Globalization can be defined as a phenomenon of increased economic integration among nations, characterized by the movement of people, ideas, social customs and products across borders. This phenomenon has a long history, dating back to the trade routes developed during the Roman Empire, as well as those pioneered by Marco Polo or ocean voyagers like Columbus and Magellan.

Globalization has been crucial for economic growth over time. In his influential study “The World Economy: A Millennial Perspective,” the noted economic historian Angus Maddison argued that economic advancement across time was sustained by three interactive processes:

• the conquest or settlement of relatively empty areas that had fertile land, new biological resources or a potential to accommodate transfers of population, crops and livestock;
• international trade and capital movements; and
• technological and institutional innovations.

As Maddison and others have noted, technological innovations have played a key role in spurring previous globalization episodes. Transfers of technology from Asia and Egypt—such as silk, spices, textiles, glass blowing and rice—helped Venice and its colonies play a key role in the development of Europe. As economic integration spread across continents, political and financial institutions evolved to enhance and regulate the global marketplace.

The current globalization period, which more or less began in the late 1960s, contains many of the same aspects of earlier episodes. Reduced transportation costs, the opening of new markets (such as Asia, Eastern Europe and South America), and the general lowering of tariffs worldwide have helped boost international trade as a share of domestic economic activity. A key development behind the current globalization wave is the revolution in information and communication technologies (ICT). Although shipping merchandise goods is still the dominant form of trade between countries, trade in services that takes place across transoceanic cables or by satellite is of increasing importance.

The increased openness of the United States and the rest of the world to international trade can be seen in the figure on this page, which shows the sum of imports and exports of goods and services as a share of all goods and services produced annually in the United States—a figure known as Gross Domestic Product (GDP). Whereas the U.S. share of trade is a little more than...
Q. What is the WTO?
A. WTO is the acronym that stands for “World Trade Organization,” a forum for governments to negotiate trade agreements and settle trade disputes. It operates a system of trade rules.

Q. What is the IMF?
A. IMF is the acronym for the International Monetary Fund, an international organization of 185 member countries. It was established to promote international monetary cooperation, monetary exchange stability and orderly monetary exchange arrangements; to foster economic growth and high levels of employment; and to provide temporary financial assistance to countries to help ease balance-of-payments adjustments.

Q. What is the balance of payments?
A. The balance of payments is a record of payments that one country pays to and receives from all other foreign countries.

Q. What is the World Bank?
A. The World Bank is a source of financial and technical assistance to developing countries around the world. It is not an actual bank by the common definition. It provides low-interest loans, interest-free credit and grants to developing countries for education, health, infrastructure, communications and other purposes.

The World Bank is made up of two development institutions—the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). Both institutions support the World Bank’s mission to reduce global poverty and improve living standards. The IBRD focuses on middle income and creditworthy poor countries, while the IDA focuses on the poorest countries in the world.

Q. What is the OECD?
A. The OECD (Organisation for Economic Cooperation and Development) is a group of 30 member countries that share a commitment to democratic government and a market economy. Best known for its publications and statistics, the OECD’s work covers economic and...
a quarter of GDP, the rest of the world's exposure to international trade is much larger: 70 percent.

**The Benefits of Globalization**

The benefits of globalization are essentially based on the benefits of free trade. International trade is beneficial because of the principle of comparative advantage, which allows a country to specialize in the activities that it does best, given its labor, natural resources and technology. The estimated net benefits that flow from free trade are substantial. According to a study by economists Bradford, Grieco and Hufbauer, international trade has increased real household income by between $7,000 and $13,000. Removing all existing barriers to trade, they argue, would produce an additional real income gain of between $4,000 and $12,000.

In addition to the fact that people and nations can produce more goods and services when they specialize, thereby increasing the total amount of goods and services produced worldwide, free trade also increases the variety of goods and services available to consumers. Without trade, coffee drinkers in the United States would pay much higher prices because the nation's supply would depend solely on Hawaiian or Puerto Rican sources. Scarce resources would need to be redirected to produce more coffee, leaving fewer resources to produce other goods and services.

Similarly, Honda or BMW drivers would be forced to drive Chevrolets or Fords. Given that technological innovation in the automotive industry, as well as other industries, often arise from competition, the quality of cars might also be much lower for all car manufacturers.

The competitive forces of globalization have also been important factors in boosting U.S. labor productivity growth in recent years. This growth can occur in a couple of ways. First, increased competition spurs domestic firms to invest in equipment and software embodied with the latest technology. Second, moving less-skilled labor to low-wage countries increases the relative demand for higher-skilled, higher-productivity labor.

Proponents of globalization argue that increased economic integration benefits workers in relatively poor countries by providing them access to new ideas and new technologies; this exposure increases their productivity and real wages. According to Harvard professor Xavier Sala-i-Martin, this has helped to reduce world income inequality over the past 20 years.

**The Downside of Globalization**

Although free trade benefits society because it increases the world output of goods and services, it also creates losers in certain industries which cannot compete with foreign manufacturers. The biggest losers are both the workers and the owners (shareholders) in these industries, such as the U.S. television manufacturing industry which could not compete with foreign competition. If producers can substitute a cheaper foreign source of labor relative to the domestic wage rate, many will choose to move their production overseas, creating increased unemployment.

The largest unemployment effects are probably among less-skilled workers employed in ordinary production processes that can be done much cheaper overseas, such as making products like T-shirts or baseballs or reading service manuals at call centers. Since high-skilled workers are paid a premium for their labor, moving lower-skilled work offshore increases the domestic demand for higher-skilled workers relative to lower-skilled workers. Only one-third of the current U.S. labor force has graduated from college, however, and increasing that percentage will take time.

At the end of WWII, the college-educated share of the labor force was 6 percent. At that rate, economists predict that reaching 50 percent of the labor force will not come about until 2047.

One potential consequence of this is rising income inequality between low-skilled and high-skilled workers. According to the Organisation for Economic Cooperation and Development (OECD), increases in income inequality have been most pronounced in the United States, the United Kingdom and some smaller European countries. Increases in the demand for skilled labor are clear market-based incentives for workers to boost their education levels and, perhaps, for firms to increase their workforce training. The demand for high-skilled workers over the long run can also be boosted by research and development, which is often the genesis of new ideas that boost economic growth and living standards over time.

A key difference between the current globalization episode and those from the past is the sheer magnitude of the number of workers who have entered the labor pool. The rise of China and India as important exporters of goods and services means that many of their workers are now directly competing with workers in countries like the United States, Japan or Mexico. Economically, an increase in the supply of labor puts downward pressure on wages assuming no change in labor demand.

**Conclusion**

As global competition has increased, so have the voices of protectionism. Ultimately, policymakers must decide whether the costs of maintaining relatively free trade—by expanding public programs to compensate the losers of trade, or those who perceive themselves as losers—is a small price to pay for maintaining a global economic system that has produced large benefits for most parts of the world.

This article was adapted from Trading Barbs: A Primer on Globalization, which was written by Kevin Kliesen, an economist at the Federal Reserve Bank of St. Louis, and was published in the October 2007 issue of The Regional Economist, a St. Louis Fed publication.

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**Classroom Discussion**

1. What are some historical examples of globalization?
2. Explain how globalization may increase the demand for higher-skilled workers and decrease the demand for lower-skilled workers in the United States.
3. What are some arguments for and against free trade?

For a lesson plan to accompany this article, go to www.stlouisfed.org/education/itv.lesson_plan.html.
social issues from macroeconomics to trade, education, development and science, and innovation.

Q. **What is outsourcing?**
A. Outsourcing is subcontracting a process such as customer service, product design or product manufacturing to a third party. The third party might be another organization within or outside of the state, region or country.

Q. **What are NGOs?**
A. NGO is an acronym that stands for “non-governmental organization.” An NGO is an organization that is not affiliated with the government, yet has a significant impact on the political, social or economic status of a region. Since the mid-1970s the number of NGOs worldwide has increased significantly. The World Bank describes NGOs as “private organizations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services or undertake community development.”

Q. **What is comparative advantage?**
A. The principal of comparative advantage demonstrates that countries benefit from trade when they specialize in producing goods and services that they are able to produce at a lower opportunity cost than other countries.

Q. **What is the balance of trade?**
A. The “balance of trade” (or net exports) is calculated by subtracting the monetary value of imports from exports in an economy over a certain period of time. A positive balance of trade is known as a “trade surplus,” which means that the value of a country’s exports exceeds the value of its imports. A “trade deficit” is a negative balance of trade, which means that the value of a country’s imports exceeds the value of its exports.

**Web Site Sources:**
- International Monetary Fund
- Organisation for Economic Cooperation and Development
- Virtual Economics, National Council on Economic Education
- World Trade Organization
- World Bank
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