Thanks, Ashish, and thanks to the U.S.-India Business Council, the Confederation of Indian Industry, and the Bombay Stock Exchange for organizing this event. As always, what I have to say reflects my views and not necessarily those of the Federal Open Market Committee or the Federal Reserve System.

It is a pleasure to have the opportunity today to talk about the issue of globalization. Although the debate about the benefits and challenges of globalization is not new, it has recently come into sharper focus. This debate is important to all of us, and I think it is particularly relevant to India given its growing role in the global economy.

Globalization means different things to different people. In my remarks today, I will focus on the role of globalization as a force for international economic integration and economic development. I will highlight three themes:

First, the important role that trade plays in promoting higher standards of living globally.

Second, how changes in trade can create challenges for industries that become less competitive. We have not adequately considered and remedied the very large costs this can impose on certain communities and households.

Third, the answer to those challenges is not greater protectionism. Instead, we need to provide greater support to displaced workers so they can obtain the skills needed to find new well-paying jobs. We need to do better in preparing workers to deal with the challenges of globalization and technological change.

These issues are important to me as a central banker, as they affect the long-term health and productivity of the economy, and the economic opportunities available to our people.

The debate around globalization, particularly in advanced economies, reflects a range of factors. Undoubtedly, the global financial crisis and subsequent slow recovery have been significant. But, just as important have been longer-term trends, such as growing income inequality, the loss of middle-income jobs, and the rise of large emerging market economies such as China and India.

Although the debate about globalization is not new, I believe we are at a particularly important juncture. If support for liberalized trade and an integrated global economy were to suffer a significant setback, the consequence could be slower economic growth and lower living standards around the world.

While considerable effort has gone into liberalizing trade and developing the existing set of trade agreements, that does not mean they cannot be improved upon. I have no doubt some trade agreements could be enhanced or updated. Some may not adequately address recent changes in the global economy—such as the rise of digital trade—and may need to be refreshed. And, important trade barriers still remain and should be addressed. In particular, from a U.S. perspective, the access of U.S. firms to some foreign markets and the protection of intellectual property rights are issues that deserve close attention. But, in addressing these issues, we should take care to preserve the vital benefits of trade to higher standards of living in both advanced and emerging market economies. Our focus should be on further strengthening an open trade regime, and, as appropriate, amending and improving these agreements.

The Pace of Globalization

To begin, let me briefly describe the pace of globalization as a reminder of what is at stake. Global economic integration has increased dramatically in recent decades. Trade, for example, has grown from nearly 40 percent of global GDP in 1990 to 57 percent in 2015. Over the same period, the stock of foreign direct investment has increased from roughly 10 percent of global GDP to 34 percent. Ultimately, economies have become more integrated and interdependent.

This rapid growth in trade reflects falling trade barriers, declining transport costs, and improved information and communication technology. These trends have enabled the development of complex global supply chains that allow companies to manage their production more efficiently.

Emerging market economies now make up a much larger share of global trade, the global economy and global growth. As an illustration, emerging market economies have accounted for 70 percent of global output growth since the crisis—double their...
share from two decades ago. This growth has provided much-needed support to world economic activity, as advanced economies have recovered slowly from the crisis.

Rising economic integration is also very evident when we examine the trade relationship between India and the United States. Bilateral trade flows have risen tenfold, from $11 billion in 1995 to almost $110 billion in 2015. In particular, half of U.S. imports of computer services are now sourced from India. In 2015, the stock of bilateral foreign direct investment in both countries was $37 billion, up from $4 billion in 2002. The potential for further increases has been reinforced by the liberalization measures India announced last year to encourage greater foreign direct investment.

Benefits of Open Trade

Increased trade, through its longer-term impact on productivity, has been a key contributor to global growth and prosperity since the Second World War. Openness to trade brings many benefits to the supply side of the economy. These include:

- larger markets, greater specialization opportunities, and the increased ability to exploit economies of scale and scope;
- faster transmission of technology and innovation; and
- greater competitive pressure on domestic firms to increase their productivity.

Collectively, these forces lead to a more efficient allocation of a country’s scarce resources—one that is more closely aligned to its international comparative advantage.

As a consequence, consumers can benefit from lower prices, higher real incomes, and greater variety and quality of goods and services. Increased openness may also reduce wasteful rent-seeking behavior on the part of protected industries and the related costs of corruption.

These benefits from open trade are very evident in India. Academic research has found substantial gains for India following its dramatic trade reforms in the 1990s, which benefited consumers via lower prices and firms via higher markups. These higher profit margins spurred innovation and provided funds for the development of new products. Looking ahead, the upcoming implementation of the goods and services tax in India—which will create a common market internally—is expected to provide many of the same benefits as trade liberalization does internationally.

Openness to trade has certainly played a large role in the economic ascent of Asia. Following the rise of Japan, Korea, Taiwan and others, fast growth in China and India has lifted hundreds of millions of people out of extreme poverty—an unprecedented feat in human history. The benefits of economic integration and other reforms are exemplified in India’s higher growth rate since the introduction of market reforms in 1991. Growth has averaged 6.5 percent annually in the post-reform period, compared to about 4 percent annually over the prior 40 years. Indeed, India is the fastest-growing major economy in the world today. Reflecting these gains, a number of emerging market countries have been strong supporters of open trade, a sign of how much the world has changed in recent years.

A few examples can help to illustrate some of the benefits of globalization. India’s green revolution—which helped to greatly increase its agricultural productivity and food security—was facilitated by U.S. technology and scientists working with their Indian counterparts. Similarly, as is well known, Indian engineers and entrepreneurs have played a key role in the technology sector’s tremendous achievements in recent decades and now lead some of America’s largest companies, including Google and Microsoft. This success, in turn, has had important benefits for India as well, including increased foreign investment flows and employment opportunities that have helped develop a vibrant information technology ecosystem.

But, increased openness to trade is not a panacea in and of itself. Actual benefits depend on a range of other critical factors, including macroeconomic policy, the business and regulatory environment, the legal regime, the quality of infrastructure, and the quality of public services, including education. While the gains from a liberalized trade regime are not guaranteed, the alternative of trying to achieve a high standard of living by following a policy of economic isolationism will fail. Trade has played a key role in nearly all of the high-growth success stories since the middle of the last century.

Challenges of Open Trade

It is important to recognize that while trade and international integration tend to increase the overall economic pie, the distribution of the larger pie may be very uneven. In fact, slices for individual groups may shrink. Some workers—particularly those in industries that are less able to compete and whose skills have become less relevant—can be hurt and find it difficult to adjust. This often requires individuals to change industries and to relocate to different regions. So, while trade is almost always a win for a country’s economy, not everyone within that economy will be a winner. This is especially the case where there are no policies to cushion the negative consequences of trade and to facilitate adjustment.

Effects are also country- and industry-specific, and depend on initial endowments and conditions. Low-income workers in emerging markets, for example, may find it more difficult to adapt given weaker safety nets and less financial resources available to deal with adverse economic shocks. The bigger the adjustment process, the more the gains from trade will tend to be eroded.
While the rise in the skill premium from trade liberalization has been well established for both developed and developing countries, determining the aggregate impact of trade on jobs has been more challenging. To date, the evidence has been mixed. We need further research in this area to determine with more confidence a reasonable range of estimates for these employment effects. Although evidence on the extent to which jobs have been lost due to global trade is inconclusive, job losses that are attributed to trade tend to be viewed differently. That is, they are seen as having been “lost to foreigners” and are often viewed as a consequence of the policy decision to liberalize trade in the first place.

Having said that, the challenge of adjusting to open trade is a serious issue that has not received the degree of attention it fully deserves. This may partly reflect the fact that the burden has been borne unequally and spread out over a long time period. It also may reflect the fact that the winners from trade have often tended to have a stronger voice than those who have been the losers.

Research has documented that the effects on individuals of job dislocation—including those resulting from trade—can be significant and long lasting. Older workers tend to suffer larger earnings losses, and may face larger transition costs. Displaced workers may not have the appropriate skills to find good jobs in other areas of the economy, including in growing export sectors. When the affected industry represents a large share of the local economy, the damage is often magnified. In this case, the burden is more widespread because wages across the community are likely to be hit as well. And, this doesn’t begin to capture the full human toll—including the impact on workers who have lost confidence in the future and the poorer health outcomes that occur because of increased stress. For too many individuals in the United States, for instance, the American dream has been put at risk, with parents increasingly pessimistic about whether their children will have the opportunity to do better than they did.

We should find better ways to help communities that are struggling because of the effects of free trade. In the United States, we have historically experienced a high degree of geographic labor mobility—much higher than in other advanced economies. The ability to move in search of better opportunities, when possible, has helped to mitigate some of the adverse effects of trade. But, mobility has declined in the United States in recent years, implying that the adjustment costs to trade may have increased.

**Protectionism Is Not the Answer**

Given these costs of globalization and more liberalized trade, what is the best path forward? Protectionism can have a siren-like appeal. Viewed narrowly, it may be potentially rewarding to particular segments of the economy in the short term. Viewed more broadly, it would almost certainly be destructive to the economy overall in the long term.

Countries need to compete better, not compete less. Trade barriers are a very expensive way to preserve jobs in less competitive or declining industries. They blunt opportunities in export industries and they reduce the affordability of goods and services to households. Indeed, such measures often backfire, resulting in harm to workers and diminished growth.

A better course is to learn from our experience. From a U.S. standpoint, we should work to reduce remaining foreign trade restrictions that impair our ability to capitalize on our comparative advantages. For example, market access restrictions can mean that certain U.S. industries cannot realize their full potential. Similarly, weaknesses in the protection of intellectual property rights limit the ability of U.S. producers to realize the full returns from their investments. This lowers profits and diminishes incentives to grow the business and employ more workers.

If we are going to enhance the benefits of free trade and better manage its costs, it is critical that we continue to strengthen the global rules-based system. On the positive side, I would point to the WTO’s recent Trade Facilitation Agreement, which addresses customs procedures and could reduce global trade costs by almost 15 percent. But, at a broader level, the momentum behind global trade reform has clearly waned in recent years. This has occurred notwithstanding the fact that there are substantial areas in need of further reform, such as agriculture, services and non-tariff barriers. That momentum needs to be rekindled and reaffirmed. Although advanced economies historically have tended to lead the way, it is important that large emerging market countries now play a greater role. This is appropriate given their growing prominence in the global economy.

There are many approaches to dealing with the costs of globalization, but protectionism is a dead end. Trade restrictions address the symptoms and not the underlying problems, and they introduce other costs and distortions. While such measures might generate temporary boosts to growth from greater domestic production and consumption, these would likely be offset by a range of other costs. Over time, such measures would retard productivity growth and thereby shrink the economic pie. As an illustration, import substitution models that were pursued by many emerging market economies following the Second World War eventually led to lower long-term growth outcomes. This was the experience in India, which helped trigger the reforms of the early 1990s.

In assessing the benefits and costs of trade, it is important to understand that a nation’s trade balance reflects much more than its trade policy. Just as important are the country’s saving and investment spending proclivities, which are affected by many factors, including tax and fiscal policies. For example, in the United States, we have a chronic trade deficit because domestic investment spending exceeds our domestic saving. Foreign capital inflows make up the gap. In this process, the foreign exchange value of the dollar plays an important equilibrating mechanism. If the domestic saving/investment imbalance is unchanged, then any reduction in the trade balance from higher trade barriers will be offset by lower exports. The domestic currency will appreciate to cause the trade deficit to widen to accommodate the desired capital inflows. Thus, trade restrictions affect the composition of
trade but not the gap between exports and imports, which is determined by the difference between domestic savings and investment. At the end of the day, the protectionist country would produce more goods in sectors protected by higher trade barriers but also fewer goods for export.

The expectation that higher trade barriers would save jobs ignores these critical second-round effects. Moreover, the story may not end there. What happens if another country that now faces higher trade barriers responds by raising its own barriers? That would push production even further out of high-value-added exports that are now deterred by the higher foreign trade barriers and into those exports that face lower trade barriers, or into the goods protected by the higher domestic trade barriers. Raising trade barriers would risk setting off a trade war, which could damage economic growth prospects around the world.

Measures that raise trade barriers typically would protect lower-wage, import-competing jobs, but would also weigh on the prospects for jobs in the more efficient export sector, which tend to be higher-paying. The outcome would be countries producing more where they have a competitive disadvantage, and less where they have a competitive advantage—the exact opposite of what we should be aiming for. For example, in the United States, one of our largest manufacturing exports is aerospace parts (which requires skilled labor) and one of our largest imports is apparel (which requires less skilled labor).

These second-round effects would also likely hurt productivity growth. Scarce resources would be used less efficiently and trade protection would likely lessen the level of competitive pressure that helps drive innovation. Moreover, lower productivity growth would likely lead to a slower improvement in a nation’s living standards over time.

This negative consequence of higher trade barriers can be illustrated most starkly by the estimates of the costs per job saved through protectionist measures. Researchers that have studied this closely estimate that the costs per job saved from protectionist measures in the United States typically run into the hundreds of thousands of dollars per year. To illustrate, consider the case of import restrictions on Chinese tires. The cost of a job saved was estimated at $900,000 per year while the measures were in place, or more than 20 times the average worker’s compensation.\footnote{5}

Better Approaches to Deal With Globalization

Rather than protectionism, a better policy would be to help domestic workers and companies compete more effectively, rather than compete less. We need additional mechanisms that allow us to more fully capture the benefits from liberalized trade and to more proactively mitigate its costs. Ideally, policy should also better address job losses and income inequality from automation and other technological advances.

How we respond should depend on regional and industry circumstances. These include the nature of trade impacts, the skill sets and location of the workers that have been affected, and the amount of resources that can be mobilized to facilitate adjustment.

Increasing specialization brings real economic benefits, but can also leave workers more exposed to shifts in demand for their services, potentially on short notice. These issues are not going away, especially as emerging market economies take on a larger role in the global economy and automation continues apace. If we are to maintain a more open trade regime, globalization must be socially and politically sustainable. For that to be the case, we have to provide greater support to those who are hurt by trade.

Policies should include more assistance with job retraining, help with job search and mobility, and broader unemployment support. We need to do more research into what measures have been effective in economies around the world, and we should encourage greater experimentation with new approaches. Getting the balance right between providing assistance and making sure that individuals hurt by trade can get back on their feet and achieve their earning potential will be a challenge, and we need a better understanding of what actually works.

More generally, we need to do a better job positioning our workforce to cope with globalization and technological change. This will involve improvements across a range of areas, including not only education and training, but also the business regulatory environment and infrastructure investment that could support greater worker mobility. These measures would also promote higher productivity growth. While the scope and scale of issues differ substantially by country, many of these policy areas may also be relevant in India.

Lastly, there are various measures available in current trade agreements, such as antidumping measures and countervailing duties for dealing with “unfair” trade, as well as escape clauses that provide safeguards for industries that face a sudden surge of imports. Again, the challenge is to ensure that such measures are effective, that they help facilitate rather than retard adjustment, and that they are not abused so as to avoid foreign competition. But, both sanctions and temporary relief have been provided for in global trade rules. We should be willing to use them when their use would lead to more equitable outcomes and would help sustain political support for a more open trade regime.

Conclusion

Free trade is a concept that remains compelling but periodically will be tested by economic change. That is an inescapable fact of life and is a good thing because it requires the economics profession to articulate anew the value of a liberalized world trade regime. While the value from trade is very high, the associated adjustment costs can be significant and will require greater
attention if globalization is to work for all of us.

Thank you for your time. I would be happy to take some questions.

1 Mary Amiti, John Clark, Gerard Dages, Matthew Higgins, Tom Klitgaard and Joseph Tracy assisted in preparing these remarks.
2 Figures from UN World Investment Report, IMF World Economic Outlook Database, World Bank World Development Indicators.
3 IMF World Economic Outlook, April 2017, in market exchange rate terms.
4 Figures from Office of the U.S. Trade Representative, UN World Investment Report.