CIGI

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WHEN CENTRAL BANKS SURPRISE

WHY IT IS IMPORTANT AND WHAT POLICY MAKERS NEED TO DO ABOUT IT

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Key Points

- There is a risk that positive developments in the US economy and in the US Federal Reserve's monetary policy stance could induce global financial volatility and further exacerbate global economic imbalances.
- Empirical evidence suggests that global asset prices are responsive not just to US policy actions, but to news events concerning developments in the US economy and to the tones of Federal Reserve statements. Central banks need to continue to be mindful about the potential repercussions of shocking markets through statements and policy actions.
- The Group of Twenty (G20) ought to work together to implement coordinated, mutually beneficial economic policies. This includes being cognizant of the spillover effects of domestic policies, and seeking to minimize them.

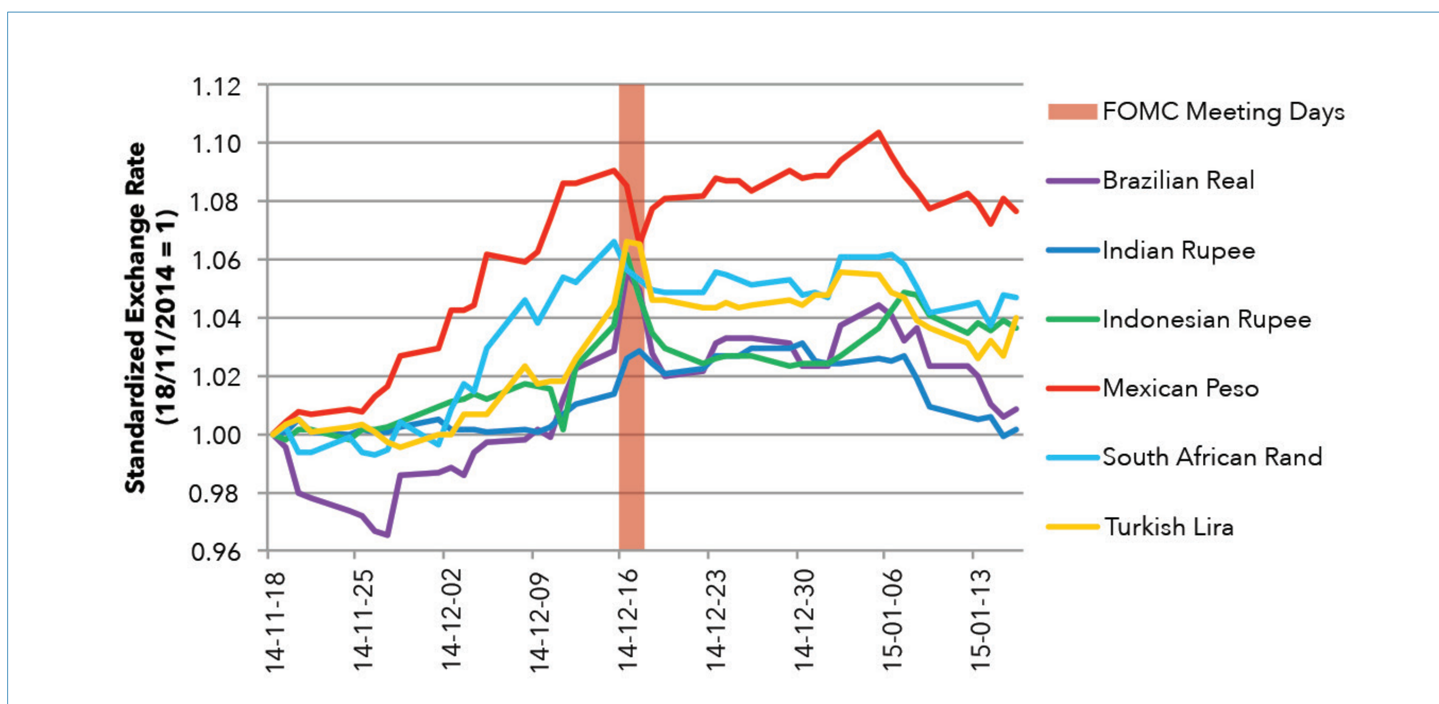
The period of unprecedented macroeconomic policy in the United States and the euro zone is entering a new phase. The global financial crisis sparked an aggressive, and highly experimental, period in US monetary policy that saw the federal funds rate hit the zero lower bound, where it still remains, while the Federal Reserve's balance sheet expanded by over US$3.5 trillion. Several other central banks have followed in the Fed's footsteps and more are waiting in the wings, if deemed necessary. The end of these policies is now in sight. The Fed has already ceased outright asset purchases, effectively stabilizing its balance sheet. More recently, the Federal Open Markets Committee (FOMC) — the Fed's monetary policy committee — has changed its forward guidance by indicating that it will remain "patient in beginning to normalize the stance of monetary policy" (FOMC 2014).

Even if the end is near, the timing of the rate hike is highly uncertain and the FOMC remains dovish, seemingly responsive to every wiggle in the arrival of new data. This uncertainty stems from the fact that the timing and pace of the change in the Fed's policy stance will depend on developments in the US economy. On the one hand, if improvements in the economy accelerate, in particular with respect to inflation expectations, the interest rate might be raised sooner than currently anticipated — at present, it seems this will most likely take place during the second half of 2015.[1] On the other hand, the persistence of low inflation driven by falling oil prices and the high US dollar may keep rates lower for even longer.

The United States is the largest and most liquid financial centre in the world, and the US dollar is the leading reserve currency. Because of the centrality of its financial markets, US policy actions often represent a barometer of risk in the global financial system. As a result, developments in the US economy and its monetary policy can shock global asset prices and contribute to creating significant global financial volatility. Given the current macroeconomic uncertainty in the United States, developments in the US economy and, perhaps

1 Based on FOMC members' economic projections. See, for example, www.federalreserve.gov/monetarypolicy/mpr_20140715_part3.htm.

Figure 1: Exchange Rate Volatility in Select EMEs
(two months surrounding the Fed announcement on December 17, 2014)



Source: Thomson Reuters Datastream.

just as important, nuances of the Fed's statements will have a strong impact on global asset prices in the coming year.

The global economy is currently facing economic imbalances that could be exacerbated by positive news events in the United States. Several emerging market economies (EMEs) are currently suffering from large and growing current account deficits and depreciating currencies, coupled with low growth and high inflation. At the same time, inflation remains low in the United States and the US dollar may be overvalued. Surprise announcements concerning the US economy or monetary policy could further exacerbate these imbalances as more capital flows to US financial markets. The global repercussions of developments in the US economy can be mitigated, to some extent, through the use of domestic policies by all affected parties.

The G20 is the premier forum for discussing issues concerning global macroeconomic imbalances — a global economic issue that requires coordinated efforts to help mitigate financial volatility and economic harm. Drawing on CIGI-sponsored research, this policy brief discusses the potential effects of unexpected US news events on global capital flows. It then identifies the countries that are most vulnerable to global financial volatility and discusses the role of the G20 in facilitating a stronger and more resilient global economy.

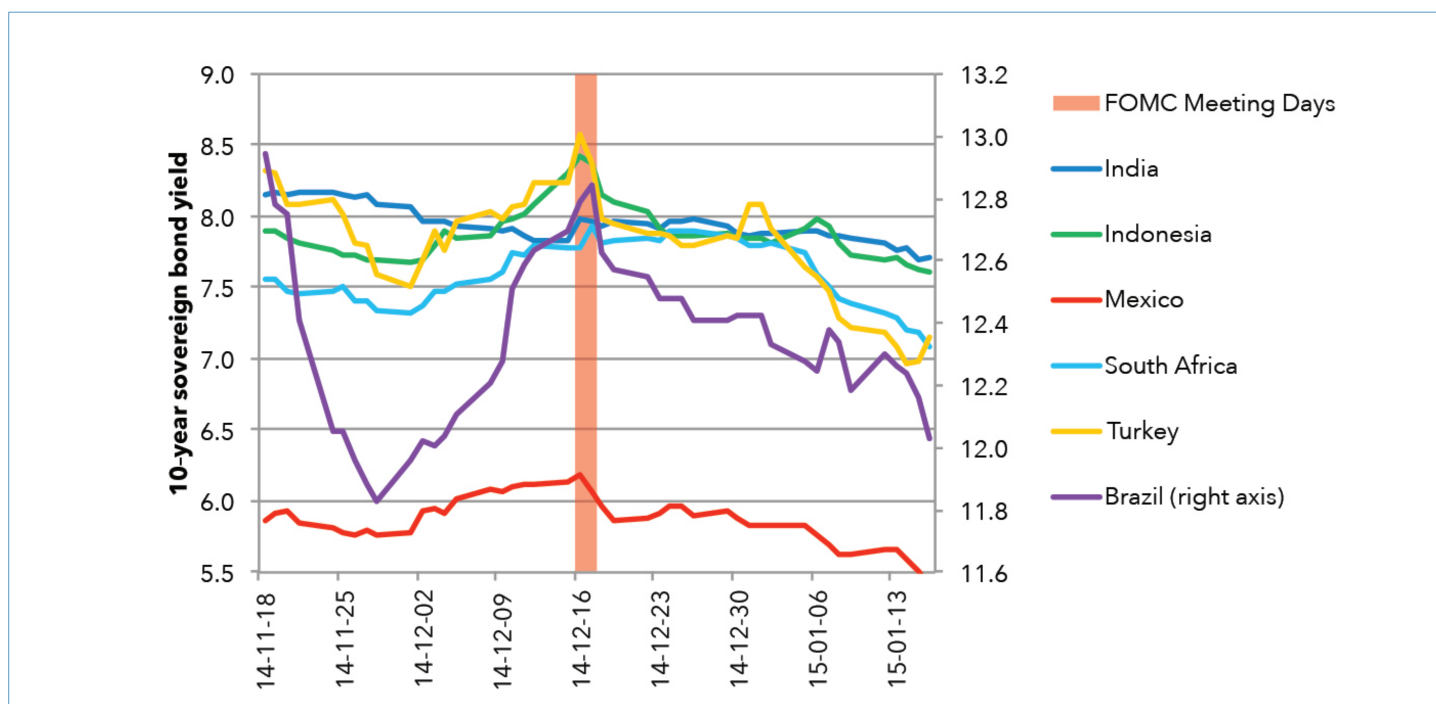
When the Fed Speaks, Everyone Listens

Despite practising careful and transparent communication, the US Federal Reserve can spark global financial chaos with a mere flinch in the perception of its policy stance. This was made clear during the "taper tantrum" in May 2013, when then Fed Chair Ben Bernanke stated that decreasing the pace of the Fed's asset purchase program was an option that was on the table.[2] This news event caused significant volatility in foreign exchange and bond markets, with stronger effects on countries with larger macroeconomic imbalances such as Brazil, India, Indonesia, Turkey and South Africa (Sahay et al. 2014). The taper tantrum clearly showed that surprise news events in the US, absent of policy action, can have significant effects on global capital flows.

More recently, in anticipation of a change in the Fed's forward guidance, large EMEs experienced currency depreciations and rising long-term sovereign yields. When the Fed decided to take a more dovish approach to its guidance than was anticipated by the market, exchange rates appreciated and long-term bond yields fell by as much as two percent in one day. Bond yields subsequently continued to fall while exchange rates have become more stable (see Figures 1 and 2). What this suggests is that announcements by the US Fed can both shock markets and

2 Another option that was on the table was increasing the pace of asset purchases.

Figure 2: Bond Yields in Select EMEs
(two months surrounding the Fed announcement on December 17, 2014)



Source: Thomson Reuters Datastream.

change the direction of trends, even when its policy stance does not change.

A recent decision by the Swiss National Bank (SNB) to discontinue the minimum exchange rate of the Swiss franc to the euro has demonstrated that surprise decisions by central banks other than the Fed can also be harmful to global financial stability. Aside from the 30 percent appreciation of the Swiss franc to the euro within a day, the SNB's announcement sent foreign exchange markets into turmoil, increased stock market volatility and shot gold prices up.

The Effects of US News Events on Global Asset Prices

The effects of surprise US macroeconomic news and monetary policy announcements on global asset prices before, during and after the crisis were analyzed (Lombardi, Siklos and St. Amand n.d.). Specifically, the effects of the tone of FOMC statements and minutes, and the surprise component of economic data releases on yield curves in several advanced economies and EMEs were measured. The analysis can shed light on the potential global distributional effects of positive economic news shocks in the United States during the next phase of its monetary policy. Analysis, however, is limited to daily data; therefore, it captures the one-day asset price shocks from surprise news events, but does not capture the potential shift in trends observed above.[3]

The global financial crisis was a period of change and uncertainty; economic developments were less predictable and macroeconomic policies were dynamic to the circumstances. The crisis period[4] had similar characteristics to the present, where macroeconomic policies are shifting and developments in the US economy will significantly affect global markets. Based on these similarities, parallels could perhaps be drawn between how "activist" tones of Federal Reserve announcements affected global asset prices during the crisis — that is, tones that reflect movement, change and the implementation of ideas — and the potential market responses we can expect in the coming year.

In the United States, activist tones in Fed announcements during the crisis led to an increase in risk perception in the financial sector, reflected in a rise in the overnight index swap rate, and decrease in short-term yields. These results suggest that activist tones signalled that action was required in order to address

3 Market participants price anticipated economic outcomes and policy actions into asset prices when information becomes available. The "surprise" component of news event is the portion that is not anticipated; surprise announcements cause same-day shocks to asset prices. Depending, however, on how quickly news is digested or reinterpreted, the impact can linger for days. Similar to earthquakes, economic news often has aftershocks.

4 For the purpose of our analysis, the crisis period is defined here as October 1, 2008 to September 30, 2009.

short-term financial instability and that short-term returns have decreased. The activist tones in Fed statements had three key effects on global asset prices. First, activity was associated with money flowing to countries that were perceived as having safer financial sectors, such as Canada and New Zealand, where overnight index swaps fell by an average of four to seven basis points. The range of responses can be much larger, depending on a host of other factors, as illustrated next. Second, money flowed to countries that markets perceived as having higher longer-term returns; for example, Brazil's 10-year sovereign yields increased by an average of eight basis points following announcements with activist tones. The third effect of activist tones in Fed statements was an upward shift in the yield curves in countries that were perceived as being at greater risk from US instability or whose economy was already suffering from the crisis, including Korea, Sweden and the United Kingdom. Similarly, activist tones in Fed statements increased long-term yields in Chile. The country was particularly vulnerable to the global slowdown because of plummeting copper prices, which represent almost 50 percent of Chile's exports.

In the current economic climate, positive developments in the US economy could cause a rush of capital flowing back to the United States, and other countries where economic prospects are positive or are perceived to benefit from US growth, while capital flight may occur in countries that have higher risks and lower growth prospects. Our analysis captures the effects of optimistic language in Fed statements on global asset prices. The effects of optimistic language in the post-crisis period may imitate some of the effects we can expect to see as the Fed tightens its monetary policy because these are both periods where positive developments are anticipated to eventually lead to a change in the monetary policy stance. Note that the data used in our analysis only extends to year-end 2013 and, therefore, does not capture the tapering period.

In the United States, optimistic tones of Fed statements increased short-term yields and flattened the yield curve. Optimistic language had two notable effects on global asset prices. First, it shifted the yield curves upward in the United Kingdom and, to a lesser extent, Canada. This may reflect a substitution effect from countries whose economies are performing relatively well. The second effect is that optimistic tones put downward pressure on long-term yields in several advanced economies, including Australia, the euro zone, Korea, New Zealand, Norway and Switzerland, by anywhere from one to four basis points. This suggests that positive developments in the US economy are perceived to improve the longer-term prospects of other advanced economies.

Finally, our analysis considers the global financial effects of the surprise component of key US macroeconomic data releases.[5] Some countries were sensitive to US macroeconomic surprises in all periods, including the United Kingdom and Canada, whose spreads varied mostly positively with the news. For example, the surprise component of retail sales data, factory orders, net trade balance and housing starts typically increases bond spreads. Other countries, including Brazil, the euro zone and New Zealand, were more responsive to surprise announcements during the crisis. In these countries, positive surprises were typically associated with rising bond spreads and long-term yields. For example, positive surprises of US Consumer Price Index data releases during the crisis were associated with a 14-basis-point rise in 10-year sovereign yields in the euro zone, while surprises of national housing starts increased Brazilian bond yields by an average of 35 basis points. These results generally support the idea that these countries' assets are substitutes for those in the United States; therefore, when the US economy performs more favourably, money flows from these countries and back to the United States. The substitution effect was stronger and more widespread during the crisis, suggesting that there is more volatility during periods of high uncertainty. There were some countries, including Chile and Korea, where bond spreads varied mostly negatively with positive US data surprises, suggesting that these economies are more reliant on the economic conditions in the United States. For example, positive US growth surprises are associated with a decrease in both long-term yields and the perceived risk in financial markets in Korea during all of the periods in our sample.

Our analysis confirms that global asset prices are responsive not just to the policy actions of the Federal Reserve, but to the specific tones of its statements. The impact of surprise US macroeconomic news events depends on a country's economic fundamentals at the time of the announcement and on its ties with the US economy. Based on our results, it is expected that positive economic developments in the United States will have three key effects on global asset prices during the tightening of its monetary policy:

- **Substitution effect:** The substitution effect characterizes a flow of capital to the United States from countries whose assets are good alternative investments. This effect will likely be relatively small and have limited implications for global economic and financial volatility because it will affect countries that have relatively stable financial systems and strong economic prospects. Potential examples of countries that will see rising yields due to the substitution effect include the United Kingdom and Canada. Note that these

5 The surprise component of macroeconomic data releases is measured as the difference between the anticipated value and the realized value captured by the consensus forecast.

countries will also likely be exposed to the global growth effect.

- **Global growth effect:** The global growth effect characterizes capital flows to countries where long-term economic activity is expected to improve from positive developments in the US economy. In other words, when the US economy is doing well, this sends a signal that the world economy may be improving. Countries that might see long-term yields fall due to the global growth effect include the euro-zone member countries and other small-open and diversified economies, such as New Zealand, Norway, Sweden and Switzerland.
- **Capital flight effect:** Capital flight is both a symptom and a cause of global imbalances that can be triggered by US surprise news events. During the crisis, large amounts of capital flowed into EMEs. There is potential for a reversal of trade flows back to the United States from countries with higher short-term risks that are now facing weaker long-term economic prospects. This is exacerbated by the fact that the Chinese economy is slowing down and commodity prices are falling. Countries that are exposed to the capital flight effect include EMEs with weaker economic fundamentals, large current account deficits, strong trade relations with China and heavy reliance on commodity markets. The vulnerability of large EMEs to capital flight is discussed in the next section.

Vulnerability of Emerging Market Economies

Sahay et al. (2014) estimate that during the crisis, 90 percent of net capital flows to EMEs were received by eight countries: Brazil, China, India, Indonesia, Mexico, Peru, Poland and Turkey. These capital flows reflect the size of the economies, growth prospects at the time and depth and accessibility of financial sectors. The authors' estimates also suggest that apart from the cases of Peru and Poland, these EMEs observed a capital "overflow," meaning the inflows were larger than economic fundamentals would suggest. This fuels concern that asset prices in these countries do not currently reflect their economic circumstances, exposing them to the risk of capital flight.

Research by Sahay et al. (2014) suggests that countries with stronger economic fundamentals and deeper financial markets are less vulnerable to capital flight. Furthermore, the use of capital controls and macroprudential policies can help deflect these adverse effects. It appears that some EMEs are better prepared to combat international financial volatility than others. India, for example, has actively strengthened its economic resilience over the past few years by significantly reducing its current account deficit, making it less vulnerable to exchange rate fluctuations. It has also improved its growth and inflation prospects, which appear to be more stable. Another example is Mexico, where deeper financial markets make the country more resilient to economic volatility while its economic fundamentals, including the current account balance and inflation, are relatively sound. Furthermore, Mexico's close economic ties with the United States mean that positive developments in the United States will improve its long-term economic prospects. On the other hand, countries that are more exposed to the slowdown in China, are more reliant on commodity markets, have large current account deficits, and suffer from low growth and high inflation, including Brazil, Indonesia and South Africa, are at a higher risk of capital flight. Turkey also appears to be vulnerable to global capital volatility because it is suffering from high inflation and low growth and has a large current account deficit.

Recommendations

The global spillover effects of US macroeconomic policies are a complex problem that lacks a simple solution. The Fed has transformed its communication policy to ensure that its monetary policy intentions are well communicated, and its actions are typically highly anticipated by market participants. The Fed's mandate remains firmly domestic, but it is responsive to trends in the global economy and acknowledges that its policy actions have global repercussions. At the same time, throughout the past six years, EMEs have used monetary policy, exchange rate interventions, macroprudential policy, capital flow and liquidity measures to help mitigate their exposure to financial volatility.[6]

The SNB's actions, mentioned above, and possible further surprises from the European Central Bank, might signal a shift away from the consensus view that central bank policies should be predictable in order to avoid shocking financial markets. A switch in this direction could further contribute to global financial volatility over the coming year.

6 Refer to Sahay et al. (2014) for an overview of the measures that were used in the large EMEs.

G20 leaders aim to build a stronger and more resilient global economy by working together to implement coordinated, mutually beneficial economic policies. There is, of course, no "ideal" mix of macroeconomic policies, but the United States, other advanced economies and EMEs all have tools to help mitigate the effects of global financial volatility and minimize global imbalances. We offer the following recommendations to the G20 to help mitigate the harmful effects of global financial volatility:

- G20 members ought to be cognizant of the spillover effects of their domestic policies, and seek to minimize them.
- Given the potential for spillovers, however, recent events reinforce the need to ensure that global imbalances are reduced in a cooperative manner. After a flurry of proposals in the immediate aftermath of the global financial crisis, there has been no substantive progress in this field.
- The G20 should reaffirm the desirability of central bank independence, but a stern reminder about accountability is also in order. Central banks can only be independent within government, not from government.

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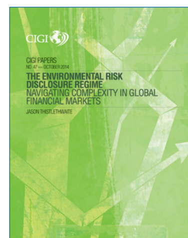
Advancing Policy Ideas and Debate

The Trade in Services Agreement: Plurilateral Progress or Game-Changing Gamble?

CIGI Papers No. 53
Patricia M. Goff

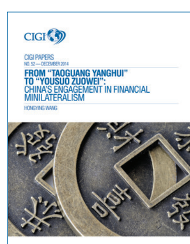
Trade analysis in the current moment is understandably focused on mega-regional negotiations, but plurilateral talks also deserve our attention. Plurilateral negotiations leading to a Trade in Services Agreement (TiSA) is the focus of this paper. Barriers to trade in services are distinct and their removal consequential; thus inviting careful consideration and, ideally, public debate. This paper seeks to illuminate developments in negotiations toward the plurilateral TiSA. Just as it has become commonplace to ask whether regional agreements advance economic and political agendas, so is it useful to explore the promise and peril of plurilateral agreements such as TiSA.



The Environmental Risk Disclosure Regime: Navigating Complexity in Global Financial Markets

CIGI Papers No. 47
Jason Thistlethwaite

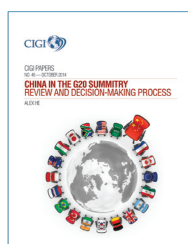
In recent years, a plurality of different governance initiatives has emerged that have the potential to reduce environmental risk within the financial sector by incentivizing investments in sustainable economic activity capable of long-term value creation. Unfortunately, environmental risk disclosure has yet to be assessed as a field of governance activity. This paper addresses this gap by describing environmental risk disclosure as a "regime complex" that is defined by a field of fragmented but related governance initiatives that lacks an overarching hierarchy.



From "Taoguang Tanghui" to "Yousuo Zuowei": China's Engagement in Financial Minilateralism

CIGI Papers No. 52
Hongying Wang

Through minilateral efforts, the Chinese government seeks to use financial minilateralism to stimulate reform of global financial institutions, provide financial public goods for its regional neighbours and fellow developing countries, as well as directly promote China's economic and political interests. This paper examines China's minilateral diplomacy in the financial area and explores possible international reaction to China's new activism and the domestic political dynamics in China.



China in the G20 Summitry: Review and Decision-making Process

CIGI Papers No. 46
Alex He

As the largest emerging economy, China believes that the Group of Twenty (G20), instead of the Group of Eight (G8), is the ideal platform for its participation in global governance. This paper examines the reasons why China joined the G20 rather than the G8, and then focuses on a detailed review of China's participation in G20 summits since the enhanced forum began in 2008.

The State-owned Enterprises Issue in China's Prospective Trade Negotiations

CIGI Papers No. 48
Hejing Chen and John Whalley

Chinese state-owned enterprises (SOEs) are likely to be key elements in China's trade negotiations over the next few years. This paper examines some key sub-issues regarding SOEs for these trade discussions and proposes strategies to focus debate and outline possible approaches to accommodation, rather than definitively resolve the issues.

China and Sovereign Debt Restructuring

CIGI Papers No. 45
Hongying Wang

This paper contends that from China's point of view, the most important question in debt management is how to prevent excessive borrowing and lending and reduce the likelihood of unsustainable debt. It sees discussions about the mechanisms of sovereign debt restructuring as having little effect on this question. It offers a context for understanding China's policy position, if and when it becomes official, by reviewing Chinese reactions to the last round of debate about sovereign debt restructuring in the early 2000s, and by examining recent Chinese discourse and initiatives regarding sovereign debt management.

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Le CIGI a été fondé en 2001 par Jim Balsillie, qui était alors co-chef de la direction de Research In Motion (BlackBerry). Il collabore avec de nombreux partenaires stratégiques et exprime sa reconnaissance du soutien reçu de ceux-ci, notamment de l'appui reçu du gouvernement du Canada et de celui du gouvernement de l'Ontario.

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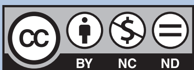

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