

MONETARY POLICY INSIGHTS POLICY FOCUS



GLOBALIZATION AND MONETARY POLICY: THE VIEW FROM JACKSON HOLE

The topic of the Jackson Hole conference this year was the “new economic geography,” with a special focus on the implications for major industrial countries of the rapid growth of China, India, and former Soviet block economies. The conference focused on several dimensions of globalization, including the recent trend toward trade in “tasks” as opposed to final goods, the role of increased trade competition from low wage economies, and the growing integration of global capital markets. These developments have potentially important implications for inflation dynamics, the relationship between real interest rates around the world, and the transmission mechanism for monetary policy. While these issues were addressed in a number of papers at the conference, they were most directly discussed in the paper by Ken Rogoff, so we organize the commentary around the themes in that paper.

The fundamental message of the Rogoff paper is that, despite the increasing influence of global factors in shaping domestic monetary policy decisions, central banks retain control over domestic inflation over the medium and long term.¹

We organize our discussion in terms of three topics. The first is the impact of increased trade competition, an import dimension of globalization, on inflation dynamics. The second is the effect of the integration of global capital markets on the convergence of real interest rates among major economies and on the level and volatility of asset prices. And the third is the implications of both dimensions of globalization for monetary policy.

GLOBALIZATION AND INFLATION

The effect of globalization on inflation has been a subject of increasing interest and study. Perhaps the central topic of discussion has been the role of China and specifically whether China is exporting deflation. But there are several other important issues related to globalization and inflation dynamics that Rogoff addresses, including whether globalization has affected the shape of the Phillips curve, whether global output gaps are increasingly

¹ Kenneth Rogoff, “Impact of Globalization on Monetary Policy,” Federal Reserve Bank of Kansas City conference on “The New Economic Geography: Effects and Policy Implications,” Jackson Hole, Wyoming, August 24-26, 2006.

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important influence on domestic inflation, and whether any restraint on inflation from globalization could dissipate or even reverse in the future.²

Does China export deflation?

Perhaps the most widely discussed possible effect of globalization on inflation is the downward force on domestic wages and prices associated with the export of cheap goods from China and other low wage economies. Rogoff focuses specifically on the question of whether China is exporting deflation.

At the first level, he says this is a very naïve question. If central banks successfully target inflation—which certainly appears to be the case whether the inflation targets are implicit or explicit—then domestic inflation will be independent of the price of Chinese goods. In this case, low priced imports from China affect only *relative* prices, not overall prices and inflation. It follows that if China lowers the relative price of imported goods in the U.S. but does not affect overall inflation here, then it must raise the prices of other goods consumed in this country. So one could just as well say that China exports inflation to domestically produced goods.

That is certainly an interesting way to look at the issue, but this is more of a matter of language than economic insight. The basic issue is well appreciated—that the growth in China’s exports would have, all else equal, lowered inflation, and hence it likely kept monetary policy elsewhere more accommodative to offset this influence.

Digging deeper, Rogoff argues that there may nevertheless be an important kernel of truth in the proposition that China exports deflation. What has occurred in recent years is a dramatic increase in the pace of China’s penetration into global markets. The result is a quite dramatic and persistent “terms of trade” shock, a decline in the price of imported goods relative to goods we export. Particularly to the extent that terms of trade shock is a surprise, it likely will, at least temporarily, lower inflation. Rogoff argues that it may be optimal for monetary policy not to fully offset this terms of trade effect—a topic we will return to below—in which case the more intense import competition would lead to temporarily lower overall inflation.

Has globalization changed the shape of the Phillips curve?

There has been a lot of recent discussion about a possible flattening of the Phillips curve, so there was a lot of interest in Rogoff’s discussion of this topic. Unfortunately, his paper and especially his presentation ended up confusing rather than illuminating the issue.

² Rogoff references a recent speech by Don Kohn that addresses many of these issues and indicated he was basically in agreement with Kohn’s conclusions. See Don Kohn, “The Effects of Globalization on Inflation and Their Implications for Monetary Policy,” Federal Reserve Board, June 16, 2006. Kohn said that no consensus had emerged within the FOMC about the effect of globalization on inflation, and that it was challenging to identify the extent to which the increased pace of globalization has influenced inflation dynamics in the U.S. His own assessment was that globalization was having some effect on inflation dynamics, but the evidence to date suggested that the effects have been gradual and limited: a greater role for the indirect effects on consumer price inflation of import prices; possibly some damping of unit labor costs, though less so for prices, judging from the still high profit margins; and potentially a smaller effect of the domestic output gap (related to the flattening of the Phillips curve) and a somewhat greater effect from global output gaps, although the evidence for the matter was far from conclusive at this point. On balance, China in particular and more generally increased trade competition has exerted a modest disinflationary force on U.S. prices in recent years.

Rogoff confused me, and I suspect many others, by framing his discussion in terms of the flattening of the output-inflation trade-off in his paper and then translating this in his formal remarks at the conference as a “flattening of the Phillips curve.”³ In fact, his flattening of the output-inflation trade-off in fact implies a steepening in the slope of the Phillips curve. To understand the source of the confusion, recall that Rogoff’s trade-off equation has output gap on the left-hand side of the equation and inflation (relative to expected inflation) on the right-hand side. A smaller coefficient in this case implies a larger coefficient on the output gap in the traditional Phillips curve specification with inflation on the left-hand side—implicitly, a steepening the slope of the Phillips curve.⁴

Most recent discussions of the Phillips curve have argued that increased trade competition and better anchoring of inflation expectations have in fact *reduced* the response of inflation to movements in the unemployment rate, especially since the late 1980s or early 1990s. When we return to the issue of how globalization has affected monetary policy, we will therefore focus on the implications of a possible flattening of the Phillips curve.

Do global output gaps affect domestic inflation?

Another topic of growing interest to macroeconomists is whether the trend toward more globally integrated economies now means that global output gaps affect domestic inflation rates. Rogoff starts with the proposition that as global shocks become relatively more important compared to domestic shocks, global excess capacity becomes more important as a determinant of domestic inflation, relative to measures of domestic excess capacity. We don’t see this as necessarily following from the fact that global shocks are more important influences of domestic economies, but nevertheless it seems reasonable that, as economies become more integrated through trade, falling wages and prices in one country (as a result of slack in that country) could affect wages and prices elsewhere.

This is an area in which there has already been at least a few empirical studies, but one that deserves further work.⁵ Our provisional judgment is that global output gaps have at most today a negligible impact on domestic inflation rates and the main linkage from macro performance to inflation is domestic output gaps, though, as suggested above, this link itself may be smaller and more gradual than we previously thought. Still, the shape of the traditional Phillips curve looks to be the more important empirical issue today, as opposed to the role of global output gaps.

³ In a paper presented at the Jackson Hole conference in 2003, Rogoff argued that globalization may have flattened the “output-inflation trade-off,” reducing the degree to which monetary policy makers could raise output for a given unanticipated rise in inflation and that this smaller trade-off reduced the incentive of central banks to allow higher inflation. He argued that this was the major way in which globalization might contribute to reducing inflation. Kenneth Rogoff, “Globalization and Global Disinflation,” Federal Reserve Bank of Kansas City, Monetary Policy and Uncertainty: Adapting to a Changing Economy, Jackson Hole conference, 2003.

⁴ Rogoff’s equation is really an aggregate demand curve, where aggregate demand depends on unexpected inflation, rather than in the spirit of a Phillips curve which is directed at understanding inflation dynamics. Rogoff’s aggregate demand curve, however, like a Phillips curve, implies a short-run output-inflation trade-off.

⁵ Rogoff references a couple of studies that suggest there may be some impact of global output gaps on domestic inflation. See Claudio Borio and Andrew Filardo, “Globalization and Inflation: New Cross-Country Evidence on the Global Determinants of Domestic Inflation,” Mimeo, Bank of International Settlements; and IMF World Economic Outlook, April 2006.

Is there a threat of a reversal of recent globalization pressures on inflation?

The recent effect of China as a downward force on global inflation as a result of increased import penetration and competition could dissipate or even reverse over time. Rogoff makes this point, but without providing much explanation. It is a point that Greenspan emphasized near the end of his term, though he seemed to view this as more likely over an intermediate-term horizon, not necessarily something that was relevant to near-term inflation.

There are several ways in which the downward pressure on inflation from China could lessen or reverse. First, there could be more significant appreciation of the Yuan. Second, robust growth in China could raise wages and prices there, dampening the price differentials that are the source of downward pressure on prices around the world.

In his comments on the Rogoff paper, Charles Bean raises perhaps the more interesting question: Is globalization already a source of upward pressure in inflation? The answer may depend on how you define globalization. If globalization is defined in terms of increased penetration of China into global goods markets through expanding exports, the answer would be that it remains a downside force on global inflation. If globalization is extended to encompass all the ways in which China and other emerging market economies are affecting global economy, the answer is less clear. Indeed, the robust growth of China has been an important part of the robust global growth over the last three years that, in turn, has put significant upward pressure on world prices for energy and non-energy commodity prices.

Indeed, perhaps the most compelling story underpinning the recent uptick in core inflation is that it reflects the effect of global growth on energy and non-energy commodity prices and the pass-through of these cost shocks into final goods prices. The combination of robust growth and energy inefficiency magnifies the role of China in driving energy prices higher.

GLOBALIZATION AND FINANCIAL MARKETS

The expansion in cross-border capital flows has been even more dramatic than the increase in the trade of goods over the last couple of decades. The resulting integration of global capital markets has contributed, in Rogoff's view, to a convergence in real long-term interest rates among major industrial economies. He specifically mentions the U.S., Germany, and Japan in that regard. At the same time, the decline in the volatility of output and inflation around the world has contributed to reduced risk spreads and hence lower real private interest rates, while lower inflation has further reduced nominal interest rates. The decline in risk spreads and decline in nominal interest rates in turn has led to a rise in the price of risky assets. Interestingly, despite the decline in the volatility of output and inflation around the world, asset prices remain as volatile as in earlier periods.

The "Great Moderation" and asset price volatility

There has been a decided decline in the volatility of output and inflation over the two decades relative to earlier in the postwar period, a development that has come to be known

as the Great Moderation.⁶ Rogoff uses the Great Moderation as a point of departure, noting the seeming disconnect between the decline in the volatility in output and inflation around the world and the apparent absence of any diminution in asset price volatility. He then asks whether central banks should be concerned about this disconnect.

It might seem natural to expect that a decline in the volatility of fundamentals such as output growth and inflation would translate into less volatility in asset prices. Rogoff suggests a couple of reasons why this might not be the case.

One has to do with the “duration” of the assets. The decline in volatility of fundamentals likely reduced the perception of risk, in turn reducing private interest rates, and the decline in inflation over this period further reduced nominal interest rates. With nominal interest rates lower, changes in the perception of risk now have a larger effect on asset prices. For example, in the dividend discount model of equity prices, the price of equities is the ratio of dividends to the sum of the risk free interest rate and the equity risk premium less the growth rate of dividends. The smaller the initial level of the denominator, the larger the percentage change in equity prices for given change in the risk premium. In fact, the same is true for changes in dividends, dividend growth, and interest rates.

Another reason why the volatility of asset prices may not have diminished with the Great Moderation may be that asset prices, and specifically equity prices, may be determined more by longer-run perceptions of economic conditions and hence may not be influenced so much affects by changes in the amplitude of shorter-run business cycles.

In any case, given the Great Moderation, central banks should not be overly concerned about the remaining asset price volatility. Bean noted, however, that the issue facing central banks today is not volatility per se, but potential bubbles emerging in asset markets (earlier in equities and today perhaps in housing) that could discontinuously correct and be the source of undesirably sharp slowdowns in growth and/or to systemic risk from sharp changes in asset prices.

The convergence of real interest rates

Rogoff argues that one of the effects of globalization, specifically of more globally integrated capital markets, is that real longer-term interest rates are increasingly set globally and hence central banks, while still controlling their respective (short-term) policy rates, have less control over their respective longer-term real interest rates.⁷

This analysis certainly has some traction, but it is overly simplistic. In a world of perfectly integrated capital markets, first of all, it is not real interest rates that are equated across countries, but holding period returns that include the effect of currency appreciation or

⁶ There is a debate about the source of the Great Moderation, with candidate explanations including luck, structural changes, and policy. Bernanke’s 2004 paper on this subject made a strong case for a role for monetary policy in the decline in volatility of both inflation and output. See Ben Bernanke, “The Great Moderation,” Federal Reserve Board, February 20, 2004.

⁷ Of course, in the long-run, even in a closed economy, central banks may have no control over long-term real interest rates, a result sometimes referred to as “super-neutrality.” Real rates in the long run in this case are determined by “real” forces--saving and investment--and are not affected by monetary policy. So the issue is really only about the possible influence of monetary policy over real long-term rates over shorter horizons.

depreciation. The simple model here is uncovered interest rate parity, which holds that nominal interest rates should differ by an amount just equal to the expected appreciation of the currency.⁸ For example, if the dollar were expected to appreciate against the yen, then U.S. real interest rates would be below yen real rates, leaving the yen return from holding U.S. bonds the same as the return that Japanese could earn directly on yen bonds.

The conclusion I reached in my 1997 paper on globalization and monetary policy was that, while there had been some global convergence in the *level* of long-term nominal interest rates over the previous decade or two, this seemed largely accountable to convergence of inflation rates.⁹ There was little evidence to suggest that correlations between *changes* in nominal long-term interest rates had increased over time. The fact that interest rate changes have not become more correlated suggests that there remains ample room for real interest rates to move differently around the world in response to domestic economic conditions.

Rogoff argues, however, that more recently there has been a convergence in real interest rates among the U.S, Germany and Japan, and suggests that more integrated capital markets are now limiting the scope for central banks to affect their respective long-term real interest rates, a subject we will return to when to turn to the implications of globalization for monetary policy.

Globalization, capital flows, current account imbalances, and economic growth

Rogoff touches only tangentially on the recent increase in global imbalances and the potential for a market-induced adjustment. The paper by Rajan at the conference focused more on this subject, including the role of globalization in perhaps encouraging or at least making it easier to finance such imbalances. Finally, Martin Feldstein, in the summary panel, developed some of the implications of a market-induced adjustment in global imbalances for growth prospects and for monetary policy around the world.

Rajan notes that, whereas traditional theory holds that capital should flow from rich to poor countries (since the latter have less capital relative to labor and, as a result, higher rates of return on capital), in fact, capital today is flowing “up hill,” from poorer countries to richer countries. That pattern partly reflects export led growth strategies pursued by some developing economies, which are implemented by maintaining under-valued currencies to provide an implicit subsidy to exports, leading to trade and current account surpluses and hence capital outflows. Flows from developing economies to industrial economies, and specifically to the U.S., may be reinforced by the global saving glut, the excess of saving relative to investment outside the U.S., although it was correctly noted that this phenomenon might be better termed the “Asian investment drought,” as it is investment (most dramatically in Asia) that has fallen, rather than saving that has risen. In any case, the global saving glut reinforces the flow of capital from Asian emerging economies to more industrial economies.

⁸ Real interest rates should differ by an amount equal to the expected real appreciation of the currency. Real exchange rates may be more stable than nominal exchange rates, at least over the longer run.

⁹ Laurence H. Meyer, “Globalization and U.S. Monetary Policy,” Federal Reserve Board, October 14, 1997.

Rajan also notes that, in cases where capital does flow into developing economies, such international capital flows do not seem to contribute to higher growth. High growth rates in these economies seem dependent only on their high internal savings. Part of the problem here may be the limited ability of developing economies with underdeveloped financial infrastructures to effectively absorb more saving than is generated domestically.

The globalization of financial markets, including the increased international diversification of global portfolios, has also perhaps made it easier for global imbalances to expand, as it has facilitated the ability of the U.S. to finance large current account deficits. Still, the most important development facilitating the U.S. current account deficit has been the willingness of foreign central banks to absorb dollars, as part of their attempts to keep their currencies under-valued relative to the dollar to stimulate export growth.

GLOBALIZATION AND MONETARY POLICY

Conference participants were of course especially interested in the discussion of the day that globalization may have affected the conduct of monetary policy and the challenges facing monetary policymakers.

The implications of a change in the slope of the Phillips curve

We are going to simply ignore Rogoff's story about a flattening of the output-inflation tradeoff and focus on the implications of an apparent (or at least possible) flattening of the Phillips curve. A flattening of the slope of the Phillips curve sounds desirable for monetary policymakers because it reduces the initial cost of any over-heating that occurs despite their best efforts. But the other side of the decline in the slope of the Phillips curve is an increase in the cost of correcting any mistake with respect to inflation, because it implies that the unemployment rate has to rise by more or remain higher for longer to reduce inflation by a given amount.

A flatter Phillips curve should make policymakers more vigilant about keeping inflation contained because failing to do so would be more costly—either contributing to more persistent periods of inflation outside the comfort zone or requiring much larger increases in the unemployment rate to return to inside the comfort zone.

How would policymakers exercise more vigilance with respect to inflation in the face of a flatter slope of the Phillips curve? The answer presumably is that policy would be more aggressively preemptive, thereby avoiding the possibility of overheating. This suggests that a higher cost of correcting inflation mistakes should make monetary policy more forward-looking (or forecast based). That is interesting because Bernanke argues that this is indeed a direction in which monetary policy is evolving all around the world.

One problem with this direction is that uncertainty about the NAIRU—a consideration that also seems to have become more important in the design of monetary policy strategy—seems to encourage policymakers to be less preemptive and indeed to use price pressures to help pinpoint where the NAIRU really is. So a flatter Phillips curve seems to make the life of a monetary policymaker more difficult and challenging.

But what if, despite the best efforts at forecast-based policy, an inflation mistake is made and inflation moves above the inflation objective. In that case, policymakers would seem

likely to become less aggressive in returning inflation to its preferred level because of the increased cost of doing so. We argued in our last FOMC Briefing that a flatter Phillips curve would reinforce any inclination toward opportunistic disinflation and hence reduce the aggressiveness of the policy response, at least in some zone relative to the inflation objective. In this case, a flatter Phillips curve could contribute to more persistence in inflation and, in addition, to more diversity of inflation across economies, a point I believe that Charles Bean made in his comments on the Rogoff paper.

Does globalization allow central banks to target a lower rate of inflation?

Rogoff suggests that globalization may also allow central banks to lower their targets for inflation or even to tolerate more easily mild deflations. The basis for this conjecture is the possibility that some inflation is needed to “grease the wheels” of the labor market, a view developed by Akerlof et al.¹⁰

According to this view, if workers are reluctant to take nominal pay cuts, then it will be difficult for relative wages to move smoothly to allocate labor across different occupations and industries if the average level of prices is constant and hence average nominal wage growth is very modest. Some rate of positive inflation however would allow a higher average rate of increase in nominal wages and permit real wages of some workers to decline more readily even if nominal wages never fell.

The Rogoff argument here is that globalization, perhaps by increasing the flexibility of wages and prices, may have reduced the need to grease the wheels of the labor market. While Rogoff has presented a reason why globalization may have diminished the force of the “grease the wheels” argument for a positive inflation target, we believe that the case for some positive rate of inflation—that is for a inflation objective set at price stability plus some cushion—is principally that zero inflation implies lower average nominal interest rates and increases thereby the risk that nominal rates will hit the zero bound during severe downturns, reducing the ability of monetary policy to stimulate the economy through traditional means, that is, by further declines in the nominal funds rate. Globalization does not diminish the force of this argument and we therefore conclude that globalization does nothing to materially affect the preferred inflation objective for central banks.

How do globally integrated capital markets affect the monetary policy transmission mechanism?

Rogoff makes the point that, despite the fact that globalization may reduce the degree of control of central banks over their respective long-term real interest rates, monetary policy remains effective, but provides no clear explanation for how monetary policy works in this case.¹¹ In our view, the globalization of capital markets may alter the precise way in which monetary policy affects aggregate demand—that is, affect the transmission mechanism for

¹⁰ George Akerlof, William Dickens, and George Perry, “The Macroeconomics of Low Inflation,” *Brookings Papers on Economic Activity*, 1996I.

¹¹ Rogoff notes that, although major central banks may individually have less control over long-term interest rates, central banks may still be able to collectively affect interest rates in a world of globally integrated capital markets. His example is that the Fed, in particular, may be able to leverage its monetary policy actions by its leadership over other central banks, in part because many other central banks choose to peg their currencies to the dollar.

monetary policy—without necessarily undermining the ability of central banks (with flexible exchange rates) to control inflation over longer-term horizons.

In a closed economy, the transmission mechanism works via the link from the policy rate (and expectations about future policy rates) to long-term interest rates and equity prices. In globally integrated capital markets, where interest rates are powerfully influenced by global forces, exchange rates may bear a more important role in transmitting monetary policy to aggregate demand.

In the case of globally integrated capital markets, an easing in U.S. monetary policy which put even small initial downward pressure on U.S. longer term rates would encourage a large capital outflow that would result in a sharp initial depreciation of the dollar, indeed an “overshooting” of the exchange rate, so that investors then expected a gradual appreciation of the dollar. (The expected appreciation of the dollar allows expected holding period returns to be equated with those on foreign bonds.) The net effect would be both a lower dollar and lower U.S. real interest rates, with both playing a role in transmitting the stimulus from monetary easing to aggregate demand.

Meyer (1997) noted that the response of the exchange rate to U.S. interest rates has increased over time, consistent with expectations based on more globally integrated capital markets. And the evidence also suggests that the response of net exports to interest rates (via exchange rates) has become correspondingly larger over time. At the same time, there is little evidence to suggest a change in the overall degree of interest-sensitivity of aggregate demand, so it appears that the internationally linked channel involving exchange rates and trade flows has become a more important part of the monetary policy transmission mechanism. At that time, the Board staff estimated that the response of net exports to changes in U.S. interest rates, via net exports, contributed about one-third of the interest sensitivity of U.S. aggregate demand over both a one-year and three-year interval.

Bean made the valid point, however, that greater reliance on exchange rates in the transmission of monetary policy might be associated with a lessening of the effectiveness of monetary policy, given the rather loose relationship between interest rates and exchange rates. At a minimum, it might increase the uncertainty about the policy multiplier.

What does recent experience suggest about the ability of central banks to affect long-term rates?

Rogoff further argued that recent experience reinforces the presumption that central banks may now have diminished control over their long-term real interest rates. He specifically refers to Bernanke’s global saving glut story and the potential that the resulting capital flows to the U.S. may have significantly lowered U.S. long-term rates, suggesting that U.S. long-term interest rates may now be dominated by such global supply and demand factors.

We have argued that this is not the correct inference. This tightening cycle did coincide with a shrinking of the term premium, perhaps due in part to central bank purchases of dollars, and the decline in the term premium did initially significantly offset the effect of increases in the federal funds rate (and expectations of further increases in the funds rate) on U.S. long-term interest rates. But we do not believe that these developments imply that monetary policy has lost control over long-term interest rates. The Fed does have to take

into account movements in the term premium, associated with global or domestic factors, and adjust monetary policy to achieve the desired effect on long-term rates and broader financial conditions. But the Fed can still move long-term rates (and exchange rates) sufficiently by raising the funds rate and expectations about future movements in the funds rate.¹²

How should monetary policy respond to exchange rates and changes in the terms of trade?

Rogoff concludes with a discussion of whether central banks should respond directly to exchange rates and to shifts in the terms of trade or, in other words, whether monetary policy rules should directly incorporate these shocks. Bean suggested that this topic could be framed also in terms of which price index should monetary policymakers respond to, one that included or excluded the terms of trade effects, and this is of course related to the question of whether central banks should respond to headline or core inflation.

Monetary policy and exchange rates: Rogoff concludes that central banks should not directly respond to exchange rate movements because the latter are too loosely tied to fundamentals. He argues that it is too difficult to glean information about fundamentals from exchange rates that would help monetary policy authorities calibrate their policy to changing economic conditions. The same logic reinforces the concern voiced by Bean that greater reliance on exchange rate movements in the monetary policy transmission mechanism could undermine the control of monetary policy over aggregate demand and inflation.

Monetary policy and the terms of trade: The “terms of trade” refers to the ratio of import prices to export prices, and so can also be thought of as referring movements in the real exchange rate. Rogoff focuses specifically on whether central banks should respond to changes in import prices, for example associated with a decline in the price of Chinese exports, and to changes in world oil prices.

Rogoff makes the case for monetary policymakers responding less aggressively to a rise in domestic prices associated with a shift in the terms of trade, presumably less aggressive than would be the response to a rise in inflation due to an overheated economy. The basic logic is that central banks should not resist movements in relative or real prices, or more accurately, should not try to damp down other prices to offset a rise in oil or imported goods prices that are a product of a change in relative prices.

This does come back to the broader question of what price index a central bank should use for its inflation objective. For example, responding to movements in core inflation would encourage a central bank to avoid responding to movements in the relative price of oil, by accommodating the temporary spurt in overall inflation associated with such a relative price shock. The case for such accommodation is that it would require an undesirable destabilization in the real economy to offset the effect of such a relative price shift on overall inflation and that the initial accommodation of this effect would not prevent monetary policymakers from returning inflation to its desired level once the effect of the oil price shock on overall inflation dissipated.

¹² We presented empirical evidence on this point in our commentary “Is Monetary Policy Broken?” from October 11, 2005.

Bean argued that most central banks understood the importance of accommodating terms of trade shocks. However, he also notes there were risks in doing so. The ability to accommodate them without doing damage to longer-term inflation expectations depends on the degree to which those long-term inflation expectations are well anchored in the face of such shocks. But he made the strong case that, in principle, central banks should not allow changes in relative prices to affect their objectives. However, Bean was quite conflicted here, as he also raised some broader concern about the practice of targeting core as opposed to overall inflation.

Monetary policy and global imbalances

Rogoff comments briefly that financial globalization has clearly been a driver of escalating global imbalances. Rajan emphasized the degree to which financial globalization has increases the ease of financing imbalances. Rogoff argues that financial globalization had contributed to inflating asset prices, which in turn has been a driver of current accounts.

Feldstein, in his comments as part of the summary panel, gave more attention to the implications of global imbalances for monetary policy. He argued, first of all, that a market-induced correction was very likely; that as part of such a correction, it was inevitable that there would be a significant depreciation of the dollar (and hence appreciation in many other currencies around the world); and that, the adjustment process to the resulting swings in current account balances would pose significant challenges to monetary policymakers around the world.

Feldstein argued that a market-based correction of the dollar would likely slow growth in the U.S., as higher interest rates induced by the reduced flow of capital to the U.S. might more than offset any stimulus from the decline in the dollar. Nevertheless, the decline in the dollar could still result in some upward pressure on U.S. inflation and complicate the task of the Fed.

This is, by the way, an application of what we have called the “two-shock model” of the adjustment to a market-based correction in the dollar, meaning that this shock would initially result in higher interest rates as well as a lower dollar, leaving the net effect on U.S. aggregate demand ambiguous and allowing for the possibility that a depreciation of the dollar could be accompanied by slower U.S. growth.

Feldstein argued, however, that the adjustment to appreciating currencies abroad, specifically in the Euro area and Japan, would likely be accompanied by slower growth there, requiring easing by their respective monetary authorities in order to stimulate domestic demand and compensate for the loss of external stimulus.¹³

¹³ One issue that we did not get the opportunity to discuss is why the adjustment process was asymmetric in the U.S. and abroad, with offsetting influences on interest rates and exchange rates resulting in lower growth in the U.S. and also lower growth abroad.

THE BOTTOM LINE

One clear conclusion that emerges from the above discussion is how much work needs to be done to clarify the implications of globalization for macroeconomic performance and the conduct of monetary policy, including further empirical analysis of the role of global output gaps on domestic inflation, whether and to what degree the Phillips curve has become flatter, and the degree to which real long-term interest rates have converged among major industrial economies.

Globalization has certainly increased the relative importance of global as opposed to domestic shocks in affecting domestic macroeconomic performance, but it has probably not compromised the ability of monetary policymakers to control inflation over the medium and longer term. Nevertheless, globalization likely has affected the channels through which the central bank will reach those objectives, with effects on both inflation determination (e.g., a flatter Phillips curve) and on output determination (e.g., an increase in the relative importance of exchange rate movements as part of the monetary policy transmission mechanism). Given the importance of these changes and the fact that our estimates of the magnitudes are very imprecise at this point, monetary policymakers will have to remain very tuned in to globalization issues going forward.