USITC Publication 3354 August/September 2000

INTERNATIONAL ECONOMIC REVIEW

United States International Trade Commission
Office of Economics

International Trade Developments

United States-Japan Agreement on Telecommunications Access Fees to Reduce Costs and Likely Increase Competition

Measuring the Impact of Freer Trade on the Environment

U.S. Trade Developments

International Economic Comparisons

OFFICE OF ECONOMICS

Robert B. Koopman, *Director*

The *International Economic Review* is a regular staff publication of the Office of Economics, U.S. International Trade Commission. The opinions and conclusions contained in this publication are those of the authors and are not the views of the Commission as a whole or of any individual Commissioner. The *IER* is produced as part of the Commission's international trade monitoring program. Its purpose is to keep the Commission informed about significant developments in international economics and trade and to maintain the Commission's readiness to carry out its responsibility to provide technical information and advice on international trade matters to policymakers in the Congress and the Executive Branch. The information and analysis in this series are for the purpose of this publication only. Nothing in this publication should be construed to indicate how the Commission would find in an investigation conducted under any statutory authority. The *IER* is available to Government officials outside the Commission on a request basis. The *IER* also is available on the Commision's Internet web site (http://www.usitc.gov/) and through the U.S. Department of Commerce National Trade Data Bank (NTDB). Inquiries or comments on information appearing in the *IER* may be made directly to the author, or to:

Editor, *International Economic Review*
Country and Regional Analysis Division/OE, Room 602
U.S. International Trade Commission
500 E Street SW., Washington, DC 20436
Telephone (202) 205-3255

TABLE OF CONTENTS

Page

International Trade Developments

United States-Japan Agreement on Telecommunications Access Fees to Reduce Costs and Likely Increase Competition

On July 18, the United States and Japan reached an agreement under which Japan will reduce its telecommunications interconnection fees. The agreement is expected to result in a savings of $2 billion over two years for U.S. and other competitive carriers. It is also expected to increase access to Japan's telecommunications market

(Diane Manifold 202–205–3271) 1

Measuring the Impact of Freer Trade on the Environment

It is often thought that a more open trading system and a high level of environmental quality are conflicting objectives. Yet freer trade has multiple indirect effects on environmental quality, which could on balance be beneficial or detrimental. Recent studies which measure these effects find evidence that freer trade may induce cleaner production in poorer countries. Even if freer trade increases the share of pollution-intensive goods in overall output, this effect is likely to be small. It may also be offset by improved environmental regulation, as freer trade causes incomes to rise. Evidence also suggests that the overall effect of freer trade on global environmental quality is small. Whether it raises or lowers environmental quality depends critically on the presence or absence of well-designed environmental policies.

(Judith Dean, 202–205–3051) 3

U.S. Trade Developments

(Michael Youssef, 202-205-3269) 7

International Economic Comparisons

(Michael Youssef, 202-205-3269) 12

Statistical Tables 15

INTERNATIONAL TRADE DEVELOPMENTS

United States-Japan Agreement on Telecommunications Access Fees to Reduce Costs and Likely Increase Competition

Diane Manifold[1]
dmanifold@usitc.gov
202-205-3271

On July 18, the United States and Japan reached an agreement under which Japan will reduce its telecommunications interconnection fees. The agreement is expected to result in a savings of $2 billion over 2 years for U.S. and other competitive carriers. It is also expected to increase access to Japan's telecommunications market.

On July 18, the United States and Japan reached an agreement regarding telecommunications interconnection rates in Japan.[2] Interconnection fees are the rates charged by Nippon Telegraph and Telephone Corporation (NTT), the former state monopoly, to use its lines. The agreement is expected to improve U.S. and other foreign firms' access to Japan's $130 billion telecommunications market.[3]

Deputy U.S. Trade Representative Richard Fisher, Vice Foreign Minister Yoshiji Nogami and Director General of the Ministry of Post and Telecommunications' Telecommunications Bureau Aadaisa Amano reportedly worked out the agreement. Complete details of the agreement have not yet been publicly released. However, according to the United States Trade Representative, Japan agreed to lower its rates for regional access by 50 percent over 2 years and for local access by 20 percent over two years. The combined reduction amounts to a 35-percent cut. The cuts will be retroactive to April 1, 2000. A review of NTT's interconnection rates will be conducted in 2002, based on an improved rate calculation model. This should result in additional and substantial rate reductions in 2002. Also under the agreement, there will be unbundling, or opening of new points of access to NTT's network and new rules to ensure fair usage rates and conditions to allow new entrants to compete in providing high-speed Internet services.

According to the agreement, restrictions on new competitors' ability to build their own networks will be eliminated. Certain road construction restrictions will be removed and measures will be promoted to improve access to underground tunnels controlled by NTT and electric utilities. By March 2001, it will be determined if interconnection with NTT DoCoMo, Japan's largest wireless provider, should be regulated more strictly because of DoCoMo's "dominant" market power. Currently, DoCoMo charges international carriers 18 cents per minute to terminate a call compared with 10 cents per minute charged by U.S. carriers.

Background

NTT is the largest telecommunications conglomerate in the world. NTT essentially controls the nation's fixed-line phone network. Under a restructuring program, Japan's fixed-line business was split into two re-

[1] The views and conclusions expressed in this article are those of the author. They are not the views of the U.S. International Trade Commission as a whole or of any individual Commissioner.

[2] The agreement was reached as part of the Enhanced Initiative on Deregulation and Competition Policy.

[3] This article is primarily based on the following sources: USTR, "United States and Japan Agree on Interconnection Rates," press release no. 00-55, July 18, 2000; Japan Economic Institute; Bureau of National Affairs; *Japan Times* Online; *Daily Yomiuri*; Stephanie Strom, "Japan and U.S. Reach Trade Pact on Telecommunications," *New York Times*, July 20, 2000.

gional companies—NTT East and NTT West which continue to be run by a single holding company with revenues of $100 billion. The two regional companies control access to more than 95 percent of the fixed phone lines. NTT also operates the nation's leading Internet service provider in Japan and holds a 67-percent share of Japan's largest cellular carrier NTT Mobile Communications Network or DoCoMo.

For years, the United States has charged that interconnection rates in Japan are two to five times as high as in Western countries. In early 1999, the United States had demanded that Japan cut its rate by 41.0 percent over 4 years using a calculation formula called the long-run incremental cost method.[4] However, Japanese officials insisted that a reduction of that size would hurt NTT, Japan's largest employer. Japan had offered to cut access charges by 22.5 percent over 4 years. The United States threatened to bring a case against Japan before the World Trade Organization if the issue were not resolved.

Since the beginning of 2000, the pressure had been increasing for Japan to resolve the dispute before the G-8 summit in Okinawa during July 21-23. As this year's host of the summit, Japan planned to emphasize information technology as a key theme of the discussions. However, the United States intended to undercut Japan's claim to act as spokesman on this issue by raising the telecommunications issue. Beginning July 10, 2000, the two countries entered into a final round of working level and subcabinet level talks just before the G-8 was scheduled to start. By July 18, the two sides had reached agreement.

[4] NTT has been previously criticized for the high rates that it charges foreign carriers and Japanese consumers for internet usage. NTT controls more than 95 percent of local lines connecting Japanese homes and businesses.

Conclusion

As a result of the agreement, competitive carriers are expected to save $2 billion over the next 2 years. The benefits are expected to be even more significant in 2002 as interconnection rates will likely drop even more sharply. WorldCom, Cable&Wireless, British Telecom, Japan Telecom and KDDI are among the carriers that hope to take advantage of the telecommunications rate settlement. The impact of lower interconnection fees is expected to show up in long-distance pricing first. The reduction in local access fees should create competition between NTT East and NTT West eventually.

The most important aspect of the agreement, according to Japanese experts, is not how many percentage points the interconnection fees will be cut, but rather that it could lead to fundamental reform of regulations in the telecommunications market. Under the agreement Japan will reconsider the methods by which fees are set for NTT's competitors. In addition, the Fair Trade Commission is to act independently and enforce competition policy in all sectors. These steps should lead to more widespread competition after 2002.

According to USTR, lower interconnection rates will reduce the cost of business transactions and Internet usage. Japanese consumers are expected to benefit from better service and lower costs. President Clinton has said that "It will level the playing field for America's cutting edge technologies and increase the number of Japanese consumers connected to the Internet."[5]

[5] Statement by the President, Office of the Press Secretary, Camp David, July 18, 2000.

Measuring the Impact of Freer Trade on the Environment

Judith M. Dean[1]
jdean@usitc.gov
202-205-3051

It is often thought that a more open trading system and a high level of environmental quality are conflicting objectives. Yet freer trade has multiple indirect effects on environmental quality, which could on balance be beneficial or detrimental. Recent studies which measure these effects find evidence that freer trade may induce cleaner production in poorer countries. Even if freer trade increases the share of pollution-intensive goods in overall output, this effect is likely to be small. It may also be offset by improved environmental regulation, as freer trade causes incomes to rise. Evidence also suggests that the overall effect of freer trade on global environmental quality is small. Whether it raises or lowers environmental quality depends critically on the presence or absence of well-designed environmental policies.

Will freer trade lead to concentrations of pollution-intensive industries in developing countries–turning them into "pollution havens?" Will freer trade reduce environmental quality globally? These and other questions have been at the center of a decade of widely publicized debate about whether or not a more open trading system is incompatible with a high level of environmental quality. This debate has been influential enough to lead to an environmental side agreement to the NAFTA, a working group in the WTO on trade and the environment, and a presidential mandate that procedures be developed to evaluate the environmental implications of future trade agreements. It also played a key role in the recent protests against a new WTO round of negotiations.

This article begins with a discussion of why measuring the environmental effects of trade liberalization could be useful. This is followed by a review of the nature of these effects and of recent studies which attempt to measure them. The implications of these studies for two major policy questions are examined. Results thus far suggest that the effects of freer trade on the environment are likely to be small, and may be beneficial. They also reinforce the importance of well-designed environmental policies. Such policies significantly alter the effects of trade liberalization, making a favorable outcome more likely.

[1] The views and conclusions expressed in this article are those of the author. They are not the views of the U.S. International Trade Commission as a whole or of any individual Commissioner.

Why measure the effects of trade liberalization on the environment?

Environmental damage is, *at its root*, generated as a by-product of the production and consumption of goods and services. For example, production of chemicals releases toxic substances into water, and consumption (usage) of automobiles releases carbon monoxide into the air. These are classic examples of what economists refer to as a "negative externality"–a market failure problem. The costs of environmental damage are not incorporated ("internalized") into the costs of production (or consumption), yet are borne by society. Thus, excessive amounts of environmental damage are generated, and society's well-being is reduced. Because the *direct* sources of environmental damage are production and consumption, well-designed ("optimal")[2] environmental policies *directly* internalize the costs of this damage into the decision-making process of producers and consumers.[3] These policies create incentives to reduce environmental damage, and ensure

[2] An optimal policy will reduce environmental damage to the point where the additional benefits from further abatement just equal the additional cost of further abatement.

[3] The estimation of environmental damage costs, abatement costs, choice of policy tool (emissions tax, marketable permits, etc.) and implementation of policy have been examined in depth. See a standard textbook such as T. Tietenberg, *Environmental and Natural Resource Economics* (Illinois: Scott, Foresman), 1988.

that it will be reduced sufficiently to raise society's well-being overall.

International trade is *not a root cause* (direct source) of environmental damage. This can be seen easily using the examples above. If chemicals were no longer traded internationally, and only sold locally, their production would still generate water pollution. Similarly, if trade in cars were eliminated, and cars were only sold locally, they would still generate air pollution when driven. However, freer trade can affect the environment *indirectly* because it influences overall levels of production and consumption, as well as their composition.

Will these *indirect* effects be beneficial or detrimental in terms of environmental quality or society's well-being? The answer depends, in part, upon what type of *environmental* policies are already in place. If optimal environmental policies have been adopted, the costs of environmental damage have been directly incorporated into production and consumption decisions. Correct incentives have been put in place, and excessive degradation eliminated. Under these circumstances, trade liberalization should raise society's well-being. However, if optimal environmental policies have not been implemented–e.g., environmental damage costs have been underestimated (overestimated) or policies have not been implemented efficiently–then the correct production and consumption decisions have not been achieved. In that case, freer trade could indirectly aggravate (or mitigate) environmental problems, and thereby potentially reduce (or increase) society's well-being.

Since existing environmental policy may fall short of the optimal, some measurement of the anticipated environmental effects of freer trade could be useful. One could determine whether these effects were expected to be significant, and whether they were indeed detrimental, beneficial or offsetting in their impact. One could also determine which types of environmental damage are more likely to be aggravated or mitigated. These results would aid in determining which environmental policies need to be implemented or modified in order to avoid unnecessary and costly degradation.

What are the environmental effects of freer trade?[4]

Because trade liberalization has multiple indirect effects on environmental quality, its net impact is ambiguous. Consider the effects of freer trade on production-generated pollution only. If countries have implemented optimal environmental regulations, then relatively stringent (lenient) environmental standards would reflect a relative scarcity (abundance) of the environment. Inter-country differences in optimal regulations would result from differences in valuations by citizens of the damage from pollutants (influenced by preferences and income levels), differences in costs of abatement, and differences in assimilative capacity for pollutants.[5] Following conventional trade theory, if a country is relatively abundant in the environment, freer trade will lead to increased specialization in the production of goods which are intensive in the use of the environment[6] (pollution-intensive). This shift in the composition of output will tend to increase pollution levels (*composition effect*).[7]

At the same time, freer trade also raises countries' incomes. Income growth itself is thought to generate three effects on the existing amount of environmental damage. First, people increase their demand for most goods, increasing the scale of economic activity, and thereby emissions (*scale effect*). Second, people increase their demand for a clean environment as income rises, demanding more stringent regulations (e.g., higher pollution taxes). This encourages firms to shift toward cleaner production techniques (*technique effect*), reducing emissions. Finally, people may shift their preferences toward more environmentally-friendly goods. This causes the share of pollution-intensive goods in output to fall, reducing emissions (*composition effect*). There is some evidence that at low levels of national income, the scale effect outweighs the composition and technique effects, causing income growth to worsen environmental degradation. At some higher income level the opposite occurs, such that further income growth reduces environmental degradation. This

[4] For a broader discussion, see: M. Ferrantino, "Trade Liberalization and Pollution in Manufacturing," USITC *International Economic Review*,1995; OECD, *The Environmental Effects of Trade.* Paris: OECD,1994.

[5] If countries have implemented regulations which are too strong (too weak) compared to their optimal level, clearly environmental scarcity (abundance) will be overstated.

[6] "Pollution-intensive" is difficult to define in an aggregate sense. One possibility is to classify goods by an index of toxic intensity defined over many types of pollutants. However, these indices typically cover pollutants relevant to manufactured goods, and thus omit the types of environmental degradation associated with agriculture (e.g., loss of soil fertility).

[7] Note that the effects of freer trade on consumption-generated pollution might counteract its effects on production-generated pollution. For example, suppose export goods tend to be air pollution-intensive. Then freer trade would increase the share of these goods in output, tending to increase air pollution. But suppose import goods emit less air pollutants relative to export goods when consumed. Since freer trade increases the share of import goods in consumption, this would tend to reduce air pollution.

is known as the "inverted-U" relationship between income level and level of environmental damage.[8]

Thus, the effect of freer trade on production-generated environmental damage will depend upon its composition effect, and its effect on income, which itself generates scale, technique and composition effects. These effects may reinforce or counteract each other, hence the net outcome is ambiguous.[9]

Can measurement address the policy issues?

Issue 1: Will freer trade turn developing countries into pollution havens?

Statistical models have been developed to test the size and significance of these composition, scale and technique effects. Lucas, Wheeler and Hettige[10] test the composition effect of freer trade on emissions. They construct a measure of the toxic intensity of GDP, using data on industrial emissions of 320 types of pollutants.[11] They then estimate the determinants of the growth of toxic intensity of output, with data from 55 developed and developing countries for the period 1970-1988. Results show that countries with faster rates of GDP growth had lower rates of increase in toxic intensity over the period. Among fast growing low and middle income countries, freer trade reduced the growth of toxic intensity further, and during the 1980s actually caused it to fall. On the other hand, a high degree of trade distortion accelerated the growth of toxic intensity of output. Freer trade appears to have shifted developing countries' composition of output towards cleaner sectors.

These results run counter to the popular notion that developing countries are relatively low-cost producers of pollution-intensive goods, due to relatively lenient environmental regulations compared to industrial countries. One explanation for this result is that relative abundance of other primary factors (e.g., unskilled labor or capital) are more significant determinants of relative costs of production. If poor countries have a relative abundance of unskilled labor, and unskilled labor intensive manufactures are relatively clean, then trade liberalization in poor countries would increase specialization in relatively clean goods.[12]

A second explanation is that in addition to this composition effect, freer trade has increased income growth. Thus, additional scale, composition, and technique effects occur which actually reduce environmental damage. Two recent studies attempt to measure the composition effect of freer trade, as well its effects on income growth, and thereby on environment. Antweiler, Copeland and Taylor[13] decompose the change in emissions generated by income growth, into scale, composition, and technique effects. They estimate these effects for SO_2 emissions, using data for a variety of years from both industrial and developing countries. They use separate calculations to infer the impact of freer trade on income. The composition effect of freer trade is found to be negative but small. In particular, poorer countries would see a small increase in the share of pollution-intensive goods in output as a result of freer trade. The scale effect of freer trade would also increase emissions. However, the technique effect generated by freer trade would be sufficiently large to counteract the other two effects, leading to an overall small reduction in emissions. Thus, freer trade appears to be "good for the environment."

Dean[14] estimates the composition effect of freer trade on emissions, and the effect of freer trade on emissions via income growth simultaneously, using provincial level data on Chinese water pollution from 1987-1995. Here again, the composition effect of freer trade accelerates emissions growth. Chinese production appears to shift towards relatively pollution-intensive goods as a result of trade liberalization. At the same time, freer trade does strongly stimulate income growth. The net effect of this income growth is a significant reduction in emissions growth. For a large number of Chinese provinces, the dominant effect is an overall reduction in emissions growth.

---

[8] See, for example, G. Grossman and A. Krueger, "Economic Growth and the Environment," *Quarterly Journal of Economics*, 1995, 353-377.

[9] Freer trade may also induce more environmentally-friendly production, if it improves access to newer and cleaner foreign technology.

[10] R.E.B. Lucas, D. Wheeler, and H. Hettige, "Economic Development, Environmental Regulations and the International Migration of Toxic Industrial Pollution: 1960-1988," in P. Low, ed., *International Trade and the Environment.* Washington: World Bank, 1992.

[11] Details on the emissions data can be found at www.worldbank.org/nipr.

[12] This explanation is supported by G. Grossman and A. Krueger, ("Environmental Impacts of the NAFTA," in P. Garber (ed.), *The US-Mexico Free Trade Agreement.* MA: MIT Press, 1993), who estimate the determinants of US imports from Mexico in 135 industry categories, for 1987. They find that US imports tend to be unskilled labor-intensive. However, environmental-intensity—proxied by the ratio of pollution abatement costs (operating costs) to total value-added in the US industry— has no significant influence on imports.

[13] W. Antweiler, B. Copeland, and M.S. Taylor, "Is Free Trade Good for the Environment?" NBER Working Paper No. 6707, 1998.

[14] J. Dean, "Does Trade Liberalization Harm the Environment? A New Test," University of Adelaide CIES Policy Discussion Paper No. 0015, 2000.

Implications:

These results suggest that developing countries may have a competitive edge in producing relatively clean goods. If they do, freer trade will decrease the share of pollution-intensive goods in output in poor countries. Even if the opposite is true, this shift in the composition of output is likely to have a small effect on environmental quality. In addition, higher income (due to freer trade) generates effects that tend to mitigate environmental damage. Freer trade appears unlikely to give rise to pollution havens in the developing world.[15]

Issue 2: Will trade liberalization reduce global environmental quality?

Several global models have been developed to simulate the effect of freer trade on outputs of specific goods, and then translate these into effects on air and water quality, soil erosion, and other types of environmental damage. Two recent studies examine the impact of freer trade on emissions globally, and report the effects by region. Ferrantino and Linkins[16] simulate the environmental effects of the Uruguay Round trade agreement on output for all countries (aggregated into 10 regions) across 25 sectors. These are then translated into environmental impacts using the Toxic Release Inventory data of the US EPA. In 6 of the 10 regions, Ferrantino and Linkins predict a small reduction in overall emissions, with China and Hong Kong seeing a drop of more than 3 percent. Of the remaining regions, three see increased emissions of 1 percent or less, with SE Asia experiencing an increase of about 2 percent.

Perroni and Wigle,[17] include both local and transnational pollution, as well as sector-specific abatement activities in their analysis of three regions: North America, other developed countries, and low- and middle-income countries. They find that environmental quality in each region is significantly improved when all countries fully internalize the costs of environmental damage into production and consumption. With these optimal policies in place, environmental quality appears unaffected by the choice of trade regime. Both removal of trade barriers and extreme increases in barriers changed the results on environmental quality by less than 1 percent in all regions.

Lee and Roland-Holst[18] examine the impact of freer trade between Japan and Indonesia. Based on their calculations, Indonesia's exports tend to be more pollution-intensive than its imports, largely due to its exports of petroleum-related products. A simulation in which all of Indonesia's tariffs are removed predicts that Indonesia's emissions levels would rise for an overall index of major pollutants (lead, particulates, SO2, and others) by about 3 percent. Japan's emissions levels of these same pollutants would fall, but by much smaller amounts. They then run the same simulation, but first implement a uniform effluent tax, which achieves a 5-percent reduction in the index of major pollutants. With that in place, they find that removal of all tariffs in Indonesia actually leads to a reduction in the pollutant index. Thus, the presence (absence) of a well-designed environmental policy means freer trade raises (reduces) the level of environmental quality.

Implications:

These results suggest that the impact of freer trade on global emissions levels is fairly small, though it may be more significant at the sectoral level for particular countries. In fact, with appropriate environmental policy in place, freer trade appears to have a negligible effect on pollution levels. The presence of environmental policies that internalize the costs of damage, significantly changes the impact of freer trade on the environment.

Conclusion

This evidence has important implications for the design of future *environmental* policy. Freer trade indirectly affects the environment in multiple ways, and some of these effects offset each other. At an aggregate level, the net effect appears to be small, and possibly beneficial. This is particularly important for developing countries, where concerns have been raised that freer trade would lead to increased specialization in pollution-intensive goods. Evidence suggests that this may not occur. If it does, the detrimental effects from such a shift may be offset by favorable effects generated by higher incomes. Most importantly, results strongly support the implementation of well-designed environmental policies. In the absence of such policies, freer trade could aggravate particular types of environmental damage. In their presence, the trade reform itself can be environmentally beneficial.

[15] These studies do not investigate relocation of industry through foreign direct investment. See J. Dean, *Economics of Trade and the Environment.* UK: Ashgate, forthcoming.

[16] M. Ferrantino and L. Linkins, "The Effect of Global Trade Liberalization on Toxic Emissions in Industry," *Weltwirtschlaftiches Archiv,* Vol. 135, No. 1, 1999.

[17] C. Perroni and R. Wigle, "International Trade and Environmental Quality: How Important are the Linkages?" *Canadian Journal of Economics* 27, 551-67, 1994.

[18] H. Lee and D. Roland-Holst, "The Environment and Welfare Implications of Trade and Tax Policy," *Journal of Development Economics* 52, 65-82, 1997.

U.S. TRADE DEVELOPMENTS

Michael Youssef[1]
myoussef@usitc.gov
202-205-3269

The U.S. Department of Commerce (Commerce News FT 900 (00-05)) reported that seasonally adjusted exports of goods and services of $85.8 billion and imports of $116.8 billion in May 2000 resulted in a goods and services trade deficit of $31.0 billion in the U.S. economy. This is $0.5 billion more than the $30.5 billion deficit of the month of April. May exports were $85.8 billion, $0.8 billion less than April exports of $86.6 billion. May imports were $116.8 billion, $0.3 billion less than April imports of $117.1 billion.

Exports of goods decreased in May to $62.0 billion from $62.6 billion in April; imports of goods decreased to $99.1 billion from $99.5 billion and the deficit on goods increased $0.3 billion to $37.2 billion from $36.9 billion. For services, exports decreased to $23.8 billion from $24.0 billion but imports of services were virtually unchanged at $17.6 billion, resulting in a surplus of $6.1 billion, $0.3 billion lower than the April surplus of $6.4 billion.

The overall change in exports of goods in April-May 2000 reflected decreases in capital goods, other goods category, industrial supplies and materials and consumer goods. Increases occurred in the exports of automotive vehicles, parts, and engines, and foods, feeds, and beverages. The overall changes in imports of goods reflected decreases in automotive vehicles, parts and engines, and other goods category. Increases occurred in industrial supplies and materials, consumer goods, and capital goods. Foods, feeds and beverages were virtually unchanged. Additional information on U.S. trade developments in agriculture and specified manufacturing sectors, in January-May 2000, are highlighted in tables 1 and 2 and figures 1 and 2. Services trade developments are highlighted in table 3.

[1] The views and conclusions expressed in this article are those of the author. They are not the views of the U.S. International Trade Commission as a whole or of any individual Commissioner.

Table 1
U.S. trade in goods and services, seasonally adjusted, Apr.-May 2000
(Billion dollars)

Item	Exports		Imports		Trade balance	
	May 2000	April 2000	May 2000	April 2000	May 2000	April 2000
Trade in goods (see note)						
Current dollars–						
Including oil	62.0	62.6	99.1	99.5	- 37.2	- 36.9
Excluding oil	61.8	62.2	89.5	90.1	- 27.7	- 28.0
Trade in services						
Current dollars	23.8	24.0	17.7	17.6	6.1	6.4
Trade in goods and services:						
Current dollars	85.8	86.6	116.8	117.1	- 31.0	- 30.5
Trade in goods (Census basis)						
1996 dollars	68.3	68.9	107.6	107.8	- 39.3	- 38.9
Advanced-technology products (not seasonally adjusted)	18.3	18.0	17.8	16.5	0.5	1.5

Note.—Data on goods trade are presented on a balance-of-payments (BOP) basis that reflects adjustments for timing, coverage, and valuation of data compiled by the Census Bureau. The major adjustments on BOP basis exclude military trade, but include non-monetary gold transactions and estimates of inland freight in Canada and Mexico not included in the Census Bureau data. Because of rounding details may not add to totals shown.

Source: U.S. Department of Commerce News (FT 900), July 19, 2000

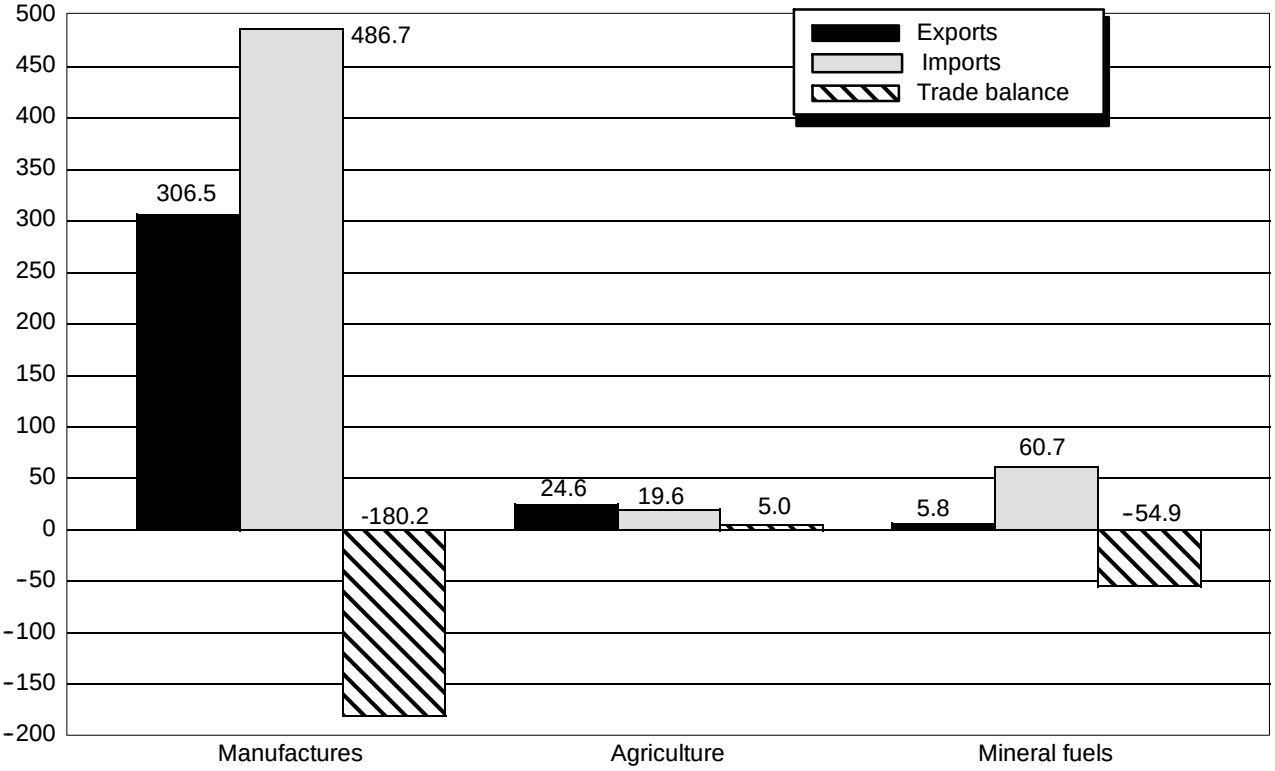
Table 2
Nominal U.S. exports and trade balances, of agriculture and specified manufacturing sectors, Jan.1999-May 2000

	Exports		Change Jan.-May 2000 over Jan.-May 1999	Share of total Jan.-May 2000	Trade balance	
	May 2000	Jan.-May 2000			Jan.-May 2000	Jan.-May 1999
	Billion dollars		*Percentage*		*Billion dollars*	
ADP equipment & office machinery	3.4	17.9	10.5	5.7	- 16.9	- 15.9
Airplanes	3.0	10.8	-25.5	3.4	6.6	11.2
Airplane parts	1.3	6.1	-6.2	1.9	3.9	4.0
Electrical machinery	7.0	34.1	15.6	10.9	- 7.4	- 3.8
General industrial machinery	2.7	13.4	7.2	4.3	-1.5	-0.5
Iron & steel mill products	0.5	2.4	20.0	0.8	-4.4	- 3.3
Inorganic chemicals	0.4	2.1	16.7	0.7	-0.3	-0.2
Organic chemicals	1.5	7.3	23.7	2.3	-3.7	-2.8
Power-generating machinery	2.7	13.4	5.5	4.3	-1.0	0.1
Scientific instruments	2.3	11.8	14.6	3.8	3.5	3.6
Specialized industrial machinery	2.5	12.2	23.2	3.9	2.5	0.4
Televisions, VCRs, etc	2.2	10.7	12.6	3.4	-14.3	-7.5
Textile yarns, fabrics and articles	0.9	4.2	10.5	1.3	-2.1	-1.6
Vehicle parts	5.3	25.2	7.7	8.0	- 42.8	- 35.4
Manufactured exports not included above	15.7	79.6	12.6	25.4	-70.9	- 59.4
Total manufactures	51.4	251.2	9.6	80.1	- 148.8	-111.1
Agriculture	3.9	20.7	10.1	6.6	4.3	3.1
Other exports not included above	8.2	41.7	28.7	13.3	-19.6	-2.2
Total exports of goods	63.5	313.6	11.8	100.0	- 164.1	-110.2

Note.—Because of rounding, figures may not add to the totals shown. Data are presented on a Census basis.

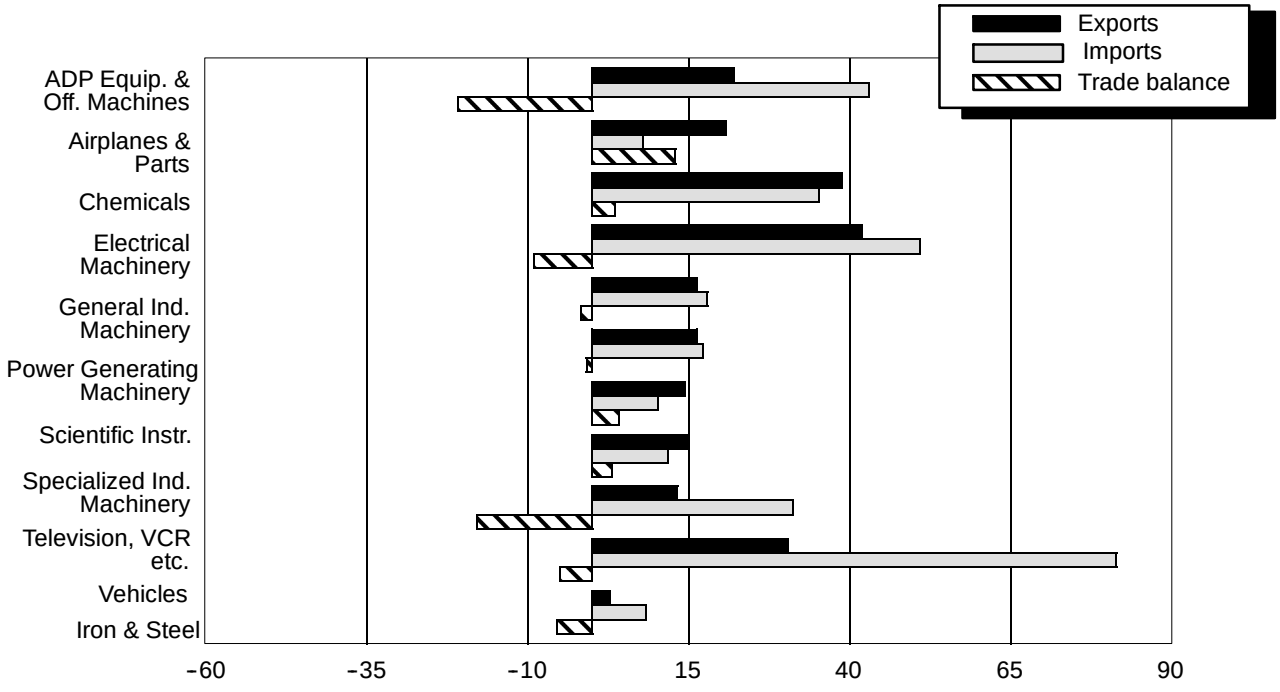
Source: U.S. Department of Commerce News (FT 900), July 19,2000

Figure 1
U.S. trade by major commodity, billion dollars, Jan.-June 2000



Source: U.S. Department of Commerce.

Figure 2
U.S. trade in principal goods, billion dollars, Jan.-May 2000



Source: U.S. Department of Commerce.

Table 3
Nominal U.S. exports and trade balances of services, by sectors, Jan.1999- May 2000, seasonally adjusted

	Exports		Change Jan.-May 2000 over Jan.-May 1999	Trade balances	
	Jan.-May 2000	Jan.-May 1999		Jan.-May 2000	Jan.-May 1999
	Billion dollars		*Percent*	*Billion dollars*	
Travel	33.2	30.5	8.9	6.4	6.1
Passenger fares	8.3	8.1	2.5	-1.5	-0.6
Other transportation	12.1	10.9	11.0	-3.7	-2.2
Royalties and license fees	15.4	15.2	1.3	9.0	10.0
Other private sales	43.9	39.1	12.3	22.7	19.9
Transfers under U.S. military sales contracts	5.9	7.2	-18.1	0.2	1.7
U.S. Govt. miscellaneous service	0.4	0.3	33.3	-0.8	-0.8
Total	119.2	111.2	7.2	32.3	34.1

Note.—Services trade data are on a balance-of-payments (BOP) basis. Numbers may not add to totals because of seasonal adjustment and rounding.

Source: U.S. Department of Commerce News (FT 900), July 19, 2000.

Advanced technology products exports rose to $18.3 billion in May from $18.0 billion in April; imports increased to $17.8 billion from $16.5 billion in April, resulting in a trade surplus of $0.5 billion, $1.0 billion lower than the April surplus of $1.5 billion.

The May 2000 trade data showed U.S. surpluses with Australia, Argentina, Brazil, Egypt, and Hong Kong. Deficits were recorded with Canada, Mexico, Western Europe, China, Japan, Korea, Taiwan, Singapore and the OPEC countries.

The January-May 2000 exports of goods and services increased by 10.8 percent to $427.4 billion, up from $385.9 billion in January-May 1999. However, imports of goods and services increased by 20.2 percent to $575.1 billion, up from $478.6 billion. The deficit on goods and services increased by approximately 59.5 percent to $147.7 billion from $92.6 billion in the same period of 1999.

The January-May 2000 exports of goods increased to $308.3 billion from $274.7 billion in January-May 1999, but imports of goods rose to $488.2 billion, up from $401.3 billion in January-May 1999. The trade deficit on goods rose to $179.9 billion from $126.6 billion, an increase of 42.1 percent. As to services, exports in January-May 2000 increased to $119.1 billion, up from $111.2 billion in the same period of 1999, an increase of 7.1 percent. Imports rose to $86.9 billion up from $77.3 billion, an increase of 12.4 percent. The surplus on services trade decreased to $32.2 billion from $34.0 billion, a decrease of 5.3 percent. The January-May 2000 exports of advanced technology products rose to $87.8 billion, up from $80.4 billion in January-May 1999, an increase of 9.2 percent. Imports rose to $82.1 billion from $67.1 billion, an increase of 22.4 percent; and the trade surplus decreased to $5.7 billion from $13.3 billion, a decline of 57.1 percent.

The January-May 2000 trade data in goods and services showed trade deficits with Canada, Mexico, Western Europe, the Euro-11 area, the European Union, EFTA, Eastern Europe, China, Japan, Korea, Singapore, Taiwan and OPEC. Trade surpluses were recorded with Belgium, the Netherlands, Spain, Australia, Argentina, Brazil, Hong Kong, and Egypt. U.S. trade developments with major trading partners are highlighted in table 4.

Table 4
U.S. exports and imports of goods with major trading partners, Jan. 1999-May 2000

(Billion dollars)

Country/areas	Exports			Imports			Trade balances	
	May 2000	Jan.-May 2000	Jan.-May 1999	May 2000	Jan.-May 2000	Jan.-May 1999	Jan.-May 2000	Jan.-May 1999
Total	63.5	313.6	280.4	100.6	477.7	390.6	-164.2	-110.3
North America	24.5	119.9	100.7	30.9	148.0	121.5	-28.1	- 20.8
Canada	15.6	76.0	68.4	19.6	94.5	79.4	-18.5	-11.0
Mexico	8.9	43.9	32.3	11.4	53.5	42.1	-9.6	-9.8
Western Europe	14.8	74.1	69.8	20.5	97.4	82.7	- 23.3	-12.9
Euro Area	9.6	46.5	45.0	13.8	65.8	56.2	-19.3	-11.2
European Union (EU-15)	13.7	66.5	64.6	18.7	89.0	76.1	-22.5	-11.5
France	1.6	8.1	8.3	2.6	12.1	10.2	-4.0	-1.9
Germany	2.4	12.1	11.5	4.8	24.1	21.5	-12.0	-10.0
Italy	0.8	4.2	4.1	2.1	10.0	8.8	-5.8	-4.7
Netherlands	1.8	8.7	7.9	0.9	4.0	3.1	4.7	4.8
United Kingdom	3.5	16.9	16.4	3.8	17.8	15.3	-1.0	1.1
Other EU	1.0	4.7	4.7	1.8	7.7	5.8	-3.0	-1.1
EFTA[1]	0.7	5.5	3.6	1.4	6.7	5.2	-1.2	-.1.6
FSR/Eastern Europe	0.4	2.5	2.2	1.4	6.6	4.4	-4.0	-2.2
Russia	0.1	1.1	0.5	0.7	3.3	2.4	-2.2	-1.8
Pacific Rim Countries	16.2	78.8	68.2	33.6	158.6	134.4	-79.8	-66.3
Australia	1.1	5.2	4.4	0.6	2.4	2.0	2.8	2.4
China	1.5	6.0	4.9	7.8	34.8	28.6	- 28.9	- 23.7
Japan	5.1	25.8	23.8	12.0	59.2	50.9	- 33.4	- 27.1
NICs[2]	6.7	32.6	27.3	9.0	42.1	35.6	-9.5	-8.3
Latin America	4.6	22.8	22.6	6.0	29.0	21.6	-6.2	1.1
Argentina	0.4	1.9	1.9	0.2	1.2	1.0	0.6	0.9
Brazil	1.2	5.4	5.2	1.1	5.4	4.2	0.1	1.0
OPEC	1.3	7.4	8.4	5.4	25.1	13.9	-17.7	- 5.5
Other Countries	2.2	11.7	11.5	5.2	24.9	19.4	-13.3	- 7.9
Egypt	0.3	1.4	1.3	0.1	0.3	0.3	1.0	1.0
South Africa	0.2	1.0	1.0	0.4	1.5	1.2	-0.5	-0.2
Other	1.7	9.3	9.3	4.8	23.1	18.0	- 13.8	- 8.7

[1] EFTA includes Iceland, Liechtenstein, Norway, and Switzerland.
[2] The newly industrializing countries (NICs) include Hong Kong, the Republic of Korea, Singapore, and Taiwan. FSR = Former Soviet Republics.

Note.—Country/area figures may not add to the totals shown because of rounding. Exports of certain grains, oilseeds, and satellites are excluded from country/area exports but included in total export table. Also some countries are included in more than one area. Data are presented on a Census Bureau basis.

Source: U.S. Department of Commerce News (FT 900), July 19, 2000

INTERNATIONAL ECONOMIC COMPARISONS

Michael Youssef[1]
myoussef@usitc.gov
202-205-3269

U.S. Economic Performance Relative to Other Group of Seven (G-7) Members

Economic growth

U.S. real GDP—the output of goods and services produced in the United States measured in 1996 prices—grew at an annual rate of 5.3 percent in the second quarter of 2000 following a 4.8-percent increase in the first quarter, according to revised estimates by the U.S. Department of Commerce (Commerce News BEA 00-22). For the year 1999, real GDP grew by 4.2 percent.

The annualized rate of real GDP growth in the first quarter of 2000 was 2.1 percent in the United Kingdom, 4.9 percent in Canada, 2.8 percent in France, 2.7 percent in Germany, 4.0 percent in Italy, and 10.0 percent in Japan. The annualized rate of real GDP growth in the first quarter was 2.8 percent in the Euro-11.

Industrial production

The Federal Reserve Board (Federal Reserve Statistical Release -(G.17 -419)) reported that U.S. industrial production increased by 0.2 percent in June 2000 following advances of 0.5 percent in May and 0.8 percent in April. Total industrial production in June 2000 was 5.8 percent higher than in June 1999. For the second quarter as a whole, the total industrial production index increased at an annual rate of 7.0 percent, up from the first quarter pace of 6.5 percent. The output of mines and utilities picked up in the second quarter while the growth of manufacturing output remained close to an annual rate of 7.0 percent for a third consecutive quarter. The strength of manufacturing this year has principally come from the high technology industries (computers, semiconductors, and communications equipment). Excluding these industries, manufacturing has increased at an annual rate of only 1.0 percent since the fourth quarter of last year. Overall industrial capacity utilization was 3.8 percent higher in June 2000 than in June 1999.

Other Group of Seven (G-7) member countries reported the following growth rates of industrial production. For the year that ended May 2000, Japan reported an increase of 7.5 percent, and the United Kingdom reported an increase of 2.3 percent. For the year that ended April 2000, France reported an increase of 4.8 percent, Germany reported an increase of 6.1 percent, but Italy reported a decrease of 4.2 percent. For the year that ended March 2000, Canada reported an increase of 6.2 percent. The Euro-11 reported an increase of 6.5 percent for the year ended April 2000.

Prices

The seasonally adjusted U.S. Consumer Price Index (CPI) rose by 0.6 percent in June 2000, after registering 0.1 percent increase in May, according to the U.S. Department of Labor (USDL-00-175). Energy prices increased by 5.6 percent in June, accounting for three-fourths of the overall CPI-U advance. For the 12-month period that ended June 2000, the CPI-U increased by 3.7 percent.

During the 1-year period that ended June 2000, prices increased by 1.9 percent in Germany and by 2.7 percent in Italy. During the 1-year period that ended May 2000, prices increased by 2.4 percent in Canada, 1.5 percent in France, and 3.1 percent in the United Kingdom, but prices decreased by 0.7 percent in Japan. Prices increased 1.9 percent in the Euro-11 in the year ended May 2000.

Employment

The Bureau of Labor Statistics (USDL 00-194) reported that the unemployment rate was 4.0 percent in June, about the same as in May. Employment edged up in manufacturing and construction, but rose in the services industry.

[1] The views and conclusions expressed in this article are those of the author. They are not the views of the U.S. International Trade Commission as a whole or of any individual Commissioner.

In other G-7 countries, latest unemployment rates were as follows: 6.6 percent in Canada, 9.1 percent in Germany, 5.7 percent in the United Kingdom, 9.8 percent in France, 10.7 percent in Italy, and 4.6 percent in Japan. The unemployment rate in the Euro-11 was 9.2 percent.

Forecasts

Seven major forecasts expect real GDP growth in the United States to average about 2.9 percent at an annual rate in the third quarter of 2000, and to increase to 3.4 percent in the fourth quarter. The annual average growth rate for the year 2000 would reach 5.0 percent. Table 5 shows macroeconomic projections for the U.S. economy from July 2000 to June 2001, and the simple average of these forecasts. Forecasts of all the economic indicators except unemployment, are presented as percentage changes over the preceding quarter, on an annualized basis. The forecasts of the unemployment rate are averages for the quarter.

Table 5
Projected changes in U.S. economic indicators, by quarters, July 2000-June 2001
(Percentage)

Period	Conference Board	E.I. Dupont	UCLA Business Forecasting Project	Merrill Lynch Capital Markets	Macro Economic Advisers	Eaton Corp.	Regional Financial Associates	Mean of forecasts
				GDP constant dollars				
2000:								
July-Sept.	2.8	3.0	2.8	3.7	2.8	2.1	3.3	2.9
Oct.-Dec	4.4	2.5	2.6	3.7	3.3	4.1	3.1	3.4
2001:								
Jan.-March	3.5	3.0	2.8	3.7	3.2	1.8	2.9	3.0
April-June	1.2	2.8	3.0	3.6	2.6	3.7	2.5	2.8
Annual 2000 . . .	5.2	5.1	4.3	5.3	5.1	5.1	5.2	5.0
				GDP Price Deflator				
2000:								
July-Sept.	2.6	2.3	2.9	1.5	1.9	2.1	2.3	2.2
Oct.-Dec	3.0	1.9	2.2	1.6	2.3	1.6	2.6	2.2
2001:								
Jan.-March	2.6	1.9	2.5	1.3	2.2	1.8	2.2	2.1
April-June	2.6	1.9	1.8	1.3	2.2	1.1	2.2	1.9
	2.3	2.2	2.2	2.1	2.1	2.1	2.3	2.2
				Unemployment average rate				
2000:								
July- Sept.	3.9	4.1	4.2	4.0	3.9	4.2	4.0	4.0
Oct.-Dec.	3.8	4.1	4.4	4.0	4.0	4.0	4.0	4.0
2001:								
Jan.-March	4.0	4.2	4.4	4.1	3.8	4.3	4.1	4.1
April-June	4.1	4.3	4.5	4.1	3.9	4.4	4.3	4.2
Annual 2000 . . .	3.9	4.1	4.2	4.0	4.0	4.1	4.0	4.0

Note.—Except for the unemployment rate, percentage changes in the forecast represent annualized rates of change from preceding period. Quarterly data are seasonally adjusted. Forecast date, July 2000.

Source: Compiled from data of the Conference Board. Used with permission.

STATISTICAL TABLES

Unemployment rates (civilian labor force basis)[1] in G-7 countries, by specified periods, 1995-July 2000

		1999				2000						
Country	**1998**	**IQ**	**IIQ**	**IIIQ**	**IVQ**	**Jan.**	**Feb.**	**Mar.**	**Apr.**	**May**	**June**	**July**
United States	4.5	4.3	4.3	4.2	4.1	4.0	4.1	4.1	3.9	4.1	4.0	4.0
Japan	4.1	4.7	4.8	4.8	4.7	4.7	4.9	5.0	4.9	4.9	4.7	4.7
Canada	8.3	7.9	7.8	7.6	7.0	6.8	6.8	6.8	6.8	6.6	6.6	6.8
Germany	9.4	9.0	9.0	9.1	9.0	8.7	8.6	8.4	8.4	8.3	8.3	8.3
United Kingdom	6·3	6.3	6.1	5.9	5.9	5.9	5.9	5.9	5.8	5.7	5.7	5.5
France	11.7	11.3	11.2	11.0	10.6	10.3	10.0	9.8	9.8	9.5	9.5	9.5
Italy	12.3	12.3	12.1	12.1	12.1	12.1	12.1	11.3	11.3	10.8	10.8	10.8

[1] Seasonally adjusted; rates of foreign countries adjusted to be comparable with the U.S. rate.
Source: *Unemployment Rates in Nine Countries*, U.S. Department of Labor, Sep. 1, 2000.

Consumer prices of G-7 countries, by specified periods, Jan. 1995-July 2000

(Percentage change from same period of previous year)

	1998				1999				2000						
Country	**I**	**II**	**III**	**IV**	**IQ**	**II**	**III**	**IV**	**Jan.**	**Feb.**	**Mar.**	**Apr.**	**May**	**June**	**July**
United States	1.5	1.6	1.6	1.5	1.7	2.1	2.3	2.6	2.7	3.2	3.7	3.0	3.1	3.7	3.5
Japan	2.0	0.3	-0.2	0.5	-0.1	-0.3	-0.0	-1.0	-0.9	-0.6	-0.5	-0.8	-0.7	-0.7	-0.5
Canada	1.0	1.0	0.9	1.1	2.6	2.3	2.2	2.6	2.3	2.7	3.0	2.1	2.4	2.9	3.0
Germany	1.2	1.4	0.7	0.4	0.7	0.8	1.0	1.2	1.6	1.8	1.9	1.5	1.4	1.9	1.9
United Kingdom	3.4	4.0	3.3	3.0	1.1	1.2	1.4	1.8	2.0	2.3	2.6	3.0	3.1	3.3	3.3
France	0.7	1.0	0.7	0.4	0.7	0.8	0.9	1.3	1.6	1.4	1.5	1.3	1.5	1.7	1.7
Italy	2.0	2.0	2.0	1.7	1.8	2.1	2.1	2.1	2.2	2.4	2.5	2.3	2.4	2.7	2.6

Source: U.S. Department of Labor, Sept. 1, 2000.

U.S. trade balances by major commodity categories and by specified periods, Jan. 1995-Apr. 2000

(In billions of dollars)

Commodity categories	1998	1999 Oct.	1999 Nov.	1999 Dec.	2000 Jan.	2000 Feb.	2000 Mar.	2000 Apr.	2000 May
Agriculture	14.9	1.4	1.4	1.0	1.0	1.2	1.0	0.5	0.5
Petroleum and selected products (unadjusted)	-43.4	-6.4	-6.5	-6.0	-7.1	-9.0	-9.6	-8.6	-8.5
Manufactured goods	-241.1	-30.9	-31.1	-25.5	-27.9	-27.8	-31.6	-28.7	-32.8
Unit value of U.S. imports of petroleum and selected products (unadjusted)	$10.81	$20.7	$20.90	$22.67	$23.18	$25.01	$26.38	$24.42	$24.16

[1] Exports, f.a.s. value, unadjusted. Imports, customs value, unadjusted.

Source: *Advance Report on U.S. Merchandise Trade*, U.S. Department of Commerce, June 20, 2000.