Sept. 21, 2006

What Do Economists Mean by Globalization? Implications for Inflation and Monetary Policy

Jeffrey Frankel, Harpel Professor
Kennedy School of Government, Harvard University

Written for Academic Consultants Meeting, September 28, 2006
Board of Governors of the Federal Reserve System

Condensed presentation

- Globalization can refer to the ease of international movement of capital, people, corporations, or ideas. But economists think foremost of the ease of international trade, which is also the easiest to measure.

- Integration with respect to trade has been rapid over the last half century. Among other measures, the ratio of trade to GDP has quadrupled in the U.S. (Figure I shows increases in the ratio of trade/GDP for various countries.) [1]

- Globalization is not unprecedented: the trend was also rapid in the 19th century. (Figure II shows the effects of trans-Atlantic arbitrage in wheat since 1800.)

- Nor is globalization complete: by a conservative calculation the trade/GDP ratio would have to increase another six-fold before it would be true that Americans trade with foreign residents as readily as with their fellow citizens.

- Similarly, the ratio for European countries such as France and Great Britain, and even China, would roughly have to triple before their trade with foreigners corresponded to the size of foreign economies. (Figure 2b.)

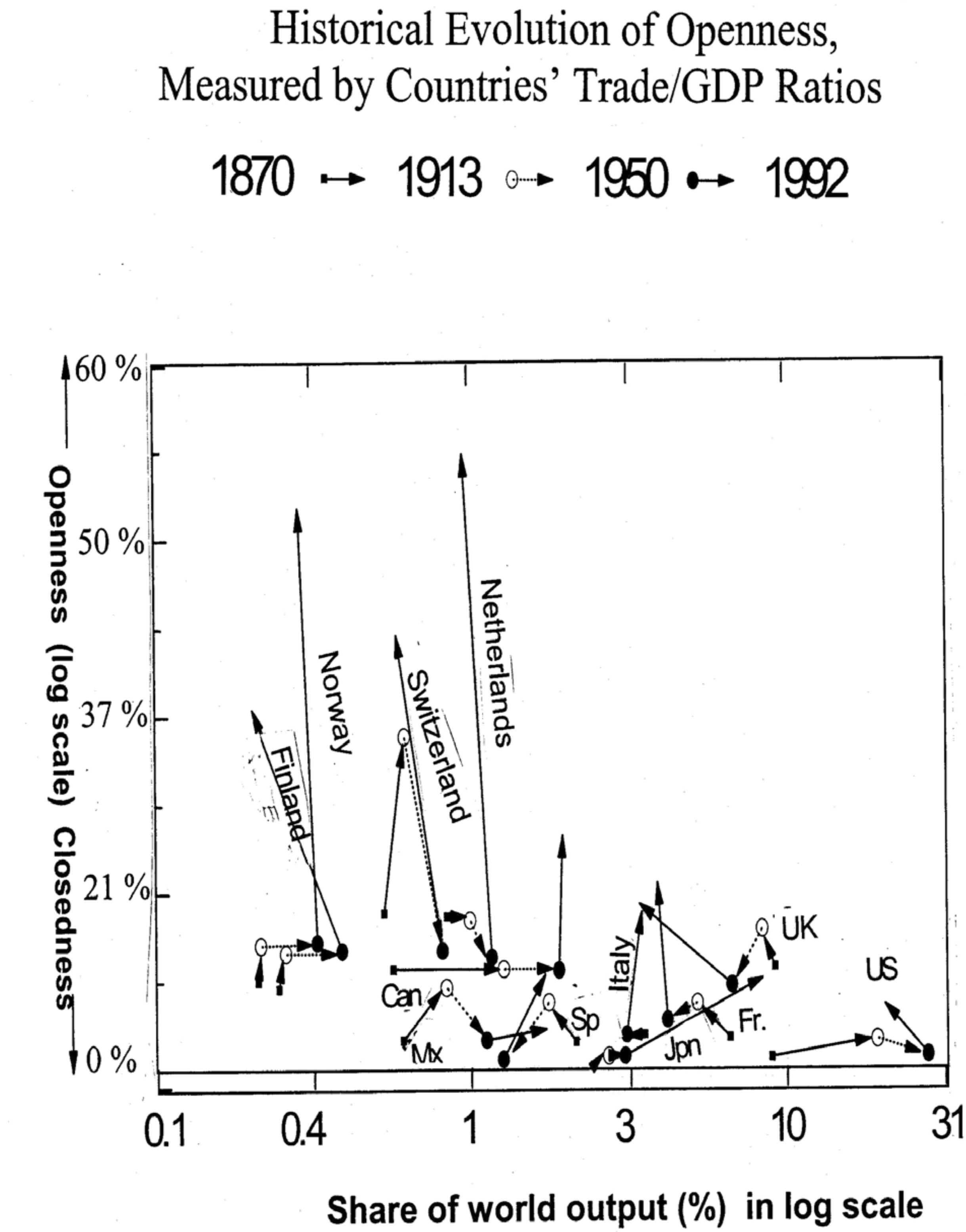
- Nor is the globalization trend inevitable. Trade contracted between 1914 and 1950. (See Figure 3). It could happen again.

- The large home bias in international trade can be attributed to barriers decomposed into transport costs, tariffs and other trade policies, and differences in languages, political systems, and currencies. Technological progress always reduces transport costs (Figure 1). But the trend is less uniform with respect to the other factors.

---

[1] Frankel (2000) elaborates on globalization and gives further references.

Figure I:



Source of data: A. Maddison (1995)

Figure II: The Gap in Wheat Prices between Britain and the US -- arbitraged away in the course of the 19th century, only to re-emerge in the 20th.

Source:
Kevin O'Rourke, "Europe and the Causes of Globalization, 1790 to 2000," in H. Kierzkowski, eds., *From Europeanization of the Globe to Globalization of Europe* (Palgrave, 2002).

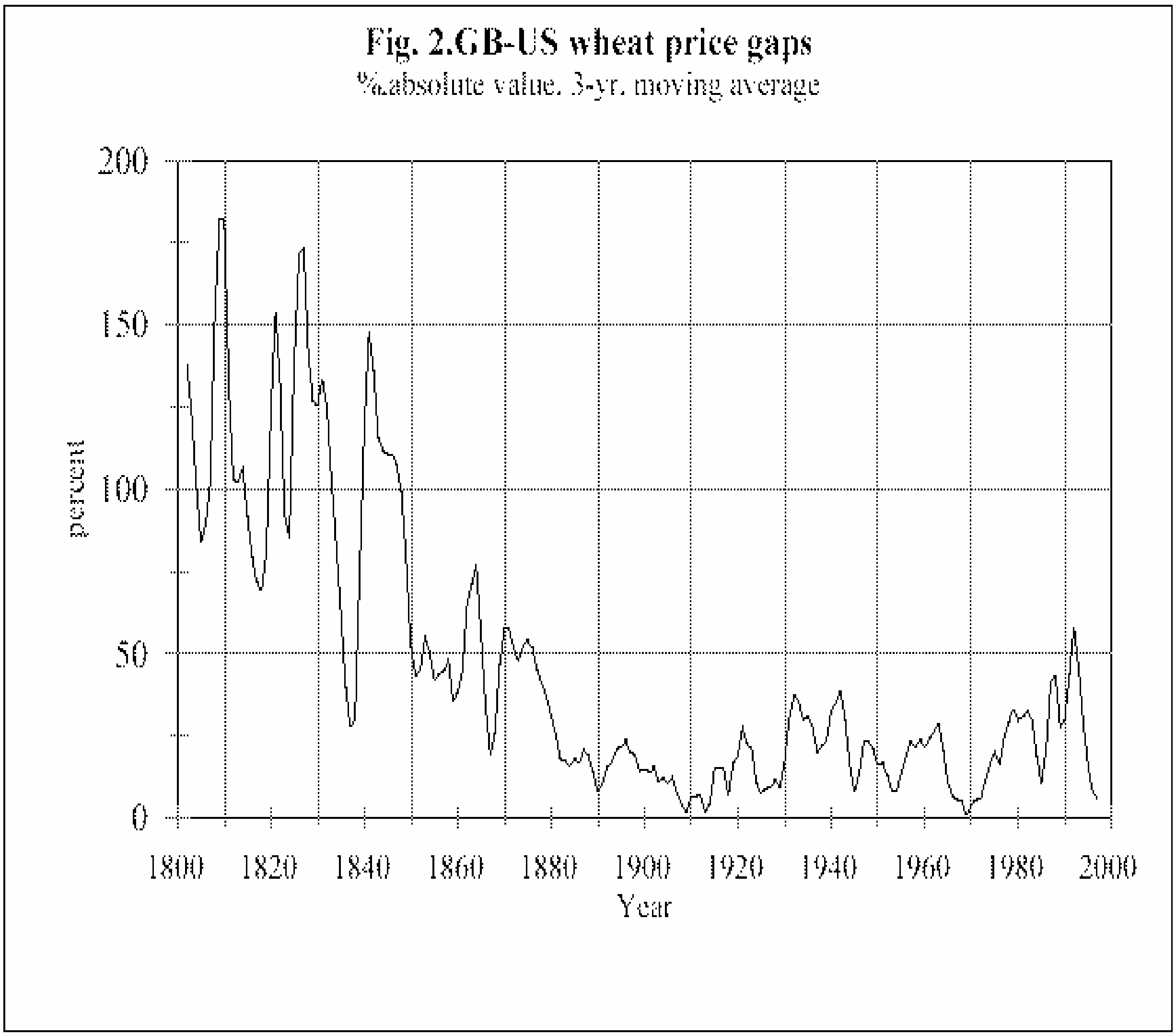


Figure 1: Technological progress

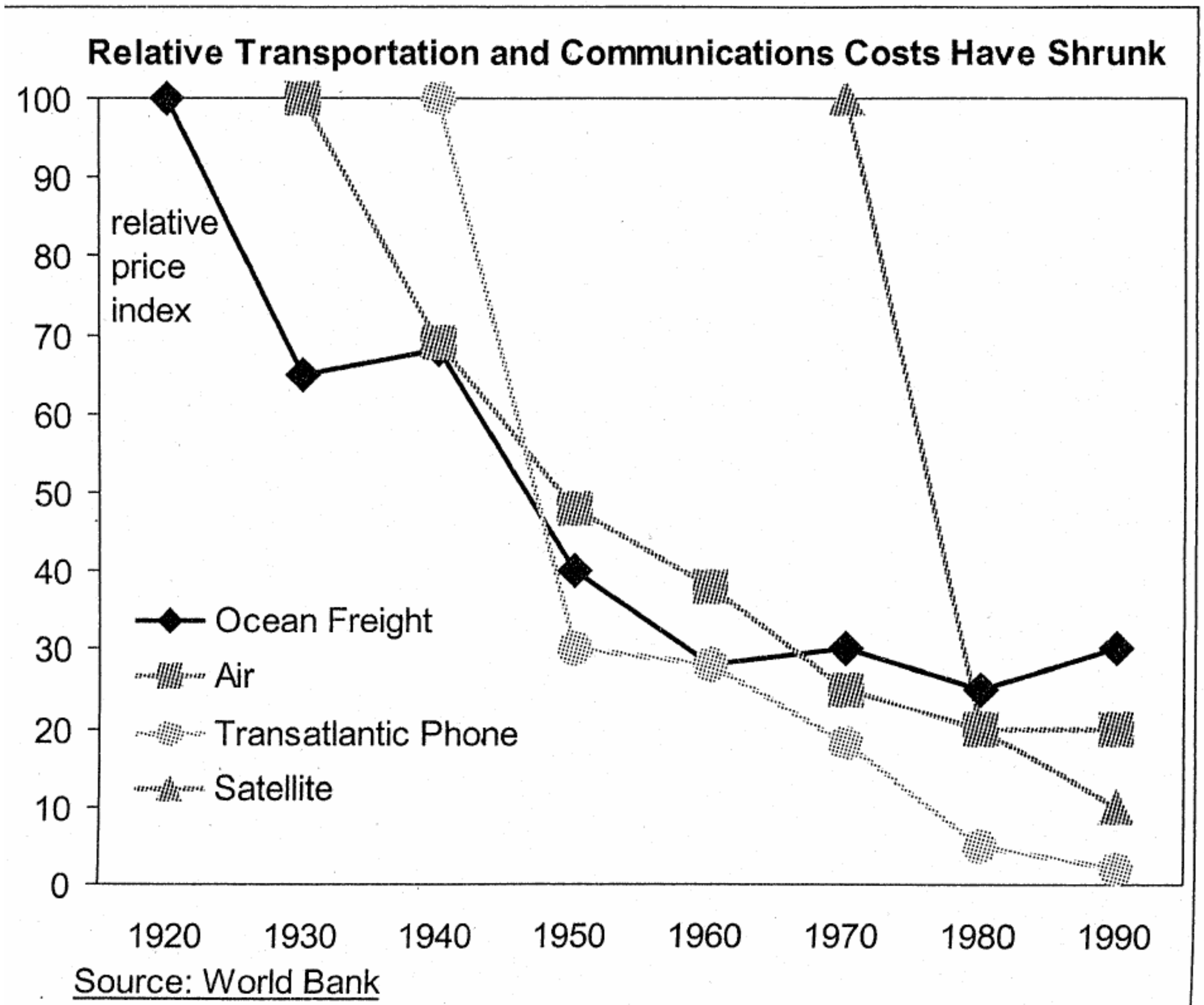


Figure 2b: Openness, Measured as Trade/GDP (Level scale)
Without US and Singapore

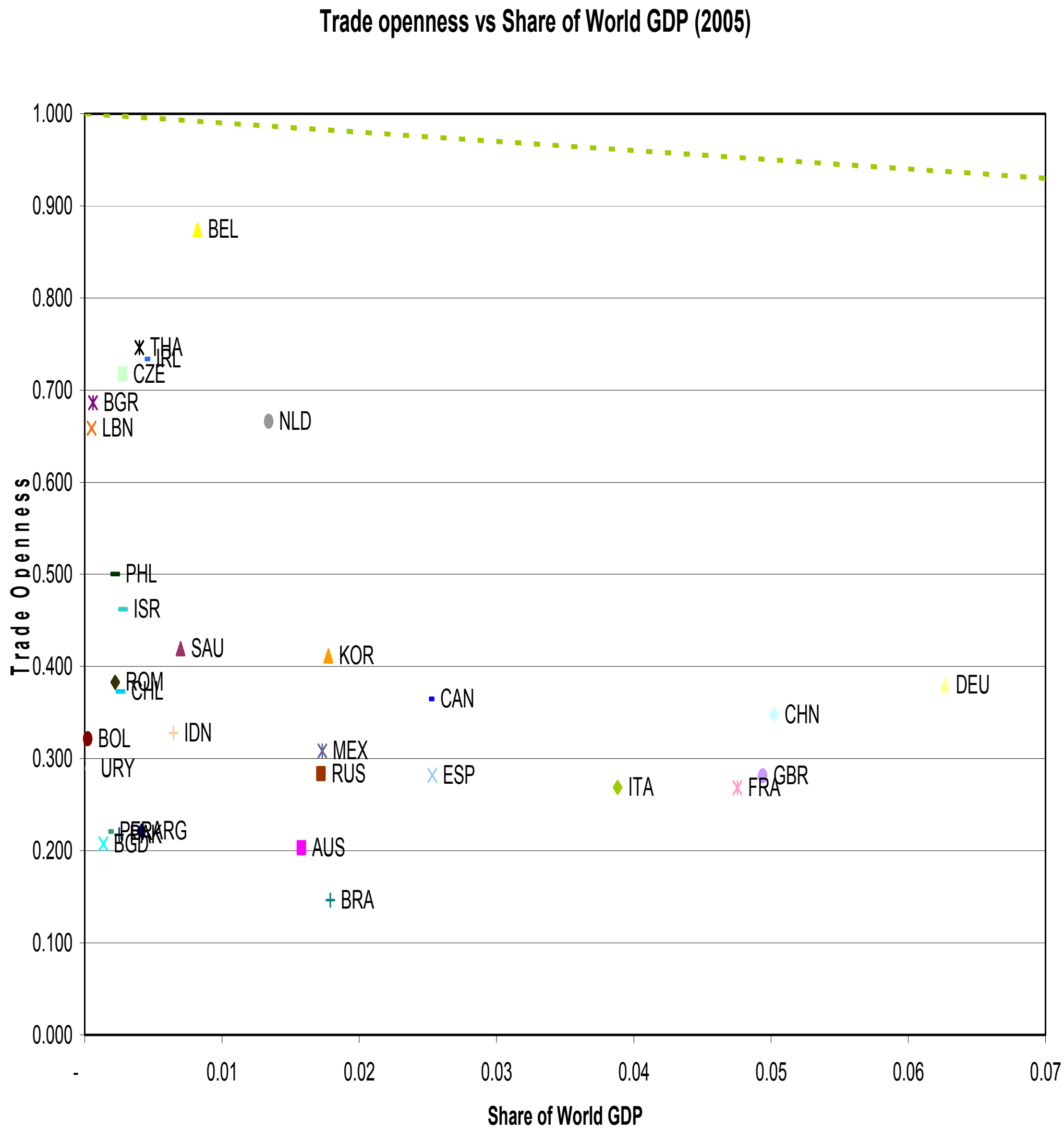
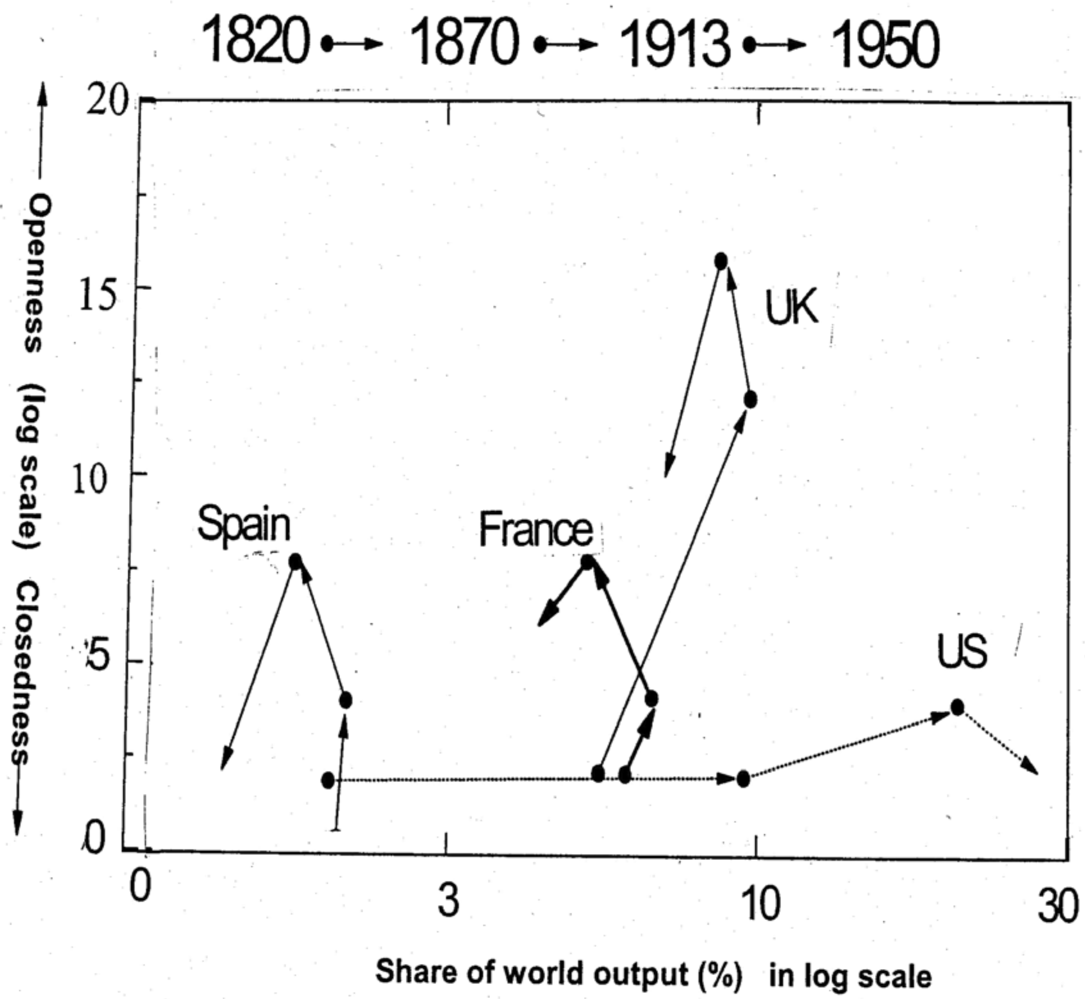


Figure 3: Globalization reversed in the first half of the 20th century

Data Source: Maddison (1995).



- Financial integration, like goods market integration, has been a powerful form of globalization, whether measured in terms of barriers, observed quantities, or price arbitrage. It can reduce the independence and effectiveness of monetary policy, but less so in a floating-currency country and particularly less so in the US case. These considerations are, in any case, adequately considered elsewhere, and not expected to be the focus of this September 2006 meeting.

- Global inflation rates peaked in the 1980s (in 1980 for industrialized countries and 1990 for emerging markets).[2] Many have surmised that it cannot be a coincidence that inflation has declined almost everywhere in the world since then, and have surmised that globalization must constitute part of the explanation. A counterargument is that inflation was equally low in the 1950s, when economic integration was far less advanced than today.

- Increased shares of imports or traded goods in the economy have probably made the CPI more responsive to changes in world prices,[3] e.g., to recent declines in the price of clothing and rises in the price of oil.

- The pass-through of exchange rate changes to domestic prices of specific imports has fallen rather than risen.[4] It is a bit paradoxical in that it constitutes a decline in the power of arbitrage rather than the reverse, though there are possible explanations.

- In any case, current popular discussion of the nexus between globalization and inflation envisions something more than that increased international integration raises sensitivity to international developments, up and down. It envisions a downward effect on inflation generally, particularly as workers in China, India, and other low-wage countries enter the global work force.

- Classical theory says that an increase in trade can lower prices and raise real income only on a one-time basis. Some more recent theories, however, posit a *permanently* lower rate of inflation.

---

[2] Rogoff (2004) or WEO (2006).

[3] Kohn (2006).

[4] Goldberg and Campa (2006) estimate pass-through to the US CPI at about 4%, the lowest of 21 OECD countries. They also find that much of the pass-through to the general price level comes via imported inputs, rather than via consumer imports and their local substitutes. Among those studying the recent decline in passthrough are Taylor (2000), Gagnon and Ihrig (2001), and Frankel, Parsley and Wei (2005).

- Some observers, including some members of the FOMC, have argued that globalization has flattened the Phillips curve ("the new view" according to Yellen).[5]

- That individual firms face more elastic demand due to foreign competition does not imply flatter supply. Romer (1993) and Rogoff (2004) have argued that globalization has steepened the Phillips curve (the "dynamic consistency" model). Rogoff also cites deregulation and other sources of increased competition.

- Both the "flatteners" and the "steepeners" suggest that inflation is permanently lower. The Romer-Rogoff view is that precisely because globalization has reduced the growth payoff from any given monetary expansion, it has made expansion less attractive to central banks. The resulting rational expectations equilibrium features permanently lower inflation.

- Another way to get permanently lower inflation is if the globalization trend is itself permanent. If it takes 50 years for a billion workers in China and other low-wage countries to become fully integrated into the world economy, then the process will put downward pressure on inflation for 50 years.

- The public does indeed still need to be reminded of the difference between changes in relative prices and in the general price level. Nevertheless, the old view that inflation is ultimately a monetary phenomenon – while not exactly wrong – is no longer very useful. Money demand is not stable and money supply is not exogenous.

- The author would emphasize that globalization, by raising real income and productivity, can narrow the gap between aspiration and reality -- between the target level of income and the constraint of potential output. This can in turn reduce inflation, for example, via lower unit labor costs.

- Admittedly, with the U.S. corporate profit share currently at all-time highs, it is not clear that unit labor costs are driving inflation in this decade anyway. Perhaps recent globalization has increased competition in labor markets even more than in product markets.

---

[5] Borio and Filardo (2006), Fisher (2005), IMF (2006, pp. 106-108), Kohn (2006), and Yellen (2006).