

# Do Imports Hinder or Help Economic Growth?

by Owen F. Humpage

Americans generally seem confused, and even doubtful, about the value of imports to the U.S. economy. Last year, they spent nearly \$1.3 trillion on foreign goods and services, presumably preferring these expenditures to any other use of their money. Importing not only provided Americans with a wider array of products than they otherwise could have enjoyed, but by stretching their budgets, importing enabled them to buy more goods and services—domestic and foreign—than would have been possible under autarky. In this way, imports improved America's collective standard of living.

Yet, when queried about imports in the abstract, Americans express attitudes ranging from ambivalence to hostility. Many regard them as a necessary evil, noting with grudging resignation that a nation cannot long export if it does not import. Some find no fault with importing foreign products that are not made or grown at home, but they otherwise claim to favor a buy-American policy. Often, these people do not realize the foreign contribution to the everyday items they buy. Most Americans express concern about the rapid overall expansion of imports but fail to connect this aggregate pattern to the welfare-enhancing behavior of individuals.

For their part, economists bear the responsibility for much of the muddle. When asked about the economic impact of imports over the past year, a business economist might explain that brisk gains in imports exerted a drag on overall GDP growth. If pressed to explain their rapid rise, this same analyst might cite—with little concern for the seeming con-

tradition—the fast pace of U.S. business expansion. When asked about the long-term impact of imports, however, a development expert, echoing Adam Smith, might explain that they contribute importantly to the creation of wealth. Can all these explanations be right?

As this *Economic Commentary* points out, imports do not lower economic growth. Imports and economic growth are positively correlated, with causality running in both directions. Faster economic growth does indeed lead to higher imports, but countries that are open to trade—imports and exports—tend to grow faster than countries that are closed or less accessible.

## ■ Imports and the GDP Accounts

Every news account that accompanies a quarterly GDP release reinforces, or so it seems, the common misperception that import spending lowers output. The source of the fallacy is understandable: Imports enter the GDP tally with a negative sign (see table 1). Because GDP measures the overall dollar value of final goods and services produced in the U.S. during a specific quarter or year, items bought from abroad must be removed from the tally. In 1999, for example, GDP was \$9.3 trillion dollars, and Americans bought almost \$1.3 trillion of foreign goods. It does not follow, however, that GDP would have totaled \$10.6 trillion if we had bought only domestic goods and services. Similarly, between 1998 and 1999, total GDP advanced 5.6 percent while imports advanced 12.3 percent. It is not the case, however (as is frequently claimed), that GDP would have grown faster had people spent their incomes on domestically produced goods instead of imports. Imports do not, in

**Although Americans spent \$1.3 trillion on foreign goods and services last year, many regard imports with hostility, preferring to “buy American.” But do imports really hurt the American economy? This *Economic Commentary* argues they do not. If anything, imports promote growth.**

fact, depress the GDP total because of the way they are financed.

As a nation, we pay for our imports either with exports of our current output or with financial claims against our future output. When exports rise (or fall) in line with imports, GDP remains unaffected. Exports add to the output tally—exactly what imports subtract—and net exports (the trade balance) do not change.

Since 1992, however, exports have fallen short of imports by a widening margin. In 1999, the trade deficit amounted to \$256 billion. When this happens, we must finance the trade shortfall either by reducing previously acquired claims on foreign output or by offering foreigners claims on our future output. This is accomplished largely through the exchange of various types of financial securities and bank accounts. A foreigner who holds a dollar-denominated security or bank account can eventually use those funds, plus any accrued interest or dividends, to buy U.S. goods and services. Hence, these financial instruments represent claims on future output. On balance, this exchange of financial instruments creates an inflow of foreign capital that exactly offsets the trade deficit.

Inflows of foreign capital do not sit idle. The corporations or governments that issue the securities and the banks that offer the deposits use the funds to finance domestic investments, government spending, or private consumption. All of these appear as expenditures elsewhere in the GDP accounts. In all cases, the process of paying for our imports contributes to domestic output. The U.S. bought \$1.3 trillion of foreign goods and services last year; we paid for these with \$1.0 trillion in exports and by issuing \$256 billion in net financial claims to foreigners. The corresponding inflow of foreign capital supported \$256 billion in expenditures that appeared elsewhere in the 1999 GDP accounts. If imports had been lower last year, the GDP accounts undoubtedly would have had a different configuration. Personal consumption might have been higher, but business fixed investment might have been lower. The \$9.3 trillion nominal GDP total and the 5.6 percent nominal GDP growth rate, however, would not have changed.

### ■ Growth and Imports

The need to finance imports with exports that add directly to output or with capital inflows that sustain other types of expenditures ensures that imports do not lower GDP or its growth rate. Instead, a positive relationship exists between imports and economic growth (see figures 1 and 2). Less certain, however, is the direction of influence between imports and economic growth. Do higher imports cause faster economic growth, or does faster economic growth lead to expanding imports?

At quarterly frequencies, the direction of causality *seems* to run predominantly from income to imports, not the other way around. The intuition is straightforward: When incomes rise, as is the case during a business expansion, people tend to buy more domestic and foreign goods and services. Similarly, countries whose incomes are high for other reasons import more. Economists estimate that a 1 percent increase in real GDP in the U.S. will lead to a 2 percent rise in U.S. import spending.<sup>1</sup>

Nevertheless, the causal relationship underlying import spending and economic growth is more intricate than statistical tests of quarterly data reveal. Countries that remove trade barriers and encourage openness gain from specialization and from cross-border technolog-

**TABLE 1 GDP AND ITS COMPONENTS, 1999**

	1999 dollars (billions)	Percent change from 1998	1996 dollars <sup>a</sup> (billions)	Percent change from 1998
GDP	9,254.6	5.6	8,867.0	4.1
Personal consumption expenditures	6,257.3	7.0	6,000.9	5.3
Gross private domestic investment	1,622.9	6.0	1,637.7	5.8
Government consumption expenditures/gross investment	1,629.8	6.5	1,535.4	3.7
Exports of goods and services	997.4	3.2	1,043.6	3.6
Imports of goods and services	-1,252.9	12.3	-1,366.5	11.8

a. Components of GDP need not add to totals because current dollar values are deflated at the most detailed level for which all required data are available.

**SOURCE:** U.S. Department of Commerce, Bureau of Economic Analysis.

ical transfers, all of which promote economic growth. In a recent cross-country study, economists Jeffrey Frankel and David Romer found evidence that higher trade contributes to long-term economic growth, after accounting for the effect of growth on trade. Although they consider total trade (exports plus imports), their research methodology attributes the same response to imports that it applies to exports; that is, imports cause economic growth.<sup>2</sup>

### ■ Specialization and Markets

At least since Adam Smith's time, economists have realized that nations grow rich through the process of specialization and trade. The extent to which countries can feasibly specialize in certain types of production, however, depends on the scope of markets. Because bigger, broader markets permit access to a wider range of goods and services, they enable a greater degree of specialization among individual countries.

Engaging in economic exchange, however, entails real resource costs that ultimately constrain the span of markets. Often, advances in international commerce have followed innovations that reduced the cost of engaging in trade. Globalization progressed fairly steadily throughout the second half of the twentieth century on advances in transportation and communications, and with a lowering of trade barriers.<sup>3</sup>

### ■ Comparative Advantage

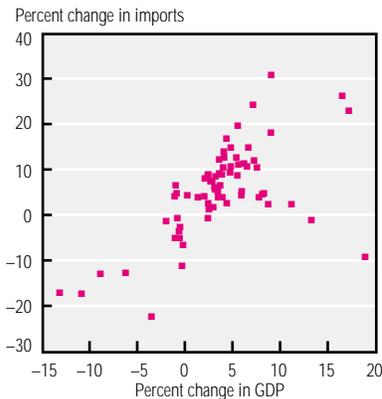
Specialization stems from two sources, comparative advantage and economies of scale. Although these bases for specialization have similar implications for economic growth, they may have dissimilar effects on how growth affects specific segments of an economy.

Nations are endowed with a diverse array of physical characteristics, natural resources, and indigenous human skills, which enable each of them to produce certain goods more cheaply than others. Developing countries, for example, tend to have a lot of low-skilled labor relative to capital and highly skilled labor. Because the abundant factor—low-skilled labor—is cheap to procure in these countries, they can produce goods that require relatively large amounts of low-skilled labor less expensively than they could produce goods requiring high proportions of physical and human capital. Economists contend that developing nations have a comparative advantage in the production of labor-intensive goods and services. More developed countries, which have a lot of capital relative to labor, tend to have comparative advantages in capital-intensive goods. The U.S. seems to have a comparative advantage in the production of civilian aircraft and medical equipment because we have a lot of capital and a well-trained workforce.<sup>4</sup>

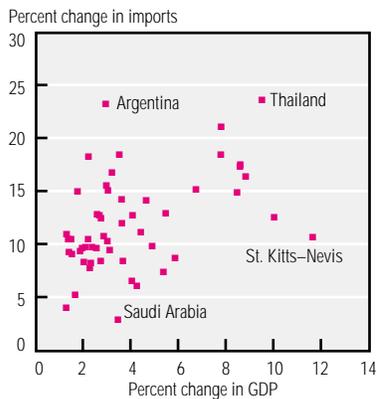
When each country specializes in the production of goods for which it has a comparative advantage and trades these goods for the output of other countries, everyone can consume more goods and services than in the absence of trade. This process creates wealth by enabling countries to acquire more through importation than could be attained from domestic production. Imports, then, are key to improving standards of living.

When specialization and trade occur because of comparative advantage, resources and workers are drawn into the expanding export sector and away from the contracting import-competing sector. Since demand will be greatest for the abundant factor—the underlying source of the comparative advantage—the economic returns to this factor will rise relative to the returns to the scarce factor with

**FIGURE 1 U.S. IMPORTS AND ECONOMIC GROWTH<sup>a</sup>**



**FIGURE 2 FOREIGN IMPORTS AND ECONOMIC GROWTH<sup>b</sup>**



- a. Annual percent change, 1930–98.  
 b. Average of annual percent changes for 54 countries, 1985–95.

**SOURCE:** International Monetary Fund, *International Financial Statistics*.

international trade. Trade will consequently distort the distribution of income in favor of the abundant factor of production. This tension can act as a friction against the nation's continued movements toward specialization and trade. Owners of the scarce resource—or owners of any resources that cannot migrate easily to the expanding export sector—will typically object to further expansions of international trade.<sup>5</sup>

### ■ Economies of Scale

As an explanation of trade, comparative advantage predicts that countries will export and import distinct types of goods; that is, we should not observe countries importing and exporting the same (or similar) products. If the U.S., for example, has a comparative advantage in the production of airplane parts and medical equipment, it will never

import airplane parts and medical equipment. Economist Roy Ruffin, however, estimates that in 1996, 57 percent of U.S. trade took place within the same industrial classifications, rather than between industrial classifications. Corresponding numbers for Europe and Japan were 60 percent and 20 percent, respectively. Ruffin's data suggest that comparative advantage fails to account for a great deal of international trade.<sup>6</sup>

A likely explanation for this observed intra-industry trade is that although the products appear similar and fall within the same industrial classification, they are actually different in some real or perceived respect. To the purchaser of a minivan, for example, a Toyota Sienna is different from a Dodge Caravan. Specialization still occurs within these industries, but it is based on product differentiation and, most importantly, on economies of scale.<sup>7</sup>

Economies of scale refer to reductions in the unit cost of producing goods that result from increasing the scale of production. They stem largely from high fixed costs of production (overhead) whose recovery gets spread out over greater amounts of production as the scale of operation increases. As a firm expands, its economies of scale may reach a limit, beyond which a rise in the average variable costs of production exceeds the decline in the average fixed costs of operation—but this point may be a very large plant size. Because international trade expands the scope of the market, it enables specific industries to take advantage of greater economies of scale in production. The gains from trade appear as a savings of real resources that society can devote to alternative uses.

Whereas under comparative advantage the international pattern of trade reflects the global distribution of resources, it may be a matter of historical accident when economies of scale drive specialization. In an industry characterized by extensive economies of scale, once a firm becomes well established, it has a clear cost advantage over new entrants to the industry. Economies of scale, then, act as a barrier to competition. Under such circumstances, the direction of exports and imports will depend principally on which countries contain the firms that first achieved wide-ranging economies of scale.

Gains from trade associated with greater economies of scale do not change the relative price of the abundant and scarce factors of production, as occurs with comparative advantage. As trade expands, labor and capital will be affected as some domestic firms and industries lose in the competition with foreign producers. Although they will eventually shift to other activities, the process need not distort the distribution of income across types of labor or between labor and capital. Consequently, clearly defined and influential groups opposed to free trade may be less likely to arise.

### ■ Innovation and Trade

A country's long-term, sustainable rate of economic advance depends on the growth of its labor force and capital stock, the education of its workers, and its willingness to adopt political and legal institutions consistent with free markets. But a country's ability to generate persistent gains in its standard of living—output per capita—depends critically on its rate of technological advance. Competition and exposure to new products seem to promote innovation and diffusion of technology. Moreover, technological gains generate knowledge “spillovers” that reduce the costs of future scientific advances. Consequently, technology tends to build on itself. International trade expands markets and global competition, and firms achieving substantial economies of scale may be best poised to adapt to new technologies. Importation, particularly of capital goods, facilitates the transfer of technology and encourages the development of new products and production processes. Exports can similarly promote technological transfer through the exposure to foreign markets.

Technological transfers should enhance the productivity and, therefore, the real wages of all workers, but the biggest gains should accrue to the more highly skilled since they are best able to adapt new technologies. Hence, technological transfers may increase wage inequalities within countries, and these can slow the growth of trade.<sup>8</sup>

### ■ Conclusion

Trade is always a two-way exchange, but when undertaken freely, both parties are better off. This is as true when participants reside in different countries as it is when they live in the same place.<sup>10</sup> Imports do not reduce or slow economic growth. By fostering specialization and

the transfer of technology, they lead directly to faster economic growth and improved standards of living. Unfortunately, the benefits of specialization and technological progress do not accrue equally to everyone, and may worsen the economic lot of some people. No one, however, seriously scorns economic advancements. Should we, then, disparage imports?

### ■ Footnotes

1. See Peter Hooper, Karen Johnson, and Jaime Marquez, "Trade Elasticities for G-7 Countries," Board of Governors of the Federal Reserve System, International Finance Discussion Paper no. 609, April 1998.
2. Jeffrey A. Frankel and David Romer, "Does Trade Cause Growth?" *American Economic Review*, vol. 89, no. 3 (June 1999), pp. 379–99.
3. See Kevin H. O'Rourke and Jeffrey G. Williamson, *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, Cambridge, Mass.: MIT Press, 1999.
4. See Robert J. Carbaugh, *International Economics*, 7th ed., Cincinnati, Oh.: South-Western College Publishing, 2000, p. 30.

5. See O'Rourke and Williamson (1999).

6. See Roy J. Ruffin, "The Nature and Significance of Intra-industry Trade," Federal Reserve Bank of Dallas, *Economic and Financial Review*, 1999 Quarter 4, pp. 2–9.

7. The discussion assumes that economies of scale are firm-specific; however, they may also be industry-specific. On the distinction, see Paul R. Krugman and Maurice Obstfeld, *International Economics, Theory and Policy*, 4th ed., Reading, Mass.: Addison-Wesley, 1997.

8. See Ishac Diwan and Michael Walton, "How International Exchange, Technology, and Institutions Affect Workers: An Introduction," *World Bank Economic Review*, vol. 11, no. 1 (January 1997), pp. 1–15.

9. In some cases, countries may be able to improve their economic welfare by instituting trade restraints or by retaliating against foreign-trade restrictions. Such gains, however, typically come at other countries' expense. Moreover, tailoring such policies to specific firms and industries is problematic. See Douglas A. Irwin, *Against the Tide: An Intellectual History of Free Trade*, Princeton, N.J.: Princeton University Press, 1996.

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