

## **The Global Economy: Demand, Supply and Interdependence**

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*As prepared for delivery*

I am very excited to be here in Ramallah today. I am hoping that I can use my visit to learn from you about both the opportunities you have and the unique challenges you face in promoting shared and sustained economic growth. The United States is committed to working together to help strengthen your economy and to give more people the opportunity to have good jobs, start successful businesses, and contribute to innovation. I am eager to hear about the steps forward you have taken in your economy, including to support small business and entrepreneurship, attract foreign investment and tourism, and develop the information technology sector. In many ways the Palestinian economy has been a model for places around the world that face serious conflicts. In just the last year, revenue collections have improved while improvements in the banking system have contributed to greater financial soundness, making possible greater flows of credit. Still, the challenges in growth—even prior to the conflict in Gaza—and the very high unemployment rates represent a major challenge.

The Palestinian economy has great potential, but is also constrained by a unique set of circumstances, including the Israeli-Palestinian conflict. While economic peace is no substitute for a political settlement, steps that increase cooperation between economic authorities in Israel and the Palestinian territories can have a positive impact on growth. Overall, moving the Palestinian economy towards a greater role and integration in the global economy would be helpful for both the Palestinians and for their economic partners around the world.

There are, of course, major difference between Palestinians' challenges and the economic challenges faced by countries around the world, including both advanced economies like the United States and emerging economies like China. But some of the issues are the same, like how to invest in areas like infrastructure and education to foster future growth. Moreover events around the world can impact your economy and its ability to achieve its goals. The recent drop in oil prices over the past several months is yet another reminder of just how unpredictable the global macro-economy can be, and how no economy is totally immune from the consequences of events happening around the world, whether they be positive or negative.

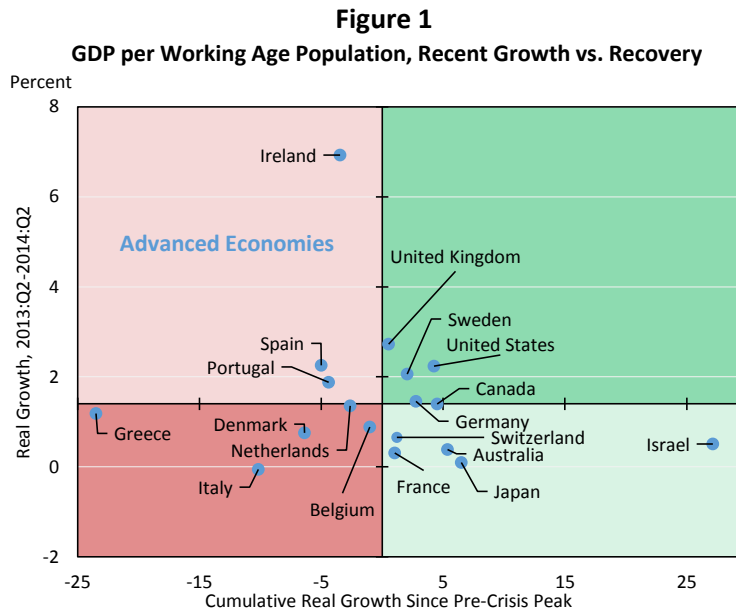
So it is with that context, that my plan today is to speak about some of the broader global economic trends and what they mean for the future of the global economy. I hope we can get much more specific about the Palestinian economy in the discussion we will be having today.

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<sup>1</sup> Eric Van Nostrand, Susie Scanlan, and Matthew Aks at the CEA provided research assistance.

## A Varied Recovery

Nearly every advanced economy endured a recession amid the global financial crisis, but the experience since then has varied widely across countries. To illustrate the divergent dynamics of global post-crisis growth, we can study the evolution of GDP across economies. For comparability, I focus on real GDP growth adjusted for the growth rate of the working age population. Ten of the 18 economies shown in Figure 1 have surpassed the level of GDP per working age population they achieved before the crisis, while the other 8 have not. The United States, Canada, Australia, and Japan have risen more than 4 percent above their pre-crisis peak, while many advanced economies—including much of peripheral Europe—have yet to fully recover.



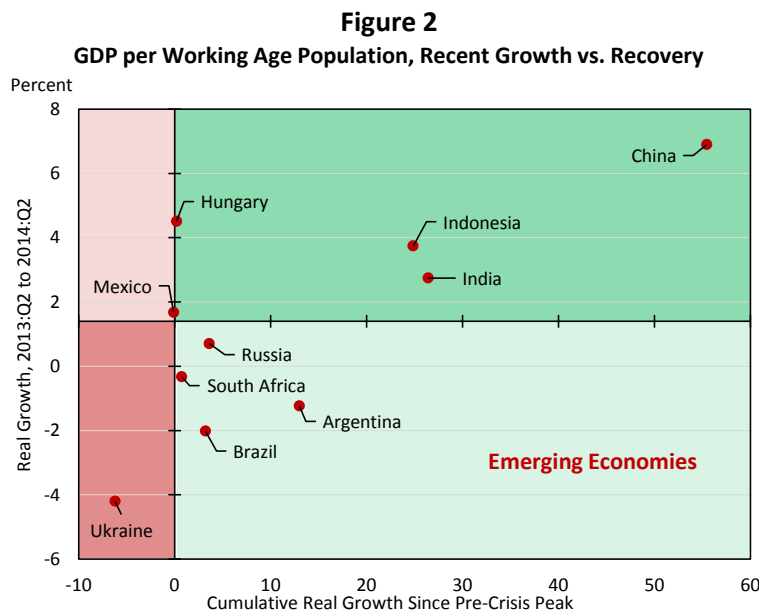
But looking at how current growth rates compare to the advanced economy median of about 1½ percent growth in GDP per working age population we see four broad patterns of recovery:

- The United States is firmly planted in the top-right quadrant of Figure 1, having both exceeded its pre-crisis peak while continuing to demonstrate global leadership in growth. The United Kingdom and Sweden have also exceeded their previous peaks, albeit by thinner margins. All three economies continue to see growth in GDP per working-age person of more than 2 percent per year. In the United States, this output growth has been accompanied by an increasing pace of job growth—with 2014 on pace to be the fastest pace of job growth since the 1990s—and the unemployment rate falling at the fastest pace in thirty years.
- Japan, France, and Australia occupy the bottom-right quadrant. They have also exceeded their pre-crisis peaks, but are slipping back with essentially a halt to growth in Japan and France over the last year. Japan’s contraction has been exacerbated by the consumption tax increase in April, but that is not the whole story. The Japanese economy experienced

slowing growth rates last year, culminating in a contraction in the fourth quarter of 2013, well before the consumption tax went into effect.

- Portugal, Spain, and Ireland, in the top-left quadrant, remain below their peak. But over the last year, the Iberian nations enjoyed decent growth of around 2 percent per year, and Ireland very strong growth of nearly 7 percent per year. Nevertheless, unemployment rates remain elevated in all of these countries—especially in Spain, where unemployment stands at 24 percent, down from 26 percent one year ago.
- Italy has not only failed to recover, it has continued to face significant economic challenges with growth well below average in the last year. Italy’s recession is now approaching its fourth year and the unemployment rate has risen to 13.2 percent.

Emerging markets also show differentiation. Most have surpassed their pre-crisis peaks in GDP per working age population. But in terms of recent growth in GDP per working age population, the emerging world is much more varied around a median of about 1¼ percent. Brazil and South Africa are actually contracting, while China and India are growing, as shown in Figure 2.



Looking forward, the 40 percent decline in global oil prices since their mid-June peak is likely to drive additional global differentiation between oil consumers and producers. One important contributor to the falling energy price environment has been the notable boom in U.S. oil production, which has now surpassed Russia and Saudi Arabia as the largest oil producer in the world. Despite this progress, however, the United States remains a net importer of oil, so it is likely to see a benefit from the recent decline in oil prices, along with other net oil importers like Japan, India, China and the major European economies. Other countries that have depended on large petroleum trade surpluses are likely to face strains from the recent declines in prices, and monitoring for negative spillovers that emanate from these economies is likely to be an important task over the next several months. On net, the consensus is that the recent developments are likely to represent a meaningful boost to global aggregate demand—with the IMF projecting a

0.8 percent boost to global GDP—as consumers in the United States and elsewhere spend a large chunk of the windfall that, under a counterfactual scenario of continued high prices, would not have been spent as quickly by oil producers. An additional force leading to a net rise in global output is increased supply by energy-using industries.

## Supply and Demand

Like so much in economics, the level of a country's output reflects the interaction of supply and demand. In the macroeconomic context, supply tells us how much goods and services *can* be produced if all resources were fully utilized—it determines an economy's potential output. Supply reflects factors like the size of the capital stock, the skills of the workforce, and the advancement of technology. The second factor is demand, which tells us how much actually *is* produced given the purchasing power of individual consumers, business purchases of plants and equipment, and government consumption and investment. This determines how much of the supply is actually utilized.

These two factors are interrelated. Increased supply raises incomes and thus boosts demand. Conversely, inadequate demand today implies less investment in equipment, infrastructure or education as well as more unemployed workers losing their skills, all of which translates into less supply in the future. Nevertheless, supply and demand are useful constructs that have different implications for the economic outlook and economic policy. Let me consider each in turn on a global basis and explore the ways that policy has affected and will continue to affect them in the United States.

### *Demand Deficiencies*

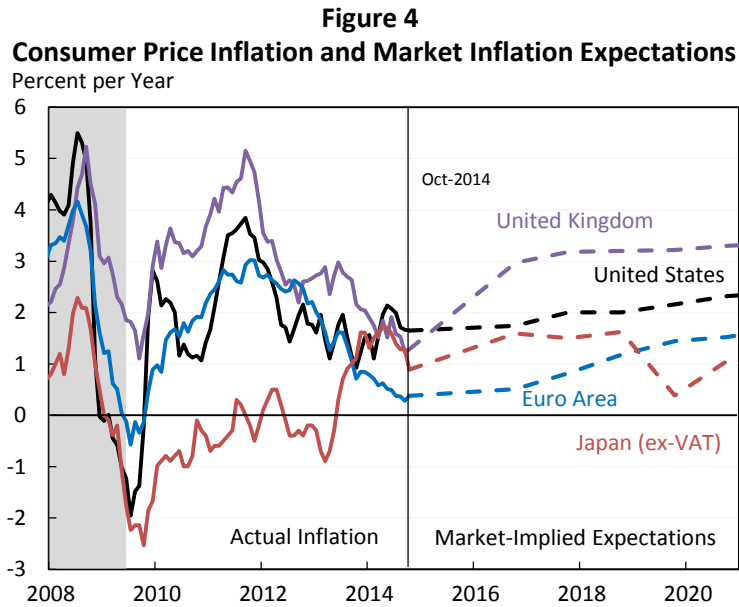
We do not directly observe either supply or demand. But several clues can help us distinguish between them and identify appropriate policies to help sustainably grow each.

**Slack resources are the equivalent of inadequate demand.** When the unemployment rate is 11.5 percent, as in the euro zone today, 16 percent, as it is in the West Bank, or even higher in Gaza, it is clear that the binding constraint on output is not a supply-side factor like technology or the capital stock, but instead the fact that demand is inadequate to fully utilize all the resources that already exist. And labor market slack comes in many different flavors than just the headline unemployment rate: in the United States, many policy conversations center on slack that is evident from alternative measures of labor utilization such as shortfalls in labor force participation and involuntary part-time employment.

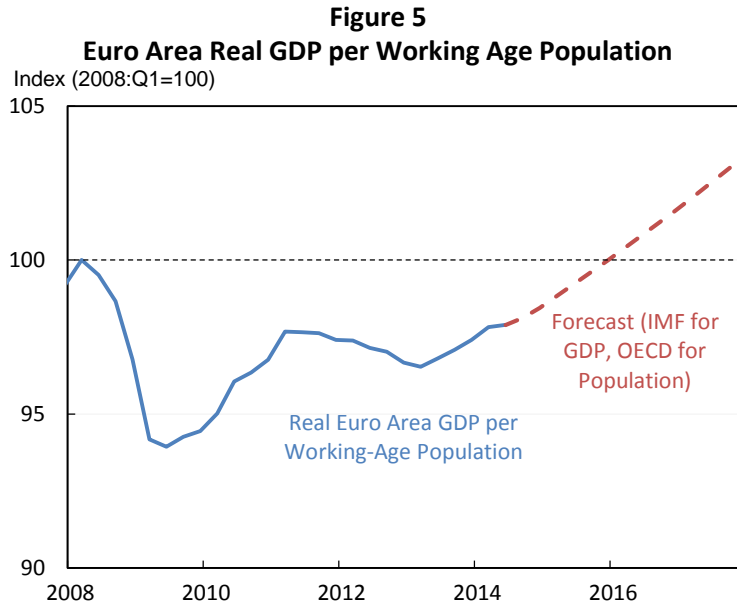
**Low or falling inflation *can* be a sign of inadequate demand.** It is often difficult to observe resource utilization directly because the sustainable level of unemployment varies across countries and time. And other factors—like participation, work hours or even work effort—might systematically vary with the business cycle. As a result, it is useful to look at changes in inflation as another indicator of aggregate demand. Inflation confirms the same story that the euro zone unemployment tells—with inflation low and falling, as shown in Figure 4. Japan, which does not have excessively high unemployment, appears to have insufficient demand when

viewed through the lens of inflation—which trended down this year when excluding the impact of the consumption tax hike and long-term inflation expectations remain below 1 percent.

The signals from inflation are more straightforward in a large, fairly-closed economy like the United States. In other economies, inflation dynamics are strongly affected by exchange rates and by external factors, so managing demand through monetary policy involves more complicated trade-offs.



**An abrupt change in output can be explained by a shock to aggregate demand.** Demand can be volatile from quarter to quarter and year to year, as consumers and businesses shift their spending and investment patterns, leading to jumps in output. In contrast, supply is generally more smooth—and largely incapable of explaining abrupt contractions in output. However, supply shocks, such as a power supply disruption following a natural disaster, can result in abrupt changes in output. This is especially true in smaller economies. On this account, demand again appears to be playing an important role in both the euro area—which is still more than 2 percent below its 2008 peak in GDP per working age person as shown in Figure 5—and also in Japan. Indeed, the demand shortfall is projected to result in 8 years of lost growth to the euro area: output per working-age person is not projected to return to 2008 levels until 2016.



I believe that one of the reasons the United States has recovered comparatively well compared to other advanced economies has been more aggressive use of fiscal and monetary policy. In that regard, the steps Japan has taken to delay its consumption tax and that the European Commission is taking to invest in infrastructure clearly move in the right direction, although it is far from clear that the magnitude will be sufficient.

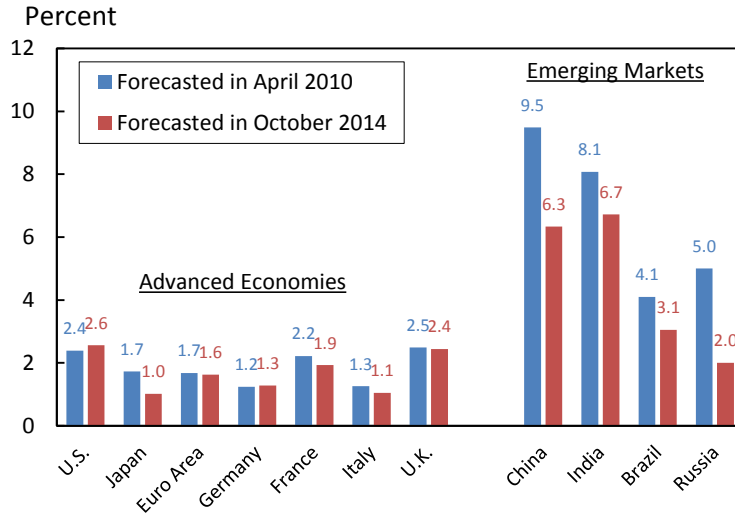
Of course, these measures do not work in all circumstances—and the Palestinian economy does not have an independent monetary policy and it also faces severe fiscal challenges. But any steps that can put people back to work, use more of the potential of your economy, and expand output while bringing in revenue would be welcome.

### *Supply Shortfalls*

At the same time, supply shortfalls have also played an important role in the slower pace of global growth. The International Monetary Fund (IMF) has marked down its growth projections for many of the world's major economies, as shown in Figure 6, which compares the five-year-ahead growth forecasts made in the April 2010 *World Economic Outlook* to the five-year-ahead growth forecasts made in the October 2014 *World Economic Outlook*, a decent proxy for revisions to the expectation of the growth of aggregate supply. While Japan, France, and Italy have seen downward revisions to medium-term growth expectations, one striking aspect of this figure is the sharper downward revisions to prospects for the BRIC economies, which saw growth outlooks marked down by 1 to 3 percentage points. In fact, in the most recent *World Economic Outlook*, the IMF noted that the BRIC economies have been responsible for half of the IMF's total growth forecast errors from 2011-14, despite representing just over a quarter of global GDP. Much of that shortfall has been in economies operating with relatively little slack and without the lowflation that has characterized the euro zone and Japan.

**Figure 6**

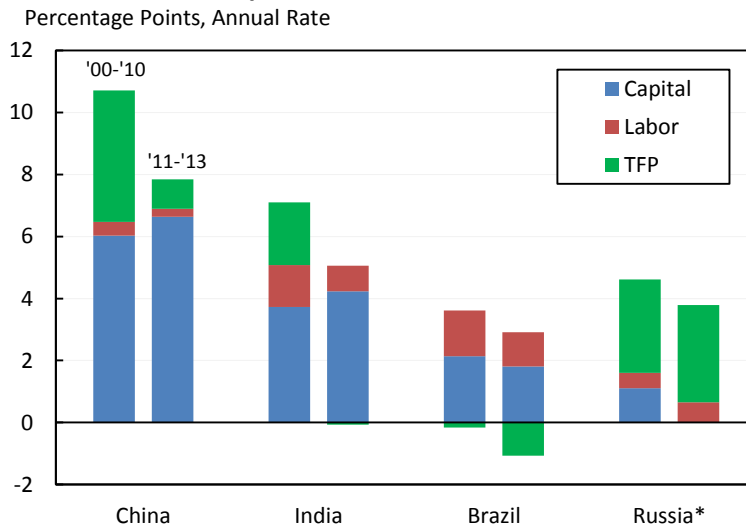
**Five-Year-Ahead Growth Forecasts in Selected Economies**



For these emerging markets, much of this supply-side slowdown in growth cannot be explained by capital or labor, and thus is in the residual category of “total factor productivity” (TFP) which measures some combination of technology, efficiency in production processes, the scale of markets, and measurement error. As shown in Figure 7, China, India, and Brazil all saw noticeable drops in total factor productivity growth from 2011 to 2013, relative to the preceding ten years.

**Figure 7**

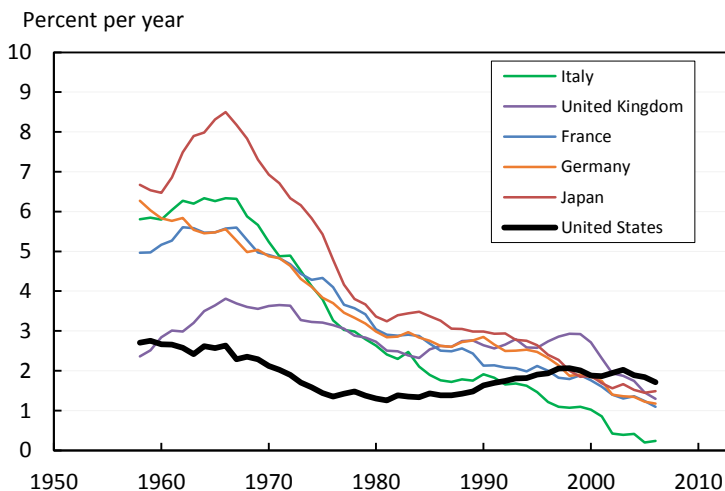
**Sources of Output Growth: 2000-2010 vs. 2011-2013**



The emerging market productivity slowdown may be just a temporary phenomenon, and perhaps is at least in part a response to the economic crisis and weak demand. Another possibility is that it could represent the end of an unusual period in global economic history when the integration of China and India into the global economy led to a rapid period of catching up with the

technological frontier, but as these nations—especially China—get closer to the frontier then the easier opportunities for growth are no longer available. Meanwhile, as shown in Figure 8, labor productivity growth in most advanced economies (which depends heavily on TFP growth) has been consistently slowing since the end of World War II—although the productivity boost in the United States with the new economy beginning in the mid-1990s represents somewhat of an exception.

**Figure 8**  
**15-Year Centered Moving Average of**  
**Annual Labor Productivity Growth**

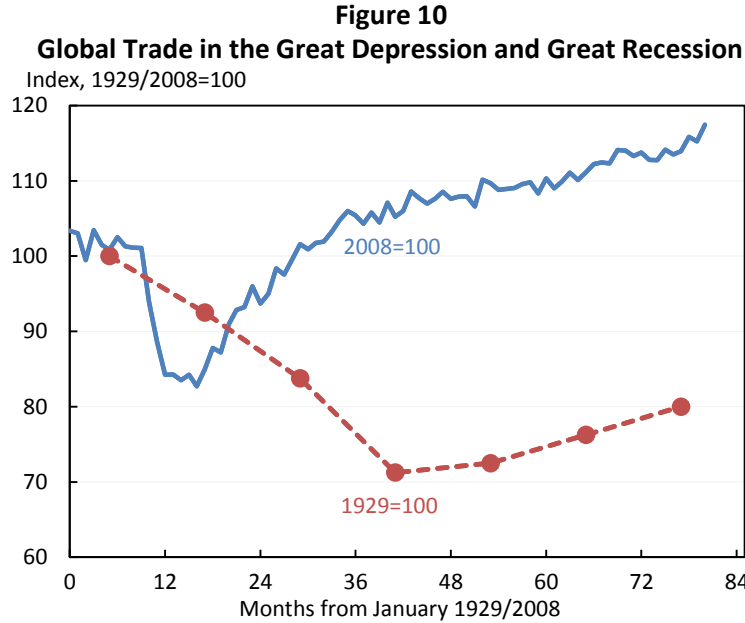


Although the slowdown in productivity growth appears to be a global phenomenon, many of the solutions are very much national in character. Certain elements—like investing more in research or STEM education are likely to make a constructive addition to productivity growth in a wide range of economies. But the types of reforms that are most needed in product markets, labor markets, tax systems, and elsewhere in the economy will vary significantly from country to country.

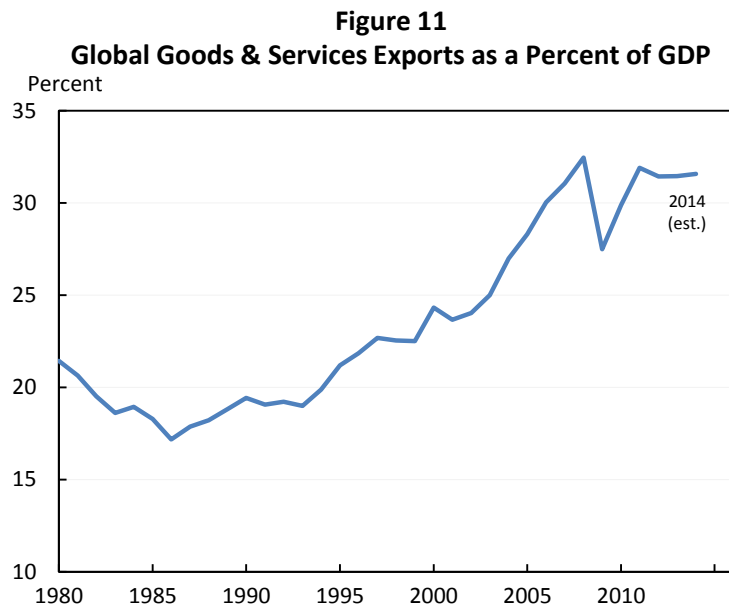
### The Slowdown in the Growth of Trade

A major question surrounding the global economic situation is the outlook for global trade. At the outset of the financial crisis, the volume of global merchandise trade fell even more sharply than it did during the early stages of the Great Depression, although it quickly rebounded and by the end of 2011 was about 5 percent higher than its pre-crisis peak, as shown in Figure 10. Economists generally have a handle on explaining what happened between 2008 and 2011. A massive synchronized drop in global demand led to the postponement of purchases for commodities, consumer goods, and industrial equipment, and for those latter two categories, the development of global supply chains over the preceding thirty or so years served to amplify the initial shock. Unlike the experience in the 1930s, however, WTO rules helped to ensure that countries avoided turning to extreme protectionist measures in the immediate wake of the crisis, enabling a relatively rapid rebound of trade to its pre-crisis peak, at least during 2010 and 2011.





What is less well understood—and perhaps more concerning—is the more recent slowdown in global trade that has unfolded since about 2012. And by slowdown, I mean that in 2012, 2013, and 2014, global trade is estimated to have grown at about the same pace as overall global output—an unusual shift given that from the mid-1980s until 2008 when global trade (including goods and services) grew more quickly than global output by an average of nearly 3 percentage points per year. Figure 11 tells this story, with global exports rising steadily as a percent of GDP, from 18 percent in 1985 to 32 percent in 2008, dropping sharply during the crisis, rebounding in 2010 and 2011, and then plateauing over the last three years. As a result global trade as a share of global GDP in 2014 is estimated to be slightly lower than it was at its peak in 2008.



There are three broad sets of explanations for this plateauing of global trade. Because this phenomenon is so recent, I present these sets of explanations not as definitive answers and not to say they explain an equal share of what we have seen, but rather to frame the discussion on this important topic.

One possible explanation is that the recent slowdown in global trade is cyclical and reflects the weak spots in the ongoing global economic recovery that I have been discussing. On this point, it is worth noting that the volume of euro area imports is still 8 percent below its pre-crisis peak, while Japan's import growth has been flat over the past twelve months.

Alternatively, a second possible explanation recently advanced by economists at the IMF and World Bank is that structural changes in the world's two largest economies have contributed to slowing global trade. In the United States, the wave of offshoring that occurred in the 1990s has abated and domestic manufacturing has begun to rebound, curtailing or perhaps even reversing international supply chain fragmentation. At the same time, the development of domestic supply chains in China has likely reduced the need for China to import intermediate inputs for the purpose of processing and re-export.

The third possible set of explanations for the recent slowdown in trade focuses on policy. A more innocent hypothesis put forth by Paul Krugman is that trade liberalization is now a victim of its own success—tariff rates have been cut substantially for both advanced and emerging economies, limiting the scope for future progress toward global trade integration. Taking into account this and other one-off events like China's WTO accession that are now behind us, a plateauing in global trade as a share of global output may seem perfectly natural. A related hypothesis is that progress in multilateral trade negotiations has slowed. But there is also a more nefarious version of the policy-related hypothesis: it holds that we have actually seen a stealth resurgence in protectionist measures in recent years, with countries turning to non-tariff barriers like local content requirements or increasing the use of trade defense measures like anti-dumping and countervailing duties or safeguards. Non-tariff barriers remain particularly important for trades in services, a growing component of total trade.

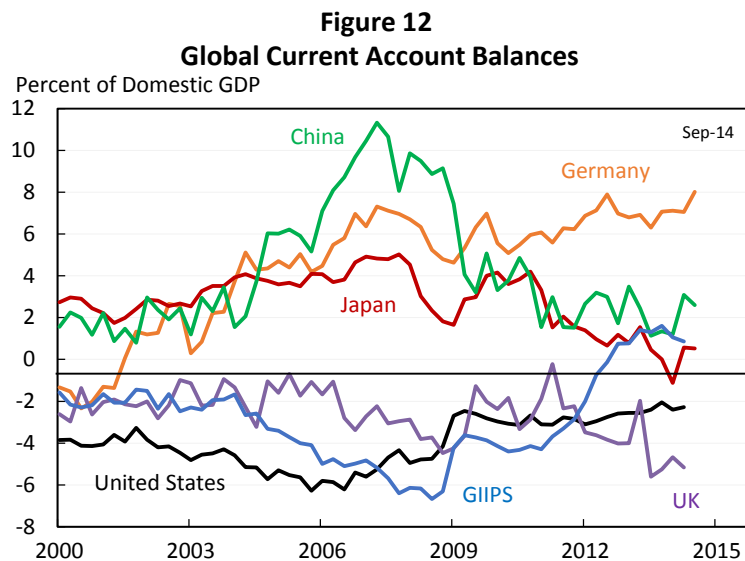
### **Ensuring Growth Is Sustained: The Role of Current Account Rebalancing**

For many of the world's economies, today's biggest imperative is getting growth going and better utilizing demand. But it is not just about the level of growth: sustainability matters too. Growth built on artificial foundations—bubbles and excessive borrowing—is not only unlikely to last, but it also risks the propagation of much deeper problems, as witnessed during the global financial crisis. There are a number of elements to sustainability, including a sound financial system, fiscal sustainability, and domestic financial balances. I want to focus on one element that in some senses represents a combination of these three and has proved to be particularly important in recent crises: the current account balance.

The current account balance measures the net current transactions between a country and its trading partners. It is comprised of net exports, net factor income, and international transfers. When a country receives more cash inflows than it expends, its current account is in surplus.

When a country spends more than it takes in, it runs a current account deficit, and must borrow from abroad to finance its activity.

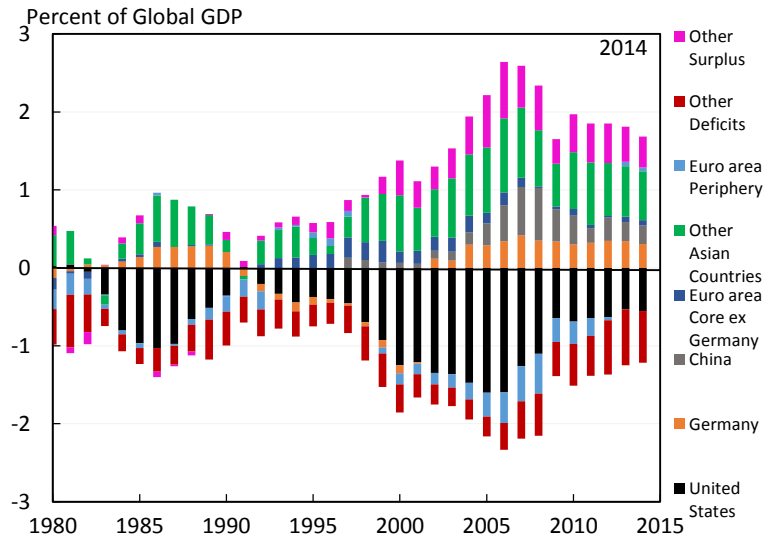
Persistent deficits and surpluses both threaten the sustainability of global growth. Current account deficits left countries like Greece and Spain especially vulnerable to outflows of capital, even though the deficits themselves stemmed from very different causes. Greece's persistent deficit was rooted in fiscal policy, while bank-fueled private real estate investment drove Spain's. Conversely, excessive surpluses are not just an unreproducible model for the world as a whole, but they also can lead to unbalanced growth in the surplus countries and promote problematically large deficits in their trade partners. The evolution of the current account balances for selected major economies since 2000 is shown in Figure 12.



As Figure 13 shows, global imbalances, measured by the sum of absolute surpluses and deficits, have fallen since the Great Recession, primarily as a result of weak global demand following the financial crisis.<sup>2</sup> In the process, however, some countries have continued to run sizable surpluses, forcing others to have bigger deficits and slower growth than they otherwise would.

<sup>2</sup> Treasury's "Report to Congress on International Economic and Exchange Rate Policies" (October 2014).

**Figure 13**  
**Current Account Balance**



The United States has seen its current account deficit fall to nearly 2 percent of GDP, reaching the smallest as a share of the economy since the 1990s, driven in part by reductions in net U.S. oil imports. Greece, Italy, Ireland, Portugal and Spain have reversed the trend in their current account deficits and are currently running small surpluses—although the rebalancing has come at great cost for their domestic economies.

China has reduced its current account surplus as a share of its economy, but it still has further to go as a market-determined exchange rate would likely lead to additional adjustment. In addition, a significant concern is that while China has moved in the direction of rebalancing from external demand to domestic demand, much of that domestic demand has been increased investment, particularly in real estate and infrastructure, instead of in the form of higher consumption. The eventual unwinding of that investment, combined with the persistent high growth in manufacturing exports, poses a risk of increasing the imbalance.

Germany's current account surplus exceeds China's surplus, and indeed it has not declined since 2008 as a share of global GDP. Germany's outsized surplus is largely attributable to its high exports beyond the borders of the euro area. Germany has not used this surplus to increase domestic demand, which could feasibly offset the contraction of demand in the weaker European economies and insure against a further weakening in the German economy itself.

### **Ensuring Growth Is Shared: The Role of Inequality**

Finally, it is important to remember that growth—even sustainable growth—is not enough. It is critical that this growth is shared.

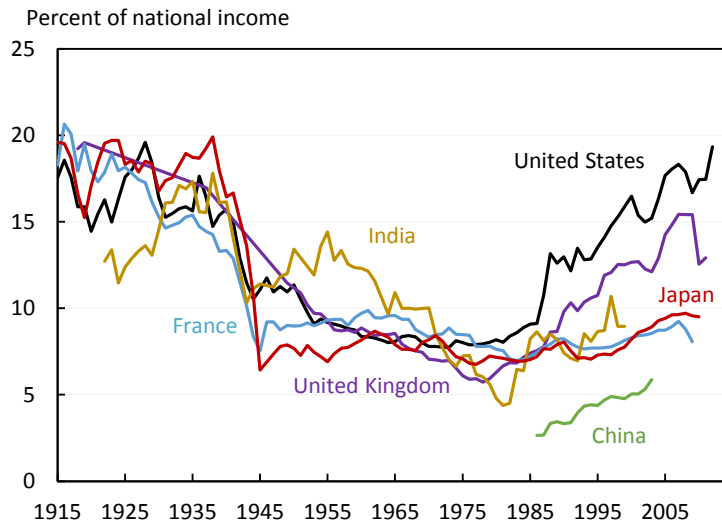
Inequality has increased in a wide range of countries, as shown in Figure 14, including the United States where the top 1 percent of households now receive nearly 20 percent of national income. The growth in technology over the last few decades has increased the need for an

educated work force and has driven up the wage premium for college education, exacerbating inequality. And all the while, the minimum wage has not kept pace with inflation; in real terms, the minimum wage has declined by about a fifth since the early 1980s.

As a result, there is substantial scope for policies that lead to more inclusion, many of which would also strengthen growth.

**Figure 14**

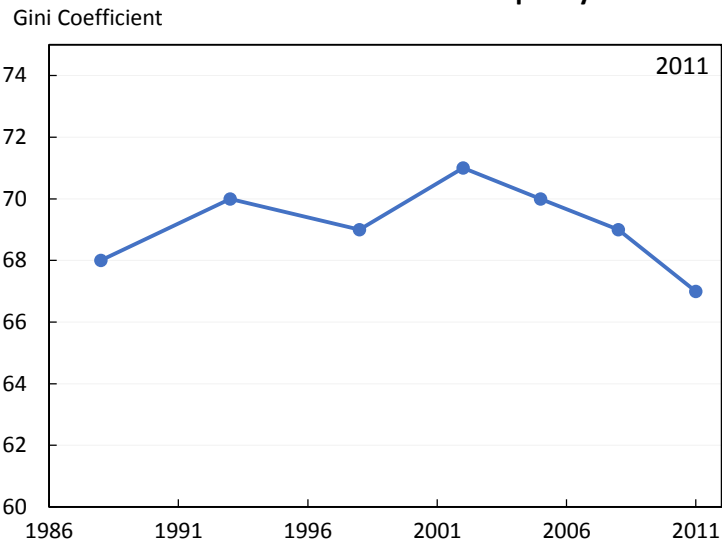
**Top 1 Percent Income Share**



But although inequality is rising *within* countries, because of large populations and rapid economic growth in emerging Asian economies, inequality appears to have been stable or possibly even decreasing when measured at a global level, as shown in Figure 15. Measured at a global level, the biggest income gains from 1988 to 2008 went to households between approximately the 15<sup>th</sup> percentile and the 65<sup>th</sup> percentile of global income.

Hundreds of millions of people have been lifted out of poverty in recent decades, and that is in many ways the most stunning economic achievement in global history. But the fact that this improvement is happening at the same time that inequality is rising within countries raises a serious challenge to the sustainability of the global economic model that helped facilitate these gains. This paradox suggests that policies to ensure inclusive growth within countries are an essential complement to growth-promoting policies themselves.

**Figure 15**  
**International and Global Inequality**



### **Conclusion**

I have provided a broad overview of the outlook for the global economy and tried to help put the developments in some of the world's major economies—both advanced and emerging—in a broader context. I look forward to any questions on these issues and discussing the Palestinian economy with you.

## Notes to Figures

### Figure 1

Note: Working-age population is defined as those persons 16 to 64 years of age in the United States, and 15 to 64 elsewhere. In countries where population is estimated on an annual basis, quarterly interpolations are used. Data as of 2014:Q3 for the United States, 2014:Q2 for all others. Where recent data on working-age population is unavailable, the working-age share of the total population is assumed to remain constant from 2013. Horizontal axis is positioned at the median recent growth rate.

Source: Eurostat; World Bank; national sources; CEA calculations.

### Figure 2

Note: Working-age population is defined as those persons 15 to 64 years of age. In countries where population is estimated on an annual basis, quarterly interpolations are used. Data as of 2014:Q2. Where recent data on working-age population is unavailable, the working-age share of the total population is assumed to remain constant from 2013. Horizontal axis is positioned at the median recent growth rate. For countries that did not contract in the global financial crisis, cumulative growth is calculated since 2008:Q4.

Source: World Bank; national sources; CEA calculations.

### Figure 3

Note: The sample of countries includes 30 countries, all those included in Figures 1 and 2 where sufficient real GDP data is available over the time horizon included in the chart. U.S. recessions shaded.

Source: National sources; CEA calculations.

### Figure 4

Note: Actual inflation is measured by each economy's headline index of consumer prices. Market-implied expectations are forward consumer price inflation rates calculated from the market prices of inflation swaps. U.S. recessions shaded.

Source: Bloomberg Professional Service; national sources.

### Figure 5

Note: Working-age population includes all person 15 to 64 years of age. The projection is calculated by CEA using growth projections from IMF and population projections from OECD.

Source: Eurostat; IMF; OECD.

### Figure 6

Note: Five-year-ahead forecast is for year-over-year growth in 2015 (blue bars) and 2019 (red bars).

Source: International Monetary Fund, *World Economic Outlook* (April 2010 and October 2014 editions).

### Figure 7

Note: Data for Russia covers 2001-2010 versus 2011-2012.

Source: The Conference Board, *Total Economy Database*; CEA calculations.

Figure 8

Note: Data through 2013; last data point shows average of 1999-2013.

Source: The Conference Board, *Total Economy Database*; CEA calculations.

Figure 9

Note: Data for 2014 is based on first 10 months of this year, except for Japan inflation data, which is based on average for first three months of this year (prior to the tax increase). Japan's inflation data is also adjusted for the tax increase in 1997.

Source: National sources via Haver Analytics; CEA calculations.

Figure 10

Note: Red dots represent annual averages for 1929-1935.

Source: CPB World Trade Monitor (data through September 2014); International Trade Statistics 1900-1960, Statistical Office of the United Nations (published May 1962, available at: < <http://unstats.un.org/unsd/trade/data/tables.asp#historical>>).

Figure 11

Note: The World Bank's published merchandise trade data extends through 2012, while the UN Conference on Trade and Development provides data on services trade through 2013.

Merchandise trade data for 2013 is projected using monthly data from the CBP World Trade Monitor. Global GDP and trade is projected for 2014 using the IMF *World Economic Outlook*.

Source: World Bank, World Development Indicators; United Nations Conference on Trade and Development; CBP World Trade Monitor (data through September 2014); International Monetary Fund, *World Economic Outlook* (October 2014 edition).

Figure 12

Note: GIIPS includes Greece, Ireland, Italy, Portugal and Spain

Source: National sources via Haver Analytics; CEA calculations.

Figure 13

Source: International Monetary Fund, *World Economic Outlook* (October 2014 edition); CEA calculations.

Figure 14

Source: Facundo Alvaredo, Tony Atkinson, Thomas Piketty and Emmanuel Saez, *The World Top Incomes Database*.

Figure 15

Source: Milanovic, Branko. *Global Inequality by the Numbers: in History and Now*. The World Bank Development Research Group Poverty and Inequality Team. (published November 2012, available at: < <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6259>>).