Good morning. I would like to thank President George and the Kansas City Fed for the opportunity to participate in this year’s proceedings. I would also like to compliment professor Rey on her thoughtful—and thought-provoking—paper.

Professor Rey’s paper offers a number of interesting findings. Drawing on the experience of the last 22 years, she documents an important global dimension to financial cycles, showing that gross capital flows, asset prices and credit often move in sync across countries in response to changing perceptions of risk. She also shows that global banks have played a central role in the cycle, expanding their balance sheets and leverage when perceived risks are low. And she finds that U.S. monetary policy had a notable correlation with movements in bank leverage, capital flows and risk perception.

On the policy side, professor Rey explores several options for trying to tame the global financial cycle: targeted use of capital controls; coordinating monetary policy in the center countries to limit global financial spillovers; using macroprudential policies1 countercyclically to limit excessive credit growth; and imposing stricter limits on leverage for all financial intermediaries.
I broadly agree with the basic thrust of the paper: that the global financial cycle significantly complicates policymakers’ ability to guide financial conditions in their own economies. We often talk about large open economies versus small open economies. But the reality is that financial flows and cross-border linkages have reached a scale such that all economies have become much smaller in relation to global market dynamics.

This is a real problem, one that confronts policymakers around the world with challenges that don’t admit easy solutions. Indeed, it has been an issue for us at times, such as when crowding into our bond market helped hold down the long end of our yield curve even as we were tightening.

But I don’t see this situation as creating the sort of “either/or choice” between an independent monetary policy or an open capital account that professor Rey seems to posit with her new dilemma. And in fairness, professor Rey does not really advocate for either extreme. Her preferred recommendations—active macroprudential policy and tougher limits on leverage—would work to strengthen monetary policy independence. After all, the more other policies attend to risks from the financial cycle and capital flow volatility, the more monetary policy can remain focused on cycles in the real economy.

Should Policy Try to ‘Manage’ the Financial Cycle?

I have to confess that I am skeptical of professor Rey’s suggestion that it would be desirable to try to manage the global financial cycle by having central banks in center countries work to “internalize” the financial impact of their policies on the rest of the world.

I have no doubt that monetary policy influences financial cycles, or that policy in the U.S. influences financial conditions outside our borders. And to be sure, it is useful for central banks to maintain an open and active dialogue with each other, as professor Rey suggests. But that doesn’t necessarily make monetary policy the best option for trying to guard against financial excesses, either in the U.S. or globally.

After several decades of a relatively laissez faire approach, when we trusted too much in market participants’ self-interest to regulate
themselves, the pendulum has swung the other way, toward tighter prudential oversight and regulation. We should follow through in trying to make that approach work, before redirecting monetary policy away from a focus on demand management.

Moreover, it is not clear that we can control the financial cycle very well with monetary policy. Professor Rey’s own results suggest that U.S. monetary policy accounts for as little as 6 percent of the variation in the VIX.2

And, of course, other side effects could arise. For example, if concerns about financial spillovers were to make policy in the center countries less accommodative, the rest of the world could face spillovers of a different sort: at best, weaker export demand; at worst, the destabilizing financial effects of recessions in the center economies. And yields might still remain quite low and capital flows even more volatile.

There has been a fair amount of discussion of late in advanced economy policy circles about an alternative way to manage the financial cycle: adding a macroprudential overlay to supervisory policy. Many recognize that this could add a helpful dimension to policy, one that played a role in how we conducted policy in the U.S. decades ago, and that is widely used in the emerging world today.

But a macroprudential approach won’t be a silver bullet, or a self-actuating framework. It will entail imperfect tools, imperfect information and imperfect results. Moreover, experience in the emerging world suggests that macroprudential tightening usually works best when monetary policy is working in the same direction. Perhaps most important, the application of macroprudential tools inevitably involves difficult choices. As our colleagues from the emerging economies can attest, the crucial elements for success are judgment and a willingness to act.

The Role of Banks in the Global Financial Cycle: Past and Future

In looking through the empirical section of the paper, I found myself wondering to what degree the results—particularly the central role of banks and bank leverage in the global cycle—reflect a discrete
episode in financial history, rather than continuing features of the global financial landscape. I suspect there is a bit of both.

As we know, the two decades that preceded the financial crisis were a period of enormous structural change in the global financial system, reflecting changes in technology, accounting, regulation, instrumentation and market practice. In essence, we moved from a system primarily focused on \textit{lending} by intermediaries, to one much more dependent on \textit{funding} by markets, and reliant on collateral.

Banks continued to play a central role, as originators, as providers of funding, and in many cases as investors, with the larger banks expanding their balance sheets substantially, and off-balance sheet activities even more aggressively. In the process, banks became more leveraged and more market driven in their orientation, their funding and their culture.

Global banks, particularly European banks, expanded their international activity at an especially fast pace. This was particularly marked in terms of linkages involving the advanced economies, where large two-way gross flows—mostly claims of banks on other banks—greatly increased financial interconnectedness.

But the trend of rapidly increasing size and cross-border activity was arrested by the global financial crisis. As a result of that chastening experience and the thrust of regulatory policy since—with more stringent standards for capital, leverage, liquidity and off-balance sheet activities—the more immediate question of late has been how much more global banks might \textit{retrench internationally}.

Still, international banks remain central to the global system. And the fundamental reorientation of banking that has taken place over the past 25 years is likely to persist, even as banks grow more slowly, and operate with higher prudential buffers and stricter oversight. At the same time, other forms of cross-border positioning seem likely to resume their upward march, in part, in response to new opportunities created by retrenchment by global banks.

All this leaves many questions regarding how global market functioning will evolve: whether markets will remain as integrated, and as
liquid; whether spillovers and shocks will play out the same way; and
whether the financial system will necessarily be safer and more stable.

I suspect it will be only when we are further down the road—when
we have more sand in the gears from the regulatory side, as new
standards for liquidity, leverage and proprietary trading come on line
—and less lubricant from the monetary side—that we will be able to
take the measure of the new global system.

That includes how the nature and location of risk taking will shift, and
the implications of those shifts for capital flows and financial stability.

I think we all understand that the global financial cycle will never be
fully “tamed.” The hope is that it can be moderated, and the system
made more resilient. That is what the policy changes now in train—
greater capital and liquidity buffers, a more robust infrastructure, and
creating better incentives to manage risks—are meant to achieve.

**Challenges Associated With Financial Deepening in the EMEs**

Most of us would agree that banks and financial sectors in advanced
economies grew too big during the pre-crisis period. Few would say
the same for emerging market economies (EMEs). In most cases,
financial depth remains much lower, though it has been growing.

For most EMEs, there is good reason to expect a continuing trend
toward greater depth, broader access to credit and a greater role for
capital markets and new types of instrumentation.

And I think we have every reason to expect there will be impor-
tant international dimensions to that deepening process, including
involvement of advanced economy banks and bondholders, and in-
creased “south-south” flows involving EME investors.

In principle, this process should produce benefits: faster growth,
higher consumption, transfers of technology and expertise, better
risk sharing and a rebalancing of global demand.

But in practice, financial deepening comes with risks as well.
Experience across many countries and many decades has shown how
rapid financial deepening can create financial stability challenges. You
can think of this as a “leaps and bounds” rule—where the growth of
credit leaps along, significantly outpacing real activity, there is bound to be trouble ahead.

The canonical solution is for countries to maintain strong supervisory and regulatory systems, to remain vigilant against credit growing too rapidly and to develop carefully sequenced plans for market liberalization. Of course, EME authorities get this, and have been making significant efforts to keep pace, including through broad use of macroprudential measures.

The challenges in achieving the benefits of financial depth without the potential downsides remain significant. And of course, the task is not made any easier by the potential for heavy and volatile capital flows from the advanced economies.

**Thoughts on Recent Volatility**

Let me close with a few thoughts on the recent wave of volatility.

It is well-understood that the accommodative financial conditions in the advanced economies have been an important driver of capital flows to the emerging world.

But growth prospects and improved balance sheets and policy performance in many emerging market economies have also been acting as a magnet for inflows. Capital flows to where it can find attractive returns, and for some time the emerging world has been providing some of the most interesting growth and investment opportunities.

But while capital flows to growth opportunities, it also runs from potential losses. Events that dampen risk appetite can trigger sharp pullbacks from emerging market assets, as we have seen on numerous occasions. The recent pullback, caused at least in part by the potential shift in U.S. monetary policy, is only the most recent case in point.

This latest sell-off—including renewed pressure over recent days—remains within the range of other episodes which the EMEs have successfully weathered in recent years. But it is hardly over, and it highlights the volatility that EMEs may face when the U.S. actually
does begin to wind down its monetary stimulus, and more generally, when foreign capital turns less abundant and more expensive.

Recent events come when near-term prospects in the emerging world have begun to look less favorable. Growth has been steadily slowing for three years, the price trajectory appears less supportive for commodity exporters, politics have become more volatile and reform momentum generally has slowed. All this has combined to create an almost palpable shift in EM market atmospherics, with investors taking an increasingly discriminating, case-by-case approach to asset allocation.

In terms of policies to cope with inflows and contain the risks of sudden reversals, it is obvious to everyone here, but worth repeating nonetheless—fundamentals are fundamental. Experience suggests that one cannot overstate the importance of sound macroeconomic management—strong fiscal positions, credible proactive monetary policy and vigorous financial sector oversight. Hot money in a context of sustained imbalances or financial sector weakness rarely turns out well.

Going forward, there will inevitably be a greater premium on policy coherence and predictability, on progress in dealing with structural challenges, on maintaining margins of maneuver through flexible exchange rates and interest rates, and on maintaining adequate reserve cushions.

Collectively, the EMEs have made significant progress over the last decade: fiscal positions have become stronger, exchange regimes more flexible, monetary policy more predictable and focused, banking systems better capitalized. But progress has not been uniform, and elements of unfinished business remain.

As much as we might like to find it, there is no master stroke that will insulate countries from financial spillovers. Certainly I don’t see capital controls as playing such a role. My reading of history is that controls generally lose their effectiveness over time, and that efforts to go back and forth, by intensifying and relaxing controls dynamically, often can lead to counterproductive results, not least because of the impact they have on credibility and perceptions of policy coherence.
Professor Rey is right to emphasize that vigilant macroprudential policy at the country level and stronger capital and leverage requirements are important for moderating the global financial cycle. I would add liquidity standards to the shortlist.

But in my view, the best protection against global challenges comes from home-grown structural strengths—from the efficiency of labor markets and the tax system; from the strength and breadth of institutions and physical infrastructure; and from the quality and efficiency of education, the social safety net and public order.

Building these fundamental strengths is not a task only for the emerging world. In many of the advanced economies, we have fallen into treating structural illness with cyclical medicine. Accommodative policies may be useful as short-term palliatives, but only structural policies can restore economies to long-term health. In my view, that is where we in the advanced world increasingly need to be turning our attention.
Endnotes

1Macroprudential policies use an approach to financial regulation aimed at reducing risk to the financial system as a whole (systemic risk). The main goal of macroprudential regulation is to reduce the risk and the macroeconomic costs of financial instability. It is recognized as a necessary ingredient to fill the gap between macroeconomic policy and the traditional microprudential regulation of financial institutions.

2VIX is the ticker symbol for the Chicago Board Options Exchange Volatility Index, a measure of the implied volatility of S&P 500 index options. It is designed to reflect the market’s expectation of stock market volatility over the next 30 days.