henry Ergas and Mark Wright, "Internationalization, Firm Conduct and Productivity," paper presented at a conference on the international integration of the Australian economy, Loombs Centre, Kirribilli, July 11-12, 1994.
4. For an argument that there is causal connection, see Richardson and Rindal, *Why Exports Matter: More!*, pp. 21-23. For a cautious inability to find a causal connection of exporting on productivity in Colombia, Mexico, or Morocco, see Sofronis Clerides, Saul Lach, and James Tybout, "Is 'Learning by Exporting' Important? Micro-Dynamic Evidence from Colombia, Mexico, and Morocco" (National Bureau of Economic Research Working Paper no. 5615, August 1996).
5. The following is from Richardson and Rindal, *Why Exports Matter: More!*, pp. 10-12.
6. *Ibid.*, p. 13.
7. Bela Balassa, *Studies in Trade Liberalization* (Baltimore, MD: Johns Hopkins Press, 1967). The RCA index for a particular industry is defined as the share of the country's exports of the industry in total manufacturing exports of the country divided by the share of global exports of such product in total global manufacturing exports.
8. Six Eastern European countries, Norway, Switzerland, India, and Saudi Arabia (included in previous tables) are not included here.
9. For example, "eight developing countries accounted for two-thirds of foreign direct [investment] inflows in 1990-93, while half of all developing countries received little or none." World Bank, *Global Economic Prospects and the Developing Countries* (Washington, DC: World Bank, 1996), p. 1.
10. Indeed, economists estimate that the gains are quantitatively bigger than ever because of the way global integration enhances productivity and growth and disciplines distortions of market power.
11. The economics of this argument spring from the pathbreaking work of John Rawls's *Theory of Justice* (1971) and those who have continued in a similar tradition. But they do not require Rawls's extreme simplification or abstraction. They require only assent to the principle that of two policies with the same effect on mean standards of living, the one that raises the median most is generally to be preferred.
12. Even in traditional thinking, adverse movements in a country's terms of trade could impose losses. Alongside new gains from trade via productivity, growth, variety, and monopolistic underpricing are a few new reasons why, in exceptional cases, a country actually might lose from global liberalization.

13. See OECD, *Employment Outlook* (1996), table 3.1, pp. 61-62, and World Bank, *World Development Report* (Washington, DC: World Bank, 1986-1997). The former uses ratios of earnings of the marginal worker in the top decile of wage earners to the median and the median to the marginal worker in the bottom decile. The latter uses income or consumption shares of the top decile or quintile to the bottom quintile.
14. Based on World Bank, *World Development Report*, 1986-1997. Exceptions with more varied patterns include Brazil and Thailand.
15. Eli Berman, John Bound, and Stephen Machin, "Implications of Skill-Biased Technological Change: International Evidence" (National Bureau of Economic Research Working Paper No. 6166, September 1997).
16. For detail, see Ishac Diwan and Ana Revenga, "Wages, Inequality, and International Integration," *Finance and Development*, September 1995, pp. 7-9; Lant Pritchett, "Divergence, Big Time" (World Bank Policy Research Working Paper no. 1522, 1995); and Danny T. Quah, "Convergence Empirics Across Economies with (Some) Capital Mobility," *Journal of Economic Growth*, 1 (March 1996), pp. 95-124.
17. Ramon Moreno, "Are World Incomes Converging," Federal Reserve Bank of San Francisco Weekly Letter No. 93-41, November 26, 1993, for example, observes that the clustering at the bottom could be explained by measured declines in investment and productivity growth in low- and middle-income countries from 1982 to 1992. The controversial 1993 World Bank study of the East Asian miracle attributed much of the clustering at the top to global integration by outward-oriented converging countries.
18. The measure of integration is either (a) the level of or (b) the time change (early 1990s over early 1980s) in a simple average of four integration indicators, all standardized to be comparably measured: the ratios of trade and foreign direct investment to gross domestic product; the country's sovereign credit ratings as determined by the publication *Institutional Investor*; and the share of manufactures in exports.
19. In these matters, the trade-offs and opportunities confronting today's societies have somewhat the same character as those confronting insular, agrarian, traditional societies of a century ago. Current generations in those times may not have gained from the forces pressing them toward education, urban relocation, industrialization, specialization, and interdependence (instead of self-sufficiency), but it would be ludicrous to argue that their children and grandchildren did not gain.
20. Perhaps core standards for labor relations and industrial relations, in relative preference to further intellectual-property rationalization.
21. And that, of course, keep the gains positive by circumscribing their preferential and diversionary effects.

Chapter 4

Gaining Support for Trade from the American Public

Ellen L. Frost

To be credible and effective, a national trade strategy needs broad public support. Within the next few years, a number of key developments will highlight the presence—or absence—of such support. The effort to renew authority to implement trade agreements (so-called fast-track authority), the possible expansion of the North American Free Trade Agreement (NAFTA), the need to address China's entry into the world economy, the planned elimination of the global system of quotas on textiles and apparel, and many other controversial issues will keep trade on or near the front burner of American political life.¹

These initiatives are almost certain to trigger some form of public debate. Gone are the days when trade policy could be formulated and negotiated behind closed doors. Too many Americans are caught up in it, and too many interests are at stake. Whole new sets of actors have emerged, and congressional interest has intensified. Trade has been both oversold and demonized. The media have fastened onto trade-related controversies and are unlikely to let them lapse back into relative obscurity.

In economic terms too, trade is here to stay. The United States ceased to be even relatively self-sufficient decades ago.

The sum total of exports, imports, and returns on investment is now equivalent to over 30 percent of U.S. gross domestic product (GDP), up from 13 percent in 1970. Given the higher-than-